



Environmental Audit Committee

Oral evidence: Water quality in rivers, HC 74

Wednesday 15 September 2021

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[Watch the meeting](#)

Members present: Philip Dunne (Chair); Duncan Baker; Dan Carden; Sir Christopher Chope; Mr Robert Goodwill; James Gray; Caroline Lucas; Cherilyn Mackrory.

Questions 286-400

Witnesses

I: Susan Twining, Chief Land Use Policy Adviser, Country Land and Business Association (CLA); and Richard Bramley, Environment Forum Chair, National Farmers Union (NFU).

II: Rebecca Pow MP, Parliamentary Under Secretary of State, Department for Environment, Food and Rural Affairs; Kirstin Green, Deputy Director, Water Quality, Department for Environment, Food and Rural Affairs; and Simon Gallagher, Planning Director, Ministry of Housing, Communities and Local Government.

Written evidence from witnesses:

[National Farmers Union \(NFU\)](#)

[Department for Environment, Food and Rural Affairs](#)



Examination of witnesses

Witnesses: Susan Twining and Richard Bramley.

Q286 **Chair:** Welcome to the Environmental Audit Committee for our session on water quality. It is our fifth oral evidence session. Before I introduce our witnesses on the first panel, I should declare an interest as a member of the NFU and the CLA, as is disclosed in my register of interests. I think other colleagues are as well.

Mr Goodwill: Yes, the same two organisations apply to me.

James Gray: I am just the NFU.

Chair: Thank you. That is a timely introduction to Richard Bramley, who is the NFU's environment forum chair—thank you for joining us, Richard—and to Susan Twining, who leads the land use team at the CLA, for a session that we will seek to conclude by 3.10 pm, when we are being joined by the Minister for the second panel.

Thank you very much for joining us today. I would like to kick off the questions initially with a similar question to both of you. This year I believe the NFU has published its water quality strategy, which is timely and welcome. It would be helpful if you could outline what the NFU sees as its role in helping members to reduce agricultural pollution of our waterways.

Richard Bramley: Thank you for giving me the opportunity to speak to you at this Committee. The integrated water management strategy was launched in January of this year. It was a recognition of just how much water is an integral part of food production, farmlands and our landscape.

More often we have the wrong quantities of water in the wrong places at the wrong times and we are dealing with droughts or increasingly with flooding events. That is something that has been very particular this year, there have been a lot of headlines around water issues. That obviously has an impact on water quality—water quality leaving farms, falling on land, running through drains and soil erosion—and all the initiatives that the NFU, often working with other organisations, has been involved with to help improve water quality, which is something we think is critically important.

When it comes to soil, for example, it is an extremely valuable resource. Any farmer worth his salt will tell you that. When it comes to the nutrients that can be washed out as well, those are of real value on farm. We are on a steady progress of learning even better ways of keeping those nutrients on farm so they can do the good they can do where they need to do it.

Q287 **Chair:** Thank you. Susan, the CLA has also produced a water strategy document more recently this year. Could you give us your snapshot of what the CLA is seeking to do to encourage its members to reduce runoff into the rivers?



Susan Twining: Thank you. We produced our water strategy, which is a vision for the water environment up to 2030. It covers drought, water management, water quality and flood resilience. They are the three main areas we focused on. Obviously water quality was one of the key areas. We published it earlier this summer and had a long consultation process with our members last year. During that process we had a clear message from them that water quality is non-negotiable. It is a difficult issue, but it should be a priority issue for landowners to address water quality to ensure water quality is good.

Many of our members have water bodies and rivers running through their ground and have interest in ensuring the water environment is good as well. Many have private water supplies, not just supplying their own domestic use and their business, but often supplying others as well. Therefore in lots of ways many members are very, very keen to ensure we have clean water. We were keen to ensure that was part of the ambition. It is an ambitious level. We know there are some difficulties, particularly around diffuse water pollution and agriculture. It is not an easy problem to solve, but we feel that by setting that ambition we can find ways to achieve that.

Q288 **Chair:** Can you explain to the Committee the responsibility riparian owners have, if any, for the riverbank and water quality of the river?

Susan Twining: There are some legal requirements around that. Riparian owners have particular responsibilities to ensure they manage the rivers carefully. Quite often in larger rivers they own up to the middle of the river, so they have responsibilities reaching out to the middle of the river, which includes the water quality aspects.

Q289 **Chair:** Do they have responsibility in the event of watercourses coming into a river, streams or brooks, for them eroding soil into the river network? Would it be the landowner's responsibility if there is an infraction?

Susan Twining: It depends on the type of pollution you are talking about. If it is point-source pollution, then clearly it has an owner and it may be that comes from a different area. If there is a pollution incident, a leakage of slurry effluent or similar, then that would be a point source and would come from the source. For diffuse water pollution the responsibility lies across all the land.

Q290 **Chair:** Richard, you refer to your water strategy as an integrated water strategy. However, the document does not refer to pollution from agriculture of the waterways at all, so in what sense is it integrated? Do you recognise there is some responsibility for farmers where pollution incidents occur?

Richard Bramley: Yes, we certainly do recognise there is a responsibility there on landowners. Within numerous of the case studies, we refer to the efforts farmers go to to maintain the quality of water leaving their land.



Q291 **Chair:** In what sense is it integrated? Can you explain what that means?

Richard Bramley: The integrated is about collaborating with other organisations. It is about getting the balance right between when there is too much water and the role farmland plays in often storing floodwater. The flipside of it is when we get to periods where there is a real shortage of water. Good soil management can do a huge amount to help mitigate the effects of drought.

Q292 **Chair:** This inquiry has focused very heavily on non-agricultural pollution of waterways because we were looking at nitrate pollution through a previous inquiry, which was mostly focused on farmland. However, we felt it was important to address the pollution coming into our waterways from farming practices because it accounts for some 40% of the pollution of our rivers, according to the Environment Agency.

Now that we have our own system of support for farms going forward—through the ELMs system in England and the sustainable farming scheme in Wales—is the NFU having any success in persuading DEFRA, in its design of the ELMs listing for England at any rate, that there should be measures to encourage farmers to engage in slightly different farming practices to reduce pollution incidents?

Richard Bramley: First, it is worth pointing out that farmers have been engaging in improving practices for some number of years now. I can certainly speak from personal experience on that front. There have been various initiatives around protecting water, such as the local environmental risk assessments when it comes to pesticide applications and the Voluntary Initiative, which are around protecting water from pesticide contamination. There are a lot of things going on that we have already been actively promoting and very much engaging with. Members have—I do not like to use the phrase “been on that journey with us”—very much been engaging with that.

When it comes to the future schemes, since the direction of travel the Government were going to take with the new schemes first became clear, we welcomed the opportunity to be involved in that discussion. It presents a huge opportunity to not only have a more targeted approach to how we integrate food production, alongside improving the environment. We cannot separate those two things; they are absolutely essential. We live in our environment and we are totally reliant on it. However, we have a society that needs to have farming to supply high-quality food as well.

The schemes’ success will be borne out by whether we are managing to address those two needs: whether we are managing to improve on the work we have already been doing and whether we are managing to hopefully start to halt the decline in our ability to produce food in the UK because our self-sufficiency has been reduced. You could even say we have had some anomalies when it comes to consumer choice in increases in desirability for products we cannot produce here—for example,



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avocados and almonds. Is that the direction of travel that has a long-term sustainable footing when it comes to how we utilise the land in the UK and how we supply nutrition to the general public?

There are an awful lot of things that are mixed in with that. I personally am involved in the pilot of the sustainable farming incentive. That has given me an opportunity as we progress to be able to hopefully fine-tune that.

Chair: Thank you. We are going to move on now to some more difficult areas where pollution incidents have come directly from farming practices with Duncan Baker.

Q293 **Duncan Baker:** Thank you very much indeed. I want to come specifically on to farming in the Wye catchment area. I am an MP in a very rural area in north Norfolk. Whether it is chickens or pigs, the same matters crop up whenever there is a significant level of intensive farming. I have those and I am sure I speak for everybody who has encountered those problems in their own constituencies.

There are 20 million chickens alone in the Wye Valley that are being farmed. That says to me, using common sense alone, that it is an enormous amount of potential risk going into the water system. As the Chair just mentioned, 40% of the damage in our rivers is caused by what runs off into them. Do you think there should be a cumulative nutrient impact assessment before new—whether it is poultry or pig—establishments and units are consented?

Richard Bramley: First of all, I am a farmer from Yorkshire. I made sure I phoned a couple of people from the Wye Valley, because I am aware it is quite a hot topic, and I spoke to a poultry farmer there. They were both from Herefordshire. I raised these issues with them directly because if you are asking me specific questions on them I need to have a degree of knowledge.

Again, like almost parallel initiatives in my neck of the woods, they are very aware of the situation. They are very aware of their responsibilities. I cannot remember the name of the initiatives they are developing, but they are based specifically around making sure we are not overloading nutrients on land that is going to be running into the Wye. They are in the process of exporting a lot of the valuable organic manures further afield. It obviously all has huge cost implications for a business, but the message I have had loud and clear is that it is understood there is an issue of responsibility there for farmers in that area. That is progress.

Q294 **Duncan Baker:** In the nicest possible way, they are going to be invested in wanting to say that to you because it is their livelihood. To directly answer the question: should there be that nutrient impact assessment?

Richard Bramley: Any assessment of the best use of the nutrients we are trying to recycle in the UK is extremely valuable.



Q295 **Duncan Baker:** Coming on to Ms Twining, I will say it to you as well: how can you possibly manage 20 million chickens and not have a risk to our water systems? Surely those rivers in that area are going to be, at some stage, adversely affected unless there is proper mitigation there.

Susan Twining: It depends on the planning around that—not the planning system, but when you are looking at managing the manures and reducing the risk it is about ensuring you have sufficient land available to accommodate the manures without any risk to water.

There are some long-term problems within the Wye, which are mainly phosphates. The Wye, as you know, goes into Wales as well where they have different regulation. Therefore some difficult problems have arisen over time because part of the problem has been the build-up of phosphates in the soils over time. This is a long-term problem that needs long-term solutions. What we are seeing is that there is a lot of collaborative work going on in that area. There is a project called Refocus that is specifically looking at what can be done. Many of the landowners in that area and the farmers are working together to try to find a resolution that works for everybody. That may include looking at limits in the future, but I think there are possibly steps beforehand that could be taken, which might not have such a big impact on the local economy.

Q296 **James Gray:** Can I stay in the slurry pit, as it were? There are four different kinds of slurry, are there not? There is slurry from an intensive farm where you know how much it is, you know where it is going and if the slurry pit overflows it is a criminal offence and it is quite easy to track down. Is that broadly correct in terms of farming effluent? It is therefore presumably not much of a problem.

I have one dairy farmer with 600 cows that half the time are inside and half the time outside, move in and out at free will, so half the time intensive and half the time extensive. How do you monitor what is happening to the slurry in a semi-extensive or extensive area? That is the second lot.

Thirdly, how do you monitor what happens to the slurry when it is used perfectly legitimately for fertilising the fields? That is a perfectly normal practice in the west country, two or three times a year normally, although I think there has been some question on that recently as to whether it could be in the autumn or not. How do you monitor what happens then to the slurry that is spread on the fields and how do you prevent that getting into the watercourses?

Richard Bramley: First, it is obviously something that is particularly difficult. What we are dealing with in many different areas when we are farming is something called the weather. It is very hard to predict what is going to happen; it would be brilliant if we could. However, we have to—as best we can—manage the products that come from livestock farming in a way to try to reduce that risk.



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What I think you were referring to is farming rules for water, which is some recent legislation. It is a very complex issue when you focus on how we can best manage those nutrients in a world that is—

Q297 James Gray: Let me try to simplify it, then. In days of yore with mixed farming—small farms, people farming 100 acres—it was very straightforward. Cows poed, you put that on the fields and that made the corn better the following year. That was nice and easy. That is messed up by intensive farming and by very large-scale farming, which deals with large quantities of the stuff. What is the NFU proposing with regard to handling the vast quantities of animal product that comes from a dairy farmer with 1,000 cows or a chicken farmer with 100,000 chickens? How are we going to stop that getting into the watercourses, ruining their quality and killing off our rivers? How can this be handled? If it is not handled, presumably the end result will be that the Government or somebody will turn around and say, “You can’t do it anymore”. There recently was some debate about this.

Richard Bramley: That in itself will create an awful lot of other problems as to what we do with these products. Going back to Mr Baker’s suggestion around balancing the nutrient use, there is an awful lot of merit in that.

Q298 James Gray: What is the solution? What is to stop some Government down the road someplace stepping in and saying, “Right, you farmers, you’re wrecking our watercourses. From now, that is it. All poo goes to landfill or gets burned. You can no longer use it”? That is the risk, is it not? Indeed, there was a discussion this year as to whether or not you could put slurry on to fields once or twice, autumn and spring, was there not? Do you see my point? Unless you can justify this and demonstrate how you are going to handle slurry, the risk is down the road in some Government someplace sometime, and some Environment Agency, saying, “You can’t do it anymore. That is it”. What are you going to do about it?

Susan Twining: I think what you are talking about there is specialisation rather than intensification in some respects. You are getting specialisation of different farm types, you might be getting dairy, pigs or poultry that are largely specialised. Quite often you end up with a mixed-farm landscape and you export the slurry you are producing on one unit to an arable farm. It has benefit by improving the arable land, it puts nutrients in, helps to build soil carbon, helps to improve water-holding capacity and helps to reduce the need for nitrate fertilisers as well. There are lots of benefits to doing it. Looking at it on a more landscape scale, you can manage it that way. It is about having sufficient land to be able to apply manures and slurries at a rate that is acceptable that does not cause significant risk to water, which is the key. It is making sure you have sufficient land at the right time.

You also need to have sufficient storage as well. That can be a problem because slurry storage is expensive and you only invest in that maybe



once every 20 years or maybe even more in some cases. We know that some of the slurry storage infrastructure on some farms is deteriorating and that is an area that would be ripe for targeting. It has been identified by DEFRA for a slurry investment scheme it is going to be introducing next year to help farmers upgrade. That will be a huge step in helping to minimise both point-source pollution where there are failures that can cause catastrophic problems and also being able to manage and apply the slurries at the right time of the year, when there is less risk to water.

Q299 Mr Goodwill: The last conversation I had with my agronomist was along the lines of, "You're lucky, Robert, you don't have any livestock on your farm. You can just put it on out the back", which of course is what we are probably not meant to do. These rules are a nightmare. For many farmers growing winter drill crops, autumn drill crops, it will be pretty much impractical. It is also great when you have a two-week window to put some on. You will not be able to apply any organic manures until the spring, which you can do on grassland. You might be lucky one year in three and get a dry spring. How aware, Richard, are your members of these new rules? What is their general reaction to the way they might be applied?

Richard Bramley: They are extremely aware because it has caused some huge logistical headaches while we have been trying to get clarity from the Environment Agency. Unfortunately, one of the side products of livestock is that you get manures. They should not be viewed as anything other than an extremely valuable source of nutrients—

Mr Goodwill: They were until August this year.

Richard Bramley: —that displaces the use of the industrially manufactured carbon-intensive bagged variety of nutrients. You can create an awful lot of problems if they are not properly managed. This is about trying to ever improve and strike the best balance to, in any way possible, reduce the contamination of any watercourses with nutrients. The specific example there, with the huge shift of applying organic manures to drier land—generally speaking, we cannot make any promises on what the weather is going to give us—in the summer and early autumn when the conditions are very good, by switching that to spring we can create another set of problems where we can increase issues with phosphate losses and ammonia losses, for example.

We are forever trying to find the best solution for what is thrown at us in the season we have with the crops we have. I am an arable farmer who uses animal manure. I export straw to cattle farms and it comes back to me in the form of manure. By utilising cover cropping, I can make sure I not only produce bigger cover crops that trap more nutrients, but just by the nature of the fact they are bigger plants, they also trap more carbon that then gets sequestered in the soil. That improves the organic matter levels, which means soils are even better at holding on to nutrients. It is a continual progress. It is not something that you can focus on one particular aspect of. You have to try to take into account the whole



picture and, at the end of the day, what the best use is of organic manures.

Q300 Mr Goodwill: Susan, we have talked about how some of the larger more intensive units may well have access to land not on their own holding. Do you think there is a possibility that some farmers will be reluctant to take manures because of the timings they can put it on and they will revert to bagged fertiliser instead?

Susan Twining: That has already happened this autumn. We have examples of that happening. That has consequences going forward in the use of more bagged nitrogen, which is the largest source of nitrous oxide emissions in greenhouse gas emissions. It also has other impacts. Going back to the livestock producer, they have a slurry store or manure store that is needing to be emptied before the winter period. That is when you do need to store it, when you cannot get access to the land because it is too wet. It is having huge consequences already.

I think the Environment Agency completely underestimated the impacts this was going to have this year. In a lot of ways it has undermined the trust in that outcome-based approach the farming rules for water was supposed to be, which is the hope that is the way future regulation is going to work. Farmers were willing to work with that, but it feels like that has been undermined. It has not understood the impact. It has not understood the need for data. It feels wrong. Sometimes it is an instinct, the way this has been brought in feels wrong and the requirements.

Most farmers are trying to do their best and not pollute water. It feels like there has been an assumption they are intent on polluting water, which is just not true. They are trying to balance a lot of different needs around building up soil, organic matter and improving the soil and doing the right thing in using the organic manures. It feels like it is undermining the whole range of progress we have made over the last few years working with the Environment Agency.

We put forward an approach that is more risk-based as well. It is clear that in some situations—if you are a high-risk field, a higher soil type or applying readily available nitrogen at high rates—it is clearly going to present a risk to water, so that is high risk and should not be allowed. However, in low-risk sites and low-risk application situations, there is no reason why it should not be allowed, provided there is not a significant risk to water, which is what we are all trying to achieve. I think that is the frustration within the industry: it does not make sense and there is not sufficient evidence to back up blanket banning, which is effectively what the Environment Agency has done this year.

Q301 Mr Goodwill: As far as sewage sludge is concerned—and many farmers take sewage sludge from water companies as a useful fertiliser—do you think we may end up in a situation where this is mainly incinerated as farmers do not take it, particularly if they have their own livestock on the farm as well, and we will need to improve our incineration capacity for it?



Susan Twining: That might be a question to put to the water industry that deals with that side of things, the sewage sludge. However, I know from discussions with them that they will be looking at options. They have to treat the sewage. They have to do something with the sludge that comes out from that and the best way is to recycle to land. It is part of the circular economy. It is making the best use of the resources. Incineration seems a terrible waste of that resource.

Q302 **Mr Goodwill:** Thank you. Finally, Richard, there have been some quite generous grants available for farmers to lay concrete to put up sheds. Has that been taken up widely around the country, do you know?

Richard Bramley: Is this through catchment sensitive farming? Is that what you are referring to?

Mr Goodwill: This is where you are building a shed to put the manure in, basically.

Richard Bramley: It has not been available everywhere; not every area is covered by it. However, yes, I think it has been a useful incentive to improve infrastructure. The slurry investment scheme, which is on the cards as well, is going to be another way to ever improve the ability to protect nutrients, particularly during those winter months when they are not able to be spread on land.

It is also worth pointing out here that you have to make sure you have a planning system that allows for these structures to be erected, particularly when it comes to national parks and suchlike, so it is not always entirely clearcut, but they have certainly been of benefit.

Q303 **Mr Goodwill:** Have any of these buildings looked suspiciously like grain stores to you or is that just a rumour going around?

Richard Bramley: I have not heard that myself.

Chair: Thank you, Robert. That is a nice segue, as Christopher Chope has some more questions on slurry.

Q304 **Sir Christopher Chope:** Richard, what proportion of dairy farmers are not yet compliant with the minimum requirements for slurry storage facilities?

Richard Bramley: The honest answer is I could not answer that. I do not know.

Q305 **Sir Christopher Chope:** About 10 years ago the NFU did a study on this and estimated about half were non-compliant. Since then, do you think there has been greater compliance with these requirements or less compliance?

Richard Bramley: I would be guessing, but I would be surprised if things have not improved. If it is allowed, we could come back to you on that with those details, which would probably make sense.



Q306 **Sir Christopher Chope:** We have rules about minimum standards. You are basically saying you do not know the level of compliance. Does that not show a certain amount of irresponsibility on the part of the sector?

Richard Bramley: I am not saying we do not know within the organisation. I am saying personally I could not answer that.

Q307 **Sir Christopher Chope:** We heard earlier from Susan that she is expecting a new system to be brought in to enable those people who have not yet complied to be subsidised by the taxpayer to comply. Why should the taxpayer be paying for that rather than the farmers?

Susan Twining: The farmers would still be contributing. It would be a grant, so a proportion of the total costs. The problem with slurry storage is that it is high cost. Many farming businesses are about to embark on big changes in the policy and the support mechanism they are going to be getting. The cost of slurry storage often is difficult to justify out of profits, particularly on the smaller farms. It tends to be the smaller farms, dairy farms, which are more likely to be non-compliant because the cost per head of dairy cow is higher in a smaller unit than it would be in a larger unit. Inevitably they are finding it much more difficult to get the cost. In that situation it would make sense to help those businesses become compliant in order to prevent the high cost of water pollution.

Q308 **Sir Christopher Chope:** What do you think is going to be the cost? How much money is going to be handed out on this project next year?

Susan Twining: I do not have the details of that, which is something DEFRA will be working on, and I do not know the numbers that are involved. There is a tool on the AHDB website called the slurry wizard. You can put in your number of cows and it will tell you how much it costs to build a slurry store. It is quite significant. I do not have the exact figures, but if you are looking at 70 to 100 cows, you might be looking at £70,000 to £100,000 for six months' storage.

If the farming rules for water are going to prevent application in the autumn, you might need to be looking at increasing that to eight or nine months' storage, in which case you are looking at a significant extra cost of storage. When you start playing around with those figures you start to see how disproportionate the costs are for slurry compared with the profit on a business when what it does is deliver benefit to everybody through reducing water pollution.

Q309 **Sir Christopher Chope:** You do not really have an idea of exactly what the costs are. Surely if you have a dairy farm, an intensive dairy farm or a small dairy farm, and you cannot meet or afford the minimum requirements for slurry storage then surely there is a simple answer and that is to reduce the number of cattle on the farm, is it not? Why should the taxpayer be funding people who are breaking the regulations for their own ends when they could comply if they reduced the number of cattle?



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Susan Twining: They are not necessarily causing pollution; they may just not be compliant.

Q310 **Sir Christopher Chope:** What you are saying is it is a stupid set of rules because they are unnecessary, they are burdensome and pointless regulation.

Susan Twining: In terms of a long-term objective I think they make sense. However, with farming businesses, particularly smaller businesses, you cannot invest the same level of money every year. It is about being able to plan when you do that. If you want to fast-track the upgrading of these stores that is where grant funding does make a difference. It can fast-track investment into improving that infrastructure and does have a huge benefit on reducing the risk to water.

Q311 **Sir Christopher Chope:** The alternative solution of requiring people to comply, they have an option: they can either have more cattle, in which case they are going to have to put more investment into slurry storage, or they can reduce the number of cattle and thereby probably be more ecologically sound. It leaves the scarce resources, which taxpayers are being asked to put in, which could go into some other areas of the environment.

Susan Twining: There are quite a number of issues in that statement. It depends on how you look at, as we have mentioned, self-sufficiency—the productive capacity of the UK to produce our own milk and export—as well as supporting the rural economy and the jobs that come through from that. I am not sure it is as simple as just looking at the cost to the taxpayer and saying it does not work out and we should not be supporting them. I think there will be some instances where maybe the right answer will be for dairy farms to go out, but we have already seen a huge erosion of the number of dairy farms over the last 20 years. It will get to a point where we will not be able to support that sector. That sector will not be viable if we do not continue to support and improve the infrastructure.

Q312 **Sir Christopher Chope:** It is the usual plea for more subsidies. One argument surely will be if the price of milk needs to go up, the price of milk needs to go up, but why should we be subsidising the milk producers in this indirect way?

Susan Twining: I think because there is market failure in that sense, in that people are not willing to pay that higher price for milk that comes through to the producers in order to pay for all those externalities that come as a result of producing food.

Q313 **Sir Christopher Chope:** You mean people just will not drink milk?

Susan Twining: They may not.

Q314 **Sir Christopher Chope:** More will be imported?



Susan Twining: Potentially. There are lots of ifs and buts in that scenario.

Q315 **Sir Christopher Chope:** Bringing it to a conclusion, there is a heck of a lot of ifs and buts in all of this. Do you think DEFRA has produced a proper coherent document of the costs and benefits of the different options available to address these very important issues about slurry being produced on farms, particularly on dairy farms?

Susan Twining: I think it is taking the issue seriously. It is developing the slurry investment scheme, which will help support investment in new infrastructure. It might be a question for it later on, but I think it will have done the work to understand what is needed. It is clear the most pollution incidents tend to come from slurry stores and that is why the focus needs to be on that area.

Q316 **Sir Christopher Chope:** Have these cost-benefit analyses been published?

Susan Twining: Not that I have seen, which is why I am hesitant to say what they are.

Q317 **Sir Christopher Chope:** You are just hoping they have done them?

Susan Twining: It is a normal part of scheme development that you do need to convince Treasury it is worth funding.

Q318 **Chair:** Thank you, Christopher. I have one final question before we wrap up this panel. Is any work being done by either of your organisations to help farmers to measure and monitor the extent of diffuse pollution into waterways from the activities of your members?

Richard Bramley: We have various initiatives that are all geared towards improving the situation. A lot of them have been around for quite some time. Water protection is a key element of the Campaign for the Farmed Environment. We have the Tried & Tested website, which is about proper use of nutrients. I have mentioned the Voluntary Initiative already. There are local groups and I am involved with one in Yorkshire that is working with Yorkshire Water to improve nutrient capture and soil health. They all work together.

It is worth pointing out that our farming community is a very diverse one. We have talked about the struggles of a very small farm in compliance and then we have talked about the issues with having an extremely large farm as well. Ultimately, at the end of the day, what we are doing is producing food that we need here in the UK and producing it to ever improving standards. We are very focused on this. We realise this is something we need to take responsibility for, working with the food chain as well. We have mentioned market failure already and whether it is necessarily recognising the efforts of UK farmers.

We have to throw in, unfortunately, the standards imports might reach. Are we putting the production methods there under anything like as



much scrutiny? That is equally important. It is a global environment and all these things need to be important considerations. It is not an excuse, but it is something we need to be extremely wary of. That is where supporting UK production is critically important, and supporting it in a way to ever improve the environment that we work with is a key thing.

Q319 Chair: Will your members typically calculate or do a chemical assessment of the existing phosphate and nitrogen status of a field before spreading either farmyard manure or sludge from water companies so they know whether they are overloading the fields before they do?

Richard Bramley: In the case of sewage sludge, that is a given—it is always done. Farm assurance as well involves regular testing of land in order to address nutrient balance, nutrient management planning and NVZ calculations as well in order to make sure you do not over-apply nitrogen.

It is worth pointing out that in the last 36 years there has been a 69% reduction in the amount of phosphates applied to land and a 42% decline in the amount of nitrogen. That is real progress. That is what we are working on. I am doing it on my farm; loads of other farmers are doing it. It is a key thing and a good thing.

Q320 Chair: Thank you very much. We are going to end that panel there. Thank you very much to Richard and to Susan for your contributions today. Let the Minister in, please. I think you said, Richard, you would write to us on the point that was raised about the extent to which slurry is now compliant.

Richard Bramley: Yes.

Chair: Thank you. You are welcome to stay if you want to hear the next panel.

Examination of witnesses

Witnesses: Rebecca Pow, Kirstin Green and Simon Gallagher.

Q321 Chair: I would like to start our second panel by welcoming Minister Rebecca Pow, an alumnus of this Committee, and ask you, Rebecca, Minister for the Environment, to introduce your colleague.

Rebecca Pow: Thank you very much. I am delighted, as ever, to be here in front of this illustrious Select Committee. I have with me Kirstin, who is from my water quality team, from DEFRA—I am happy if you want to include her in any questions as well—and Simon Gallagher from MHCLG as well.

Q322 Chair: Thank you. Kirstin, you are very welcome. Simon, you are standing in for your Minister, who wrote to the Committee last week to explain he did not think it was appropriate for him to attend the Committee, despite acknowledging in some respects that while DEFRA is the lead on water quality issues, your Department has responsibility for



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the impact of new housing development on the drainage systems. I will say now that I felt that was an inadequate response and I was very surprised he was not prepared to appear before this Committee at this point.

Having said that, I would like to start the session. Minister, I know your interest in this subject is intense and that you have been taking a particular lead on water quality issues, which we welcome, and are encouraging the Department to give it a much higher priority than previously. Could you give us your own assessment, having been in place now for a year or so, more perhaps? Why do you think the water quality of our rivers has deteriorated so much in the last 10 years and what do you think we need to do to address that?

Rebecca Pow: Thank you very much, Chair. I am grateful. Just to give a little bit of an overview since I have been in the Department, I want to start off by saying that while we are seeing a negative picture that is being proposed all around, over the last decade our water quality has improved. We must not forget that. I want to put that on the record at the very beginning. For example, in the last two decades we have reduced phosphorous by 69% and ammonia in wastewater by 79%. The water industry, since privatisation, has spent a great deal of moneys, upwards of £160 billion, on the whole water space, with about £25 billion of that targeted on sewage treatment. There has been a lot of investment.

Also we hope we will be sharing with you shortly some recent research about invertebrates in water that has been carried out by Cardiff University, which showed some very welcome trends. I would be very happy to share that with the Committee when that comes out. I want to put that on the record before we all get too negative. That is not to say that there is not a great deal to do. There are an enormous amount of pressures facing the water industry with our growing population, with climate change and all the influences that is having on us, increasing development, and also in our expectations of water, me included. I have, Chair, as you know, made it one of my top priorities in DEFRA, because I do think we need to improve the situation.

I like to think we are moving very quickly, as I think you know, Chair, on making progress. I will rattle through some of the things that the Department and I have set in motion recently and then I am sure you will ask more questions about them as we go along. For example, we know that the storm sewage overflows need to be dealt with, so we have set up the storm sewage taskforce, and that will report back shortly. We have also introduced a whole range of amendments through the Environment Bill to get to grips with this storm sewage overflow, and all of them have been helped along by your private Member's Bill, because we have embraced a lot of the measures in there, and they are now in the Environment Bill. We have strengthened it even further during this summer, so I am sure we will talk about that in a minute.



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I have also set up the chalk stream restoration group to deal with that whole area of our very precious chalk stream habitats and the pressures that they are facing. That will report back shortly about what more we can do to help them; abstraction is a particular issue there. Also, as a slight aside, we have set up the loam and peat taskforce. Our peat restoration has a big water quality impact as well, particularly in terms of rewetting areas on the loam.

Then we have the Environment Bill with its targets, so we have this legally binding duty to set four legally binding targets, one of which will be on water quality. Within that will be a range of other targets. That is a way that we can start to get this whole improvement going, remembering that the Environment Bill has rolled over the 25-year environment plan. That is the first environmental improvement plan in the Environment Bill and that has its own water quality targets. There is all of that going on.

We have a draft river basin management plans, which the EA oversees, which is very much catchment-focused. We have a big drive now towards needing to look at things on a catchment-wide basis. My overall summary is that I believe we need a much more holistic approach to what we do with water. What we are putting in place, all these measures, will drive towards this link-up between water quality, water supply, demand, abstraction, but also flood risk—all of these things interconnect—development and the impact of climate change, which of course is throwing slightly unknown things at us. That is what I, as the Minister, want to see. I honestly believe that is the direction we are driving in, particularly with our latest draft statement to Ofwat, the regulator. I will end there, Chair.

Q323 Chair: Thank you. I share your enthusiasm and I am pleased to see that you have taken significant steps, not least through amendments to the Environment Bill, which are welcome, in particular the ones that found an origin in a private Member's Bill last year. I am very grateful for all the work the Department has done to recognise that.

I do not completely recognise your characterisation of the improvement that has happened over the last 10 years. There may be a case in terms of the reduced ammonia and phosphates coming out of water treatment plants, but some of us on the Committee visited rivers during the course of this inquiry and we have had very direct evidence from residents who live alongside rivers that the state of the rivers has deteriorated both visibly and from the chemical analysis that they have done through various campaign groups and support over the last 10 years.

We have had particularly alarming evidence of an enormous increase in microplastics, which are not typically monitored by the Environment Agency or the water companies, but that is primarily their source. I do not think you are trying to be complacent about this issue, but we do not recognise the picture you have painted. The evidence we have had from a number of the written submissions suggests that fish species and stocks have declined very significantly over the last 10 years, particularly



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salmon. I would be interested to see the invertebrate information you have when you can produce it.

I will take you on from that to the Environment Bill. You mentioned the water targets that will come out of that Bill. I know they are not due to be published for a while, but can you give us any insight in relation to water quality? What kind of targets are you personally looking at to try to introduce and improve water quality monitoring and then enforcement against those targets?

Rebecca Pow: To go back on your point, Chair, I do not mean to be complacent. I think what is happening in our water is very serious and I too have visited many rivers. I am not for a moment undermining the seriousness at all, but I wanted to mention for the record some of the improvements that have been made and some of the investment. I quite clearly think there is a lot to do, which is why we are putting all these measures in place.

Obviously there is a legally binding duty to set a long-term target on water. All of the four legally binding targets will be announced in October 2022, but we will be consulting widely on those before that. We are taking all of our expert advice now and we are looking at a whole range of issues. I cannot give you the exact detail on which targets will be selected, but it will include agriculture, wastewater, for example, reduction of pollutants and so forth, potentially abandoned metal mines, because there are still a lot of toxic chemicals coming out of old abandoned mines, which show when we do the water test, when the chemical tests are done—that is historic—and things like looking at demand and water consumption and whether there should be a target for that. Work is going on in all of these areas so that we can be sure about where we should set the targets and what the targets should be.

Q324 **Chair:** Will they drive at improving water quality to achieve the good ecological status that so few of our rivers have at the moment? Is that the objective of the target setting?

Rebecca Pow: Yes. There will be an absolute drive towards that, because one of our other targets in the Bill is to halt the decline of species abundance—that is, nature—by 2030. Of course water is all part of that. It is absolutely crucial that ecology is one of the keys.

Q325 **Chair:** In relation to the water company role, you have recently published the draft strategic policy statement for Ofwat, which determines in effect the capital expenditure programme for the next five-year pricing period for the water companies. I know you are subject to consultation at the moment and this inquiry will hopefully provide some recommendations to improve the final draft of that statement, but at the moment it rather vaguely calls on the regulator to ensure the water companies are more ambitious in their focus on water treatment. Water treatment has typically been the poor relation of the water company capital expenditure programme under Ofwat's rules. Are you anticipating



a greater emphasis on that subject? Are you prepared to be more specific in the way in which you direct Ofwat to treat investment in water treatment, as opposed to supply?

Rebecca Pow: Of course it is the independent regulator. We give it directions and then it has to carry out the directions in passing on and agreeing what the water companies can do. In that statement we are absolutely making the environment one of the top priorities. That includes improving water quality and that will mean all-round measures are needed to do that. We are focusing on and highlighting that we expect a much greater focus on catchment, the catchment approach through the drainage and wastewater management plans, which the water companies have to produce, greater focus on nature-based solutions and greater focus on sustainable urban drainage. It is up to Ofwat to ensure that the water companies bring all those things into their plans, while they have to be responsible for value for money in delivering it, cost to the taxpayer and all that. We are making water quality a top priority.

Q326 **Chair:** Do you think you should require Ofwat to set specific outcome-based targets, rather than generic statements of improvement? We have had evidence from the water companies themselves that they would like to see specific targets, because then it gives them a clear objective to go for, whereas if it is not specific it is a matter for conjecture and speculation as to what they have to do, and that may not lead them to do as much as they might be able to do.

Rebecca Pow: The purpose of the policy statement from the Government to Ofwat, the regulator, is giving the broad direction of travel. The targets are being set through all these other measures, which the water companies will know through the Environment Bill and through the target-setting process. That is what will drive the water companies to improve their water quality. Kirstin, do you want to come in there?

Kirstin Green: It might be helpful if I explain it. The strategic policy statement is one part of a broader framework that is given to water companies to help determine what they should put into their business plans for the next periodic review. As the Minister said, it is a strategic policy statement from the Government to Ofwat, as the economic regulator. But the Environment Agency, and to an extent Natural England, also play a very important role in this periodic review process. They will in a sense give some of that additional detail and more precision, which I think is what you are seeking here, through a suite of guidance documents that are being produced at the moment in tandem with the work that is being done on the strategic policy statement.

There is a quite detailed document that is known as the "Water industry strategic environmental requirements"—or WISER—which is produced by the Environment Agency and Natural England. That sets out the obligations in our law and in our regulation on the water companies in quite a lot of detail. It is a fairly lengthy document, which goes through



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issue by issue what is expected of the water companies. You know that we also have the river basin management plans, which will go into a lot more detail about what is expected in each river catchment, not only by water companies, but by other players as well, but the water company contribution is quite an important part of the river basin plans.

The Minister has talked about the Environment Bill targets that we will set on water. They have not been set yet, so we cannot be more precise about what they are until they are set. Of course they will be taken into account during the periodic review process, which goes on until the end of 2024 for that subsequent five-year period.

Finally, there is also a very detailed piece of work that we are reforming to make sure it works better and is more outcomes-focused, which brings in the collaboration that the Minister was talking about and a very strong focus on nature-based solutions. That is known as the water industry national environment programme. It is the list of detailed schemes that the Environment Agency works out water company by water company to determine what they need to do to meet their environmental obligations in that business planning period. Those schemes must be reflected within those business plans. We are working together very closely—the Environment Agency, the Department, Natural England and Ofwat—to make sure that this suite of documents is pulling in the same direction and giving the same messages, albeit with different degrees of specificity.

Q327 **Chair:** I am glad you have mentioned the WINEP, because that is the document that determines how much capital expenditure is spent over the five-year period on environmental measures in relation to water treatment. Are you going to be indicating that the order of magnitude should be doubled over the next five-year period, for example? Are you going to give any indication like that?

Kirstin Green: It is not our role to say what the spend should be. It is the role of Government and the regulators to say what outcomes should be achieved and then Ofwat works with the water industry to make sure that that is done in the most cost-effective way possible.

Q328 **Chair:** You do agree there needs to be outcome-based guidance given by the Government? At the moment the water companies have been used to investing a very much smaller proportion of their capital expenditure on treatment compared to supply. What kind of change are you likely to require Ofwat to deliver to improve the outcome of treatment?

Rebecca Pow: Of course on top of all those plans we have the drainage and wastewater management plans and through the Environment Bill we are making those statutory for the first time. Those plans will deal with the wastewater side of things to a great degree. They will basically map what the water companies are doing. Then, because of all the other measures coming through in the Environment Bill, in terms of the requirements of them, particularly on storm sewage overflows, in terms of the publishing the data on these overflows annually, in terms of the EA



then having to report on what the water companies are doing on that, Government will have a duty to publish a plan on those overflows and to report to Parliament on the progress. The drainage management plans will have to reflect the actions that are happening. They are in a way driving the improvement I think you are getting at on the wastewater end.

Q329 Chair: I understand that. I do not mean to detain the Committee on the detail of this too much, but it seems to me it is back to front. The wastewater management plan will set the overall plan, but it is the WINEP, which will be approved by Ofwat, that will give the water companies the tools to implement that plan. Unless WINEP is set by Ofwat to give sufficient headroom for them to be able to invest more in treatment, it will not happen. The plan might say, “We want to see an improvement of X% in reduction of pollution into the waterways”, but unless that is delivered through the funding stream provided by the WINEP, it will not happen.

Kirstin Green: It might be worth me saying that there has been an overhaul of the methodology for producing the WINEP in conjunction with the Department, the Environment Agency and Ofwat. We have also consulted over the summer—and the consultation is open at the moment—about that methodology. It is designed to be much more outcomes-focused, much more collaborative between the Environment Agency and the water companies, much more ambitious, and to reflect those high levels of ambition that we have talked about in broad terms in the SPS. That work is ongoing at the moment. The consultation will end shortly and we will take stock of what the outcome of that is. It should result in a WINEP that is driving in that direction and reflecting Government ambition.

Q330 Chair: Thank you. I have a couple more quick questions and then a question for Mr Gallagher. In relation to the 25-year environment plan, the water quality goals were somewhat watered down compared with previous EU arrangements and water directives.

Secondly, in the strategic policy statement, and specifically in relation to storm overflows, which we know are only supposed to be deployed in exceptional weather events but are routinely deployed by the water companies, the language used is that they should be used infrequently. “Infrequently” is perhaps stronger than “routine” but their current requirement is for only “exceptional” use. That sounds to me like a watering down of the threshold of acceptability. Can you explain that?

Rebecca Pow: You started with the 25-year environment plan. I think you are referring to the fact that at least 75% of water should be in as near a natural state as possible by 2030, and we have also rolled over the water framework directive, which has the 2027 date. Our general ambition of course is high to improve water quality and that is why the 25-year environment plan is the first plan in the Environment Bill. We still have that ambition to get the 75% into good and favourable condition,



then we are setting all the targets to get us there and we have all the other raft of measures that we have outlined to get us there. I would say ambition is still high.

Similarly, with the determination to tackle the frequency with which the storm sewage overflows are used, we are putting in place a system whereby we can keep a check on what is happening with them. The idea is that they are just a last resort and infrequently used system. It is an old and obviously historic system that is still operating, to be used in times of extreme weather. All of the measures in the amendments coming through the Environment Bill will cut down them being used for purposes other than that.

Q331 **Chair:** I know your intent, Minister, is to make them infrequent, but the current regulations are that they can be used only exceptionally, and because of self-monitoring and reporting the water companies blithely ignore that and discharge routinely. But why on earth are you using this opportunity, which happens only once every five years, to downgrade the current permitting requirements to one of "infrequent" instead of "exceptional"? It does not square with all the good intent that you are describing to the Committee.

Rebecca Pow: Obviously the EA oversee the permitting of those outflows, but in the Environment Bill we also have a duty for those overflows to be monitored both upstream and downstream and at every waste outlet treatment works. We will know exactly what is happening and we also are reporting on what actions we take to eliminate the use of these storm overflows. We also have our storm overflows taskforce reporting back on a long-term goal to eliminate harmful effects. We have two plans there, which I think demonstrates that we mean business about only using these facilities when in absolute dire straits in terms of extreme weather, which is really relating to climate change. Kirstin, do you want to add anything to that?

Kirstin Green: Yes, I would. Thank you, Minister. To add to what you said, I can answer categorically that there is no intention to downgrade the pressure on storm overflows. All the Environment Bill measures that have been taken and all the focus on this issue at the moment will be reflected in the next periodic review. We are absolutely expecting more from water companies in terms of dealing with storm overflows and reducing their frequency and volume of spillage. Ambition is very high on that, but we have to recognise that this is a large programme of work, that it could be quite costly and that it will take a bit of time to get to where we need to get to.

Chair: I think we have exposed an anomaly in the language, which I am sure we will address in our recommendations.

Q332 **Mr Goodwill:** Chair, may I ask a question on that? What happens more often—something that happens infrequently or something that happens under exceptional circumstances? Is it just playing with words or are we



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genuinely trying to make things tighter?

Rebecca Pow: Our ambition is high. I think it is just terminology. Chair, if you have highlighted something you think is not clear, we will definitely look at it.

Kirstin Green: We can take that into account.

Rebecca Pow: There is absolutely no intention to try to be misleading or downplay or water down anything in relation to this aspect. In fact, it is completely the opposite.

Q333 **Chair:** That is very helpful. I hope that means you will look favourably on the amendment passed by the House of Lords on Monday that the water companies should have a duty to eliminate discharges from storm overflows over a period of time. It is obviously one of the amendments that will be coming back to the Commons. Are you in a position to comment on it now? That would be helpful, but if not, we will await it.

Rebecca Pow: It will be all the same things I have just been saying. We believe we have addressed this through all the amendments we have already made in the Environment Bill. We have been working closely with you, Chair, on a lot of these, and other Members who have pressed us on this. We have the amendments we made in June, which were the duty on the Government to publish a plan to reduce the storm overflows, to report to Parliament on the progress, water companies to publish data on the storm overflows annually and the EA then to publish that data from the water companies. Then the additional amendments that the Government put in in August were on the duty of the water companies to report real-time use of these water overflows within an hour. I think that will make a genuine difference to us knowing what is going on.

Then there is a duty to do this monitoring up and downstream of treatment works—that involves putting in gadgetry—then Government are to report by September next year on actions to eliminate storm overflow outlets, and then we have that additional report coming from the storm overflows taskforce on a long-term goal to eliminate the harmful effects. We believe we have done everything we pretty much can do to tighten all of that up. Then we will achieve what that other amendment was seeking.

Q334 **Chair:** All of those amendments are very welcome. The Duke of Wellington's amendment was supported across the House and imposes a general duty on water companies that I think would be belt and braces. We will wait to see how the Government responds to that.

Sorry, colleagues, I have one more question on Ofwat. How will the Department hold Ofwat to account for delivering on the environmental goals through the special guidance?

Rebecca Pow: We obviously keep in close contact with Ofwat. It reports back to us on what it is doing. It has its strict strategic policy statement.



Its duty within the remit—it is obviously the independent economic regulator—is to deliver efficiencies to ensure that we have a safe, secure and resilient water supply and to deliver on all of its demands. We will also be looking at how it does that in the usual way.

Kirstin Green: That is right. I will add that we work incredibly closely with Ofwat. Yes, it is the independent economic regulator, but we recognise that close work between Ofwat, the Department and the Environment Agency as the environmental regulator is the best way to achieve the outcomes that we all want to achieve. That constant co-operative work is very helpful in trying to ensure we are pulling in the same direction.

Rebecca Pow: Chair, in the 2019 price review we tweaked things a bit, so that it is all more transparent and clearer in terms of the reporting back from the water companies. We have been at pains to make sure what they are doing is clear and transparent and what their relationship is with the water companies.

Q335 **Chair:** Thank you very much. Colleagues will have other questions for Mr Gallagher, but I would like to pose one before we move on. Does your Department recognise that on new housing developments, which maintain separation of surface and foul water drainage systems, but have a right to connect to a passing drain, whether it is a foul or a surface water drain, it is a responsibility of your Department rather than DEFRA to try to make sure that that does not contribute to pollution of waterways?

Simon Gallagher: It is a great question and it is one to which there is quite a long and complicated answer. The individual decisions are made at local authority level, operating on what their local standards are and on the advice of the Environment Agency.

Chair: The right to connect is not a local decision; that is a national policy.

Simon Gallagher: I will come on to that. There are a lot of decisions that are being made locally. We have a responsibility to ensure that housing comes with the appropriate bits of infrastructure, together with the appropriate regulations on the various different parts of that, and we act as a bridge between the industry, which has had some difficult experiences, and with the various infrastructure providers. Yes, we are fully aware of these and the housing teams in the Department work very closely with the communities, with the industry and with the water companies on making sure that these are connected and work effectively.

Q336 **Sir Christopher Chope:** Can I follow that up? I have been told by the chief executive of a water company that it would be a very simple thing to stop all new developments being able to connect with the wastewater system and sewerage system. If you mix wastewater and sewage together, it makes it more difficult to control when you have severe



rainfall. Obviously we cannot do anything about the historic situation, but why are we still allowing or enabling the development companies to build new houses and the water authorities cannot prevent them from applying and being granted licences to connect up both the wastewater and the sewage, when the water companies will say, "We will allow you to connect to the sewerage" but they cannot do that? Why don't you change the rules on that straight away?

Simon Gallagher: I am not an expert on the right to connect rule; that is another part of the Department. Can I take that one back? We may need to write back to you on that side of things.

Chair: I hope very much that your Minister, when he is next called to the Committee, will actually take the trouble to come. I am going to move on now, finally—I crave the indulgence of colleagues—to Duncan Baker.

Q337 **Duncan Baker:** Thank you very much, Mr Chairman. I will move on from your questioning about the Lords amendment, but I hope that if we are very serious about it, the Government will look again.

I want to move on, Kirstin, to you. Last week water companies were given a note that they can discharge into rivers if they do not have the appropriate chemicals to treat. That does not send a very good signal to anybody that we are very serious about protecting our rivers. Some of the reasons that were given for having a shortage of those chemicals were Brexit, for instance, and shortages in transport. Was there any underlying work done to look at the resilience planning to have chemicals and not just resort to doing this if we had shortages?

Kirstin Green: There is resilience planning that takes place. There is a team within DEFRA that is responsible for doing that across a range of issues. That includes in relation to the supply chains for water treatment. It is something that has been looked at closely throughout the last couple of years. It has come to a point recently where there is this real shortage occurring. It is related to shortages that are occurring in lorry drivers elsewhere as well, so it is obviously not unique to this issue.

It is very much a temporary measure in case needed. I am not aware that it has been used yet, in actual fact. It is a real fall-back if we need to do this. It does not mean that primary and tertiary treatment are not taking place. It is important to be clear that it is not untreated sewage that would be allowed to be discharged by this, it is sewage that does not have this particular treatment with ferric sulphate. It would only be allowed to be discharged where it did not have a very strong environmental impact. In particularly sensitive waters it would not be allowed. Before any water company was able to make use of this regulatory position statement, it would need to come to an agreement with the Environment Agency on when and how it was going to be used. It is very much a temporary measure to be used on a last-resort basis.

Q338 **Duncan Baker:** It worries me that, if you are saying that there is resilience planning that has gone in for the last two years, we are still



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even doing this. It is not as though we know that the water companies do not need an awful lot of excuse to discharge. We have seen that. We have heard from our Chairman talking about it many times before. To even allow this situation, it is the “get out of jail free” card. Even allowing it to happen and making it possible sets all of the wrong examples of what we are trying to achieve, of clamping down on those companies that are acting in such a way.

I go back to Minister Pow. Surely you can understand that that is not the precedent we want to be setting at all. We have to get better and we should not be allowing those circumstances, especially if we are being told that we have put the resilience planning in place. We have been doing it for the last couple of years, yet we have reached for the lever as soon as it starts to hit the headlines that we have some problems with transport and we do not have enough chemicals and we are allowing this to go ahead.

Rebecca Pow: It has not been used yet. It is literally a contingency plan. It is not something that has been happening and has literally just arisen because of this potential shortage of drivers. It is really there just in case. It has not been used. They have not been not using ferric sulphate. It is there just in case they cannot get the deliveries there, so there is at least a contingency plan in case that should happen, which is absolutely the right thing to do. In fact, I am very pleased that everyone has got together and formed a plan in case it does need to be used.

If it does need to be used—because this is ferric sulphate, which are iron salts and they are used in the final stage of sewage treatment to reduce the levels of phosphate in wastewater—drinking water is protected totally. It would only be used as an absolute last resort on the sewage treatment, but it has not been used yet.

Q339 **Duncan Baker:** Are any companies telling you that they are short of the chemicals and therefore that they might have to use this?

Rebecca Pow: It is a “just in case”, which we do right across the board in the water industry for all our chemicals. In fact, we had to go through that in Brexit—

Q340 **Duncan Baker:** It will only have to be used if they do not have the chemicals, so the question is: do you know of any that do not have the chemicals?

Rebecca Pow: At the moment we do not know of any water companies using it. They are obviously in the best position anyway to report in. We did go through all of this in Brexit because we do have quite a number of chemicals imported for the water industry, so we also had a very comprehensive plan there in case we ever needed to use it. So far this has not been used. We would be criticised if we did not have a plan as a “just in case”.

Duncan Baker: You will be criticised if the water companies use it as



well, I imagine. Thank you.

- Q341 **Caroline Lucas:** I do get the sense that we are in a kind of parallel reality here. Notwithstanding that I am sure you are absolutely committed to the improvements that you are talking about, all of the evidence in our briefs is pointing to the fact that quality is going down. You have the 25-year environment plan that reduced the requirement for all water bodies to meet good status now being three quarters. We have the increased numbers of sewage spills, up by 27% last year alone. We have the language issue we have just been talking about, from “exceptional” to “infrequently”.

What I want to come to now is the issue of funding. My first question to the Minister is: do you believe that the Environment Agency currently has adequate funding to deliver the kinds of improvements that you have said you would like to see on water quality monitoring and enforcement?

Rebecca Pow: First of all, the water quality is static. That is what has happened right now. I hope that everything that we have said indicates that we are taking this situation of water quality extremely seriously and we are making it a top priority. I hope that all the things that we jointly have outlined so far will indicate that.

I think that your question was about funding the EA. It is a difficult time for everyone. Funding is challenging, especially as we have just faced a year of dealing with the pandemic. The EA, contrary also to a lot of views, has undertaken an awful lot of enforcement procedures. In 2020 we have had about £2.5 million-worth of fines because of—

- Q342 **Caroline Lucas:** Can I put it to you that you have said that it is because of Covid, yet the figures we have here—

Rebecca Pow: It is not totally because of Covid.

- Q343 **Caroline Lucas:** You did say everything has been very difficult since Covid, and the figures we have here show that grant in aid funding fell by 63% over the period 2009-2019, so that was well before Covid. I would put it to you that this is a systemic issue that has nothing to do with Covid. I am sure that that has probably made it worse, but essentially EA grant in aid funding fell by 63% over the last 10 years. Do you think the Environment Agency has adequate funding right now to deliver the improvements that you say you want to see?

Rebecca Pow: Yes. The Environment—

- Q344 **Caroline Lucas:** You say yes? You just said yes.

Rebecca Pow: The Environment Agency has a significant role in this space. The Environment Agency and Natural England together were both allocated £1 billion more over the last year to carry out their duties, and that has enabled them to put in place a whole new river surveillance network to enable them to do their monitoring.

Caroline Lucas: I want to ask the questions, Minister.



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Rebecca Pow: We have just allocated them 50 new inspectors to help with all of this.

Q345 **Caroline Lucas:** Why did Sir James Bevan tell this Committee that the Environment Agency has very limited resources with which to regulate the water companies and the farmers in the way that he would like and that he would love to go back to the situation of 10 years ago?

Rebecca Pow: I would have to see that in writing because that is not exactly what I was given from it.

Caroline Lucas: I can send it to you, but it is absolutely—

Rebecca Pow: The point is that all organisations have pressures on them to deliver within the funding that they are allocated. We have recently allocated the EA more funding. We have just allocated 50 new inspectors to help with all the monitoring. We have just allocated £17 million for more catchment-sensitive advisers, who will also be working very closely with the EA inspectors. We have upped the funding to them and this will all help. Indeed, they are also—

Q346 **Caroline Lucas:** It will not help against a background that budgets have been slashed to such an extent that we have had the chair of the EA come here and say he does not think he can do his job properly, which is essentially what he said. If you look at the monitoring that that amount of money is enabling to happen, we are seeing, for example, that farms in England can expect to be inspected once every 263 years. We are seeing that the number of water samples taken has fallen by 45%. The total budget for EA prosecutions and enforcement has fallen from £120 million to just £50 million. In spite of all of the fine words that you are saying, the reality is telling a different story.

Rebecca Pow: As I have said, we are taking water quality and improving quality very seriously—

Caroline Lucas: The evidence says the opposite.

Rebecca Pow: No, it does not say the opposite. We have just allocated these new inspectors. We have given £1 billion more to the EA and Natural England, who work closely together. We have more catchment-sensitive officers. All of these organisations are working more closely than ever before and harnessing a lot more innovation, tech, drones and so forth, to help with their monitoring. I am not saying it is all perfect or that everybody would not all want more money, but with the tools that we—

Q347 **Caroline Lucas:** Wanting more money? It is not wanting their budget to be slashed, and that is the reality of what has happened. Then we look surprised when we see that the number of enforcements taking place is going down. I want to put something to you—

Rebecca Pow: I would take issue with that. It is not all about enforcement and the EA. To deal with the whole water quality issue, we



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have to take a holistic approach. It does not just involve the EA. It also involves the—

Q348 **Caroline Lucas:** My questions are on the EA, Minister, and I have another three still to go, so let me just focus on the Environment Agency, which is the area that I have been asked to ask some questions about.

The Government's catchment-based approach, which you just mentioned, to improving water quality now relies on voluntary action from river trusts and other bodies. Is that not evidence that regulators are underfunded if we have to depend on community groups, which we have seen here in our Committee giving us evidence and so forth?

Rebecca Pow: Community groups are very valuable, but it is not only community groups. We have just allocated another £17 million for catchment-sensitive officers. I have been out to visit a number of them and have spoken to them. They give on-the-ground advice to farmers and they work very closely with the EA.

Q349 **Caroline Lucas:** So voluntary action works?

Rebecca Pow: It can be helpful because farmers of course have to agree to join a lot of these schemes, for example, and agriculture is one of the big areas of pollution. We have to harness all of these angles. The EA, Natural England, the farming community, the water companies, Government and the farmers across the board have to work together.

Q350 **Caroline Lucas:** Do you think that the fines levied on water companies are high enough to deter poor performance or are they simply viewed as a cost of doing business?

Rebecca Pow: One of the largest fines has recently been issued to Southern Water—£90 million. I don't think they would call that a cost of doing business. I think that was a serious and significant fine and it sends serious signals. Similarly, Thames Water had another fine—£20 million—and a great many other pollution enforcement actions have been taken. The signals coming from these are very serious on water companies. Equally they have all of the other measures lining up for them that they now have to comply with to do with the sewage storm overflows, improving their sewage treatment works and so on.

Q351 **Caroline Lucas:** Would you like to see the fines returned to the Environment Agency to support its compliance work rather than fines going into the Treasury and into the general pot?

Rebecca Pow: I believe that a number of the fines have contributed to a lot of environmental projects carried out by a number of environmental charities, river trusts and wildlife trusts.

Q352 **Caroline Lucas:** But the general fines just go into the Treasury pot.

Rebecca Pow: That is the way the legislation is set up at the moment.

Q353 **Caroline Lucas:** I am asking you whether you think that is a problem.



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Given that we have just established the fact that the Environment Agency does not have enough money, would it not make sense if some of these fines went back to the Environment Agency? I am just asking your view on that. I know what the reality is at the moment.

Rebecca Pow: At the moment that is not how the system operates—

Caroline Lucas: I know, but do you think it should?

Rebecca Pow: —although some of the money usefully does go to environmental projects.

Q354 **Caroline Lucas:** Do you think it should work that way is what I am asking you.

Rebecca Pow: That is something we could take up with Treasury, but at the moment that is not something that is up for debate. Kirstin, do you want to have input into that?

Kirstin Green: I think that it is probably something we would need to take away, Minister, yes.

Q355 **Caroline Lucas:** I have one last question. Do enforcement undertakings represent an effective solution to non-compliance compared with prosecutions, or are they a bit of a soft option, do you think, for the water companies?

Kirstin Green: Sorry, I just interrupted there. I was just clarifying the enforcement undertakings are the way in which money is channelled into those environmental projects the Minister was talking about.

Q356 **Caroline Lucas:** It is the alternative to going to court, isn't it, essentially? It has been suggested to water companies that instead of going to court they come to these out-of-court settlements. Is that a bit of a soft touch for those water companies? Obviously the court cases, when they do happen, occasionally can come up with very big fines like the one you mentioned for Southern Water.

Rebecca Pow: Yes, and obviously they take an awful lot of effort and an awful lot of time and funding from the EA to bring those cases to court. Where they can, the EA does also try to work on an advisory approach, particularly with farmers, to try to solve the problems without having to take legal action.

Kirstin Green: To come in on top of that, that can be a proportionate approach depending on what the issue is and how serious the breach has been. It can result in a quicker remedy than going through a court process.

Caroline Lucas: I will leave it there, Chair, thank you.

Q357 **Sir Christopher Chope:** Can I follow up on that £200 million coming in fines? I am surprised that you, as the Minister who is short of money in your Department, are not saying, "That should be hypothecated to our



Department". That is what happens where you have a lot of other civil penalties. It surely would be very useful money for you, so why don't you say to us that you agree that it would be a very good idea to pursue with the Treasury?

Rebecca Pow: It certainly could be pursued with the Treasury. Whether it would agree or not is up for debate.

Sir Christopher Chope: Yes, but if you don't ask you won't get.

Rebecca Pow: It is all Government money, isn't it, whether you are paying the EA or where the fine is going. We put in the spending review bid for the various things we need in DEFRA. It is all coming out of the same pot, but it is certainly something that is raised and potentially should be given consideration. I think that is something that needs to go to the Treasury.

Q358 **Sir Christopher Chope:** Surely the point is that if we want the Environment Agency to take more enforcement action, the Environment Agency is disincentivised from doing that because if as a result of that enforcement action fines are imposed, the Environment Agency does not get any financial benefit from that. If any penalties that are imposed were returned to the Environment Agency, the Environment Agency would have more of an incentive to enforce the law. Isn't that the point?

Rebecca Pow: I suppose the main point would be that it would be great if they did not have to keep taking enforcement action because there weren't any pollution incidents to take action against. What I have been talking about is the system we are putting in place, building on what was there in the first place, so that we can improve our water quality so that we do not just have to keep getting hooked up on enforcement.

Q359 **Sir Christopher Chope:** Okay. Can I ask you about this issue of the mixture of stormwater and sewage? One recommendation from water companies I have spoken to is that it would be open to the Government to prevent all new build developments being able to be connected with both wastewater and sewerage. They would have a sewerage connection and they would have to make separate arrangements for the disposal of wastewater. What are you doing to promote such a change in the law to help the water companies?

Rebecca Pow: We are obviously in close liaison with MHCLG over these issues. You raise a very pertinent point. What we are in strong consultation about is sustainable urban drainage, which is something that I feel very strongly about. We are going to review what is called schedule 3 to the Flood and Water Management Act 2010. That sets standards for what is sustainable urban drainage near new developments and the developments that want to make their connections into the system. It was never made mandatory, so we are discussing the possibility of making this mandatory. This potentially could make a very big difference to the water environment, to control what is coming out of our new housing and this whole right to connect issue.



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I am talking to the Housing Minister about this. We are conducting our review because things have changed a lot since 2010. We want to get a good picture of what is going on and then on the basis of that we will be speaking to our friends in MHCLG about how we can integrate these things, which I think will make a very big difference to the impact of development on the water infrastructure.

Q360 Sir Christopher Chope: The schedule 3 review and all the rest of it is complicated, but changing the law now, perhaps in the Environment Bill, to enable water companies to refuse to have a connection for new developments for wastewater is something that could be done just by changing one line in the law, as I understand it. What I cannot understand is why, if we are all committed to improving the water environment, that cannot be done now and why these discussions that you seem to be having with MHCLG, about which Mr Gallagher did not seem to know anything, are taking so long.

Rebecca Pow: We are considering this. Removing the right to connect could potentially be—what you also have to consider is whether removing that right is a barrier to development. We are considering—

Q361 Sir Christopher Chope: That is what it is all about?

Rebecca Pow: That is not my Department, but we are considering the issue of the right to connect through the review of schedule 3. We are looking at it. We are taking it very seriously: should we make the right to connect conditional on the approval of proposed sustainable urban drainage? I have just explained that to you. We already have those regulations in 2000 and we do not need new laws. We have them, but should they be made mandatory?

Q362 Sir Christopher Chope: When will you have taken a decision on this issue of the right to connect?

Rebecca Pow: Shortly. We are conducting this review and then we will be reporting back. We are taking a lot of advice and evidence on it and obviously there is planning reform under way. Potentially you could put those points to Mr Gallagher, along with the whole issue of blue-green infrastructure in developments and whether we should be doing more on that. That would considerably help our whole water quality landscape.

Q363 Sir Christopher Chope: Minister, every time I ask a specific question you generalise rather than answer the specific question. We know that with one stroke of the pen a significant change could be made to the benefit of the quality of the water and to help the water companies so that there is less wastewater in the system as a result of new developments. That could be done just like that.

Rebecca Pow: I hear what you say and my answer is that we are reviewing it. We are reviewing this right to connect and the SuDS. It is not as straightforward as the stroke of a pen.



Q364 **Sir Christopher Chope:** Will that review be completed in time for late amendments to the Environment Bill?

Rebecca Pow: It does not need to go in as an amendment because it is already in the Flood and Water Management Act 2010. What we have done—

Sir Christopher Chope: It just needs a regulatory action?

Rebecca Pow: —in the Environment Bill is to say that we will review all of that.

Q365 **Sir Christopher Chope:** Does Mr Gallagher have anything else he can tell us about this?

Simon Gallagher: The only bit I would say is that as a Department we are massively in favour of sustainable drainage systems. We want to push those as much as possible in the meantime while we are going through this process. We have continually over the years tightened up the national planning policy framework to increase the ask of the development industry and increase the expectation on those.

We have a very local planning system in England, which allows discretion to local authorities and does not give my Ministers vast amounts of powers to direct under the planning rules. What we have had to do is through national planning policy we set a clear expectation in that, and I can quote the bits if it is helpful, to say that for developments of 10 homes or more there should be a sustainable drainage system already incorporated in that. That is a permissive power. Many authorities demand it on smaller sites. We are working very closely with our colleagues in DEFRA because we want to see these happen practically. There is no one thing that is a sustainable drainage system, it varies according to the circumstances, which is why I think the Minister is absolutely right that we need to think about exactly how we would do this and make it work for all development as much as possible.

To be totally clear, we are absolutely one on this. We want to see sustainable drainage systems happen in as much development as is possible. It is just about how to make this practically happen.

Rebecca Pow: Aside from that, there is also a massive flood risk element to this, which is why they are so important as well, and indeed the nature that they can bring into communities. They are an all-round win. You asked me how long it would take. Our review will take us about six months.

Q366 **Sir Christopher Chope:** Can I ask you about what you are doing to address non-compliance by dairy farms with the legal minimum slurry storage capacity rules?

Rebecca Pow: Yes. Of course this has arisen over the summer. There have been a lot of conversations about that. Agriculture is one of the other major sources of pollution. It is not just sewage treatment works.



There are lots of sources of pollution in our water; it is not just one thing or another. We have urban pollution as well and chemicals and so forth. We are working very closely with the farming community. We do have regulations on this, as I am sure you will know, the farming regulations for water. The Environment Agency has over the summer clarified through a regulatory position statement to make those clearer in terms of how they will be enforced. As I am sure you know, farmers have to test their soil and their crops to see what the nutrient requirement is, how much more slurry they could take. If it shows that there is a requirement, they can spread the slurry. If they think they have more slurry than the soil and the crops need, they have to enter into a discussion with the EA about that.

Certainly the EA is going to be enforcing these regulations more tightly as time goes on because they are so important to improving our water quality. There is a lot of discussion going on now. A new advisory group has been set up with the EA, the farming community, the NFU and the biosolids sector—because it also includes sewage sludge from the water companies—to work their way through this, to make sure we can get the enforcement right.

Q367 Sir Christopher Chope: My question was specifically confined to dairy farms and the existing requirement that they should have a minimum amount of slurry storage capacity. We have heard that maybe as many as half of farms are not complying with that. What are you doing to enforce compliance with it? We have heard that there may even be a suggestion that you are going to use taxpayers' money to subsidise those farms that are not complying at the moment. Is that your plan?

Rebecca Pow: I have certainly not heard that, sir. What we are doing is in very close liaison with the farmers. We have these 50 new EA inspectors, but we also have our new catchment-sensitive officers that we have just allocated. They will be working with farmers, going to their farms to advise them. I have met some of them, for example, in the Yarty valley in Devon, where there is a real case of exactly what you are saying. There is a whole valley of dairy farms, intensive dairy farming, and the catchment officer is working with them on how to reduce their pollution run-off from their farms.

I went to see one farmer who is a good example. He had 170 cows, 170 acres. He had used some Government grant to help him build a new slurry store. He had put roofs on all of his dairy housing so that when it rains it doesn't just wash all the slurry off. He had changed his cropping practices so that he is using much more of a mix of cover crops than one monoculture of grass, where the rain pours down, hits the soil, and the soil much more easily runs away. He has covered all his streams and he has put in ramparts. I will tell you what: it was working. This shows what the catchment-sensitive officers can do and why they are so important. That is a key thing that we are moving on.



We have our slurry investment fund coming out next year, which again I know that farmers will find useful. We are having all these discussions about whether we should potentially be doing nutrient budgets. I think that it is something this Committee has discussed: should the extra slurry of those intensive dairy farmers be going to arable farms that do not have slurry? These are all things that are being looked at.

Q368 **Sir Christopher Chope:** Will you be publishing a cost-benefit analysis for your slurry innovation fund?

Rebecca Pow: It is the slurry investment grant that obviously farmers will have to apply to. It will be allocated, yes, on a—

Q369 **Sir Christopher Chope:** We will know whether it is value for money for the taxpayer? That is basically my question.

Rebecca Pow: Hopefully, it will be value. Everything we do has a value for money for the taxpayer element in it.

Q370 **Sir Christopher Chope:** One way of looking at it is to produce a cost-benefit analysis. Will you be publishing one?

Rebecca Pow: The way we divvy up all our money, whether it is flood money or whatever, we have a whole criterion that we have to work through to make sure it is value for money. I suppose that you would also have to put on it, "Is it value for money because we are having our water cleaned up?" There will be a whole system of criteria that will be assessed, as with all the grants we give, for when they are allocated. There will be lots of other measures. Lots of farmers are doing these already and lots more will have to do them.

Q371 **Mr Goodwill:** Minister, you just mentioned the Flood and Water Management Act 2010. One way of ensuring that, when new development goes ahead, all the correct calculations have been done to ensure that this does not impose loads on the pollution in the area would be to implement schedule 3, as the Welsh have already done. Would that not be a neat way of doing it? Are you considering that?

Rebecca Pow: Are you talking about their nitrate vulnerable zones they have introduced?

Q372 **Mr Goodwill:** No, this is about an approved drainage system being approved ahead of—I think that Mr Gallagher is nodding, he knows about this. That is to enable that before development can take place the SuDS, the sustainable drainage system, can be first approved, which currently is the situation in Wales, but we have not implemented that schedule in England as yet.

Rebecca Pow: I see, okay.

Mr Goodwill: It would seem a neat way of doing what you say you would like to do.



Rebecca Pow: Clearly it is devolved, but we work with all our devolved partners.

Mr Goodwill: No, they have done it.

Rebecca Pow: We will speak to them and find out how it is going.

Simon Gallagher: The review that we have announced where we are working very closely with Kirstin and the team in DEFRA is designed to address exactly these questions: how do we commence that part of the Flood and Water Management Act 2010? What are the issues involved with it? We are doing collectively what you are asking for. I think that the Minister gave some sense of the timetables involved in that earlier and we are making good progress on that. We are working very collaboratively on that.

The key thing that I am keen to ensure we are getting from that is some of the evidence was that there are some good schemes that are being brought forward at the moment with sustainable drainage built into those, so how do we ensure that we are learning from the very best schemes that are under way at the moment, as well as the schemes that are happening in devolved areas?

Q373 **Mr Goodwill:** Thank you, that is very helpful. Maybe your new Secretary of State, Michael Gove, will be able to put an update there at the top of his agenda.

The first session we had with the NFU and the CLA talked a lot about agriculture and the issues of sludge and sewage and manures and managing those. Do you think that maybe DEFRA has focused too much on sewage pollution from water treatment works or from run-off rather than the other big contributor, which is agriculture? Do you have in your mind a picture of the proportion of each in different parts of the country and where maybe you should be throwing more emphasis on, depending on where it is? We have heard about a lot of intensive poultry units in a very compact area.

Rebecca Pow: You make a good point, Mr Goodwill, but we are quite well aware that there are lots of sources of pollution. A lot of focus obviously has come on the water companies because of the storm sewage overflows, but a great deal of pollution comes from other areas like agriculture. We are totally aware of that. We are working across the board on all fronts.

Each area is different and each solution will be slightly different. I have been on visits up the River Wye, which has this issue with the chicken farms because it is a very intensive chicken area. Equally, we have the Solent where the main pressure is potentially development. Each area is slightly different and each solution will be slightly different, but we are working across the board particularly on this idea of nutrient neutrality before we can allow developments to progress. That is across the board, whether it is a new chicken unit or a new housing development.



Q374 **Mr Goodwill:** Are you concerned about the point that I think Mr Bramley referred to, that many arable farmers will take manures from other intensive units in the area—muck for straw deals, as they call them around us? Are you concerned that some farms, because of the restrictions on spreading, may be more reluctant to do that and that may mean that intensive units will have a lot more manure to try to deal with on their own unit rather than farming it out?

Rebecca Pow: I know that a lot of farmers already do farm it out. We do have our regulations. The regulations are going to be tightly enforced, probably more so than ever, as we go forward because we do have to deal with this water quality issue. Farms that have more slurry than they can cope with are going to have their management plan to work out how they are going to deal with it, how they are going to share it or whether they need more storage, which is why our slurry investment grants will be very helpful. Potentially a number of farmers will have to have more on-farm storage ready for the times when they can spread. I know that it is a challenge for a lot of farmers.

Q375 **Mr Goodwill:** The other source of phosphate and nitrate pollution is bagged fertiliser and obviously farmers try very hard to use that as sparingly as possible. Do you have any plans, particularly in certain parts of the country where it is more sensitive, to bring in further restrictions on the times that farmers can use these fertilisers or the soil testing they must do before they do that, in the same way that for sewage sludge farmers have to test to show that the fertiliser is needed rather than it being just a disposal mechanism?

Rebecca Pow: They do need to do that now. That is what is in the farming regulations and more attention will be given to that being addressed correctly. It is not just in terms of sewage sludge application; it is all slurry, and there is a requirement for farmers to test the soil. What amount can it take in extra fertiliser? Does the crop need it? They have to do their assessment and apply it accordingly at the right time. If it cannot be applied, then it has to be stored or it has to be shared with another person who could take it.

Q376 **Mr Goodwill:** You touched briefly on the idea of maybe nitrogen budgets, in the same way that we talk about carbon budgets. To try to get a bit closer to how you are thinking, are you talking about individual farm budgets, like the system that the Dutch tried 20 years ago and abandoned pretty much because it was not workable, or are you looking at the whole catchment area and what can be done, for example, where a number of farms feed into a river system, which is where the pollution you want to address is?

Rebecca Pow: It is just one tool that farmers can use to do nitrogen budgets. It is just something that we are looking at and taking advice on. It is early days but we are having a big focus on a catchment approach all round. Potentially it would have to be looked at on a catchment basis. I know that, for example, in Somerset there is a lot of work going on with



the catchment partnership to work on a catchment basis to reduce all of the outputs in terms of the pollutants, whether it is nitrates, phosphates or whatever it is, going on to the Somerset levels, which is a protected site. We have particular concerns where we have these protected sites.

Q377 Mr Goodwill: Finally to Mr Gallagher, could I ask a little bit about the planning process and intensive livestock units? We have heard that they can be congregated in quite small areas. What is your thinking at MHCLG regarding trying to ensure that when these decisions are made it is not just how it looks and it is not just how much the people in the village can smell, but about the management of the water catchment in that area?

Simon Gallagher: That is a very interesting area. It is complicated because agriculture has its own very complicated planning arrangements on what constitutes development and what does not. One of the things that we have found is that making sure that there is proper professional advice from the Environment Agency on the impact of those developments is absolutely critical to those, and the Environment Agency will be a statutory consultee for most development of that nature. We want to make sure that they have the opportunity to consult, to make their representations to the local authority on the impact of that development, on all matters for which the Environment Agency is responsible so that the local authority can take those into account, not just, as you say, the visual impacts and things.

Q378 Mr Goodwill: Forgive me, I should know this, but is the input that the EA puts into these applications funded through the application itself or is it reliant on the limited resources it keeps telling me it has?

Simon Gallagher: It is not generally funded, although it may provide some services. I cannot remember; Kirstin may be able to remind me. There are bits of its services that it can charge for and bits it does not. Generally on a planning application it will not be charged, I think.

Kirstin Green: Yes, I think that is right. I can double-check that and come back to you.

Q379 Mr Goodwill: That would indicate to me that they are not going to expend any more resource or time and effort on that than they have to, given that Sir James tells us that they are always strapped for cash.

Simon Gallagher: I think that is not true. I cannot speak for the Environment Agency, but for all the reasons that the Minister was saying, where it is concerned about the enforcement action, if it gets this wrong it will have the cost of the enforcement action down the line. It is very interested in getting upstream, and one of the things that has been very encouraging about the Environment Agency is it has wanted to move earlier in the process to be making the decisions then. It would rather not have something bad happen and then have to deal with the consequences of it. It would rather get upstream as much as possible, which seems a very sensible strategy for it.



Mr Goodwill: That is very reassuring. Thank you, Mr Gallagher.

Q380 **Chair:** Before I move on to Cherilyn Mackrory, going back to this issue of the responsibility of the Department, Mr Gallagher, for new development and water infrastructure, are you envisaging including in the upcoming planning Bill any additional points about encouraging developers to contribute towards the infrastructure that they are putting a lot of pressure on with new developments on to existing creaking infrastructure? At the moment their responsibility stops at the boundary of the development, as I understand it.

Simon Gallagher: I cannot tell you details of the planning Bill at the moment. The Government have been considering the representations and will be making statements shortly on what their plans for planning reform are.

One of the interesting things that we were consulting on and we floated last summer, and we have to wait for the response on that, was the idea of an infrastructure levy, which would give a broader contribution from development to the local community to be able to use for local priorities, not just on the site, to bring out the principles that we had established with the community infrastructure levy at the moment. We will have to see where that point gets to, but I think that it is quite an interesting set of issues that you raise on that one. Forgive me, but we have to wait for the response on that.

Chair: I understand, but if that is going to be a decision of the local community, that might exclude water companies, which are not generally regarded as part of the local community, I would strongly encourage you to consider at least including them as the potential beneficiaries for such a levy.

Q381 **Cherilyn Mackrory:** Good afternoon, panel. I want to turn the conversation to something that the Minister will know is close to my heart, which is plastic pollution. Before I go on with the question, I want to register that Surfers Against Sewage are in my constituency, I know them personally and I am a paid-up £3 a month member of them, so I want to put that on the record.

Last month the Government announced that they were going to consult on banning more single-use plastics and this is definitely a step in the right direction. We have done some good work in this area so far, but there is some frustration about the lack of consultation on wet wipes and similar. Daniel Johns from Anglian Water said that, "every day 7 million wet wipes, 2.5 million tampons, 1.5 million sanitary pads and 700,000 panty liners are flushed incorrectly down the toilet." This is a huge issue for water companies. Why are the Government not planning to ban these plastic wet wipes in their next step to tackle plastic waste, given how costly the damage is, Minister?

Rebecca Pow: Thank you, and well done for all your work with Surfers Against Sewage. It is something that I am really conscious of as well.



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Wet wipes is one of the biggest issues in blocking sewers, and storm overflows are often used more than they need to be because they have been blocked by a wet wipe and then the fat coagulates around the wet wipe and causes revolting fatbergs. It is a very big issue, which is why storm overflows sometimes are used not only because there is too much water but because they are being blocked by one of these revolting fatbergs. It is something that we are very conscious of and a lot of wet wipes contain plastic.

Basically, in a nutshell, we are developing an approach, we are working out how we are going to handle the wet wipe issue. That issue comes into a lot of areas that we are bringing through in the Environment Bill, the extended producer responsibility measure that deals with packaging and other issues. Potentially that could be something that wet wipes come under. There is the whole labelling issue. There is a lot of angles of communication with people, just to let them know you don't chuck wet wipes down the loo, that lots of water companies are working on, but more needs to be done and guidance to consumers. There is a lot to take in. We are taking advice on many fronts to work out exactly what our stance will be on wet wipes, but it is very definitely something that is on the agenda.

Chair: Thank you, Minister. We have a Division. I would normally suspend the session. I know that some Members wish to take part in the Division, but I suspect that it may not actually amount to a Division. I will suspend the sitting for a moment.

Sitting suspended for a Division in the House.

On resuming—

Chair: Minister, if you are content, we will continue.

Rebecca Pow: To reiterate on the point about the wet wipes, we will be getting back with details later this year, so it is not very long away.

Q382 **Cherilyn Mackrory:** Just to clarify, that is going to be a completely separate piece of work and we have to watch this space on that. It is my feeling that there is some irresponsible marketing going on in that sector at the moment. Not only are we trying to prevent what is already going down the toilet, but there are also some that are being marketed as flushable and they are clearly not flushable. There is an awful lot of work to do there. You mentioned the extended producer responsibility. Could you expand on how exactly those powers will ensure that the polluters will contribute to specifically unblocking the drains?

Rebecca Pow: Yes, you are absolutely right about the flushable issue. There are some false claims being made and through the Environment Bill there is a whole focus on labelling, eco-labelling and so forth that will help to iron out some of those things. It is a bit like the "What is biodegradable?" argument and so there is a lot of focus on consumer understanding. I think your other question was about extended producer responsibility.



Q383 **Cherilyn Mackrory:** Yes, just to expand on exactly how those powers will ensure that the particular polluters will specifically contribute to unblocking the drains.

Rebecca Pow: Yes, so whether one can get right to the drains. The EPR initially is going to focus on plastic packaging. The way it will work is to make the company using the packaging responsible for its whole life cycle, which includes basically costing in and thinking about where it ends up, with a view to it not ending up in landfill because we also have this commitment to eliminating all avoidable plastic waste. Potentially there is a debate about if wet wipes contain plastic microbeads and microfibres they could be considered single-use plastic. The EPR is designed to work on any product. We are starting with the plastic packaging but it could be applied to other products to make the person manufacturing them and selling them responsible for the whole chain so that they should not end up where they are not supposed to end up.

Q384 **Cherilyn Mackrory:** Do we have a timescale on the separate piece of work on wet wipes that you referred to?

Rebecca Pow: The aim is to be reporting back on our thinking on this towards the end of the year.

Q385 **Cherilyn Mackrory:** Okay. Moving on to anti-microbial resistance in the water, a study of UK coastal waters found that 11 out of 97 waters sampled contained E. coli resistant to antibiotics, which is quite startling. Amy Slack from Surfers Against Sewage told us that a study has shown that surfers are three times more likely to have antibiotic-resistant bacteria in their gut than non-surfers. What action is being taken to address the growth of anti-microbial resistance in our waters?

Rebecca Pow: It is very serious and those are concerning statistics. We still need more knowledge about this, but the Government are taking it very seriously and not just in DEFRA. This is across Departments. There is a five-year action plan for AMRs and a vision, which is basically to slow down the spread and the development, but we need more knowledge. The Government are launching the pilot on that and it is going to be based on two river catchments. They are working out which catchments to choose right now, but potentially one will be rural and one will be urban, because they will probably give different feedback. That is going to be launched soon. It is called PATH-SAFE and it is so that we can get much better understanding about the transmission, the resistance. The funding for that is a cross-Department pilot and it is coming from the shared outcomes fund.

Q386 **Cherilyn Mackrory:** Thank you. I think that you and I both wild swim in our various areas when we get a chance to and it is a growing pastime and has been throughout the Covid pandemic. I will be interested in where the river catchments are and in your opinion—I guess you could potentially answer here because this is your opinion—on at what point this becomes a public health issue. More people are doing this, we know



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that the problem is getting worse and not better, so your opinion on that, please.

Rebecca Pow: Yes, a lot more people are wild swimming and that is a different area altogether, but that is why our bathing areas are important. We have just allocated our first river bathing area, because most of our bathing areas are around the coast, of course, because we are an island. We take it incredibly seriously and it is something that we are giving increasing focus to.

Q387 Cherilyn Mackrory: We have one river, which is great news. What is your ambition for increased numbers of designated inland bathing waters in the UK? Would you like to see us match our European neighbours?

Rebecca Pow: It is interesting on Europe, because I asked the question of why they have so many more than we have. This is not an excuse, but we are an island so most of our bathing waters tend to be around the coast and the quality of something like 72% of them is excellent around the coast and that will improve. We have just got water companies to do real-time monitoring of the sewage storm overflow outlets around the coast, which I think Surfers Against Sewage really welcomed. The EA monitors those between May and September, but now we have the water companies to monitor all year, so the surfers and the swimmers can know about that. I think you were asking me about whether we could have more internal ones.

Q388 Cherilyn Mackrory: Yes. What is your ambition?

Rebecca Pow: My ambition is unending and I am very pleased to have overseen the allocation of the first. The River Wharfe at Otley has just been allocated, but every year we write to all the chief executives of the councils saying, "Is there anywhere you would like to designate?" so you can designate areas and then the right monitoring and so on has to take place. There are more in Europe, partly because they have a lot more space than we have so a lot more inland swimming takes place. Also, and this is not an excuse either, because they get a lot more sunlight in some places they are lovely clean areas to swim in. We don't get that in quite the same way and they don't have quite the population pressures that we have inland. But that is not an excuse because we are up for having many more if people want to apply.

Q389 Cherilyn Mackrory: On that basis—and this is rather a direct question—will the Government and regulators make funding available for water companies and farmers to make the improvements necessary to achieve your ambition of more inland waters with bathing water status?

Rebecca Pow: I think that goes back to everything we talked about in the beginning. All of the measures being put in place to improve water quality, which we take incredibly seriously and even more so than ever before, will add up to cleaner water everywhere. You don't need to have extra monitoring to have a bathing quality area but clearly monitoring has to take place.



Q390 **Cherilyn Mackrory:** This comes back to the Chair's point earlier about your policy statement and then the specifics that go into that, so maybe on achieving more rivers with bathing water status.

Kirstin Green: I can come in on a bit of the detail there. When a water area is designated as bathing water, that triggers certain actions for the water companies' business plans. They need to put in place more investment to improve the water quality to the extent that it is wastewater that is causing any quality problems. Of course that is not the only cause. As you have just recognised, there might be causes like agriculture as well. All the other measures that we are taking to try to support farmers and ensure that they abide by the regulations and so on will help with that, but it can certainly be a challenging thing to achieve, especially on an inland waterway.

Q391 **Cherilyn Mackrory:** Thank you. You touched on a number of what I am going to come to next. Earlier this week I sat on a panel with the *FT* and various extremely clever people in the plastic pollution ocean debate and the end of the debate seemed to be that it all comes down to money: who pays for what to make sure that this happens? The water companies have paid out £57 billion among them since they were privatised 30 years ago and people that I speak to in this sector are quite astonished that half of that money has been spent on maintaining and improving infrastructure in that time.

We keep being told that consumers will have to pick up the tab for all the investment that is needed. I have been told by water companies in the past, "If we pay for this, we are going to pass it on to the bills". I want to know your opinion. Should the water companies or their customers be required to pay for the necessary investment that water companies are going to have to make?

Rebecca Pow: As you say, water companies have already invested a great deal in infrastructure and, indeed, in the environment. That is where the considerations are made about are we passing on that to customers, but I honestly think that is all part and parcel of the decision making. If we want a clean environment, we will have to factor in the fact that we will have to pay for it. Thames Tideway, for example, which is a fantastic project, a very good partnership project with a very good funding model, is passing on those costs to the consumer and that is all agreed, but it will give such a benefit to cleaning up the Thames and sorting out the sewage issue. That is all factored into the bills over a whole period of years.

Q392 **Cherilyn Mackrory:** I am going to be rather parochial now, so forgive me. In Cornwall we already pay the highest bills in the country because we have the most coastline or we have an awful lot of coastline compared with other areas. I think that would be quite galling for a lot of bill payers in Cornwall to say, "You are going to have to pay for that," when most of the stress is not of their doing. Do you think that we need some sort of one-off windfall charge on companies to pay for the urgent upgrades that



we need to protect public health and wildlife in our rivers initially?

Rebecca Pow: I want to go back and say that every water company is mindful of the vulnerable in its community and there is help for them. We always have to take that into account in our water bills and there is a whole category there for helping those who are struggling. I just want to make that very clear. What was your second question?

Q393 **Cherilyn Mackrory:** Do you think there should be a one-off windfall charge on companies to pay for the urgent upgrades that we desperately need to protect public health in particular and wildlife in our rivers?

Rebecca Pow: Water companies are now going to have all these targets and increasing pressures on them. They are going to have to factor in how they do it and put the infrastructure in for that. That is a decision they have to make, but they will have to make it because they are going to be kept up to the mark by Ofwat, and Ofwat will be kept up to the mark by us, and we will all be kept up the mark by the Office for Environmental Protection, which is being set up to protect the environment.

Q394 **Chair:** Minister, I am grateful to you and your colleagues for giving us a bit more time. I have a few final quick questions, quickfire, and then we will be done. The Southern Water case I think highlighted the problem of self-reporting that has been happening more or less since 2010. What do you intend to do to improve confidence that the self-reporting mechanism can be trusted or, if not, replaced?

Rebecca Pow: Although it is called self-reporting, of course the EA has also always conducted its own monitoring assessment. It can do its own inspections and spot checks, and if the self-reporting comes in from the water company and the EA wants to check it, it can and it does to spot anomalies. It investigates breaches and so on, and that is what has led to enforcement actions and investigations and so forth.

Q395 **Chair:** Minister, all too rarely, because of its resource constraints, the EA has been investigating by exception and normally well after the event. If a pollution event happens, unless there is an emergency, the EA does not get there until sometime later, by which time it is too late. I hear what you say. I will move on, if I may.

One of the things that you mentioned earlier that you have introduced to the Environment Bill, which is extremely welcome, is real-time monitoring of waterways upstream and downstream of an outfall. That will provide data to the water company initially and presumably to the Environment Agency in a much more timely way, which is very welcome. That will come at a cost. Have you estimated what that cost will be and who will pay for it?

Rebecca Pow: I was going to go on to that, because we have all these new measures in the Environment Bill that will increase all the monitoring. The EA will be able to see much more clearly and transparently what is going on. That gadgetry, as I call it, will have to be



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funded by the water companies going in above and below each sewage treatment works and that will be necessary to do real-time monitoring. A lot of outfalls are already monitored but it will cover all the other ones and all the sewage storm overflows as well.

Q396 **Chair:** There are over 20,000 sewage storm overflows and I think we heard 6,000 or so treatment plants, so they will all be covered by this. Over what sort of timeframe do you expect that?

Rebecca Pow: This is something I believe you asked for in your private Member's Bill, and the reality is that it will be paid for and it will have to be paid for by the water companies. We have deadlines for our first set of reporting. We have to report on the actions taking place to eliminate the storm overflows by September 2022, so we will want to see some action having been taken, and that is only a year away.

Q397 **Chair:** They will be progressive, but as soon as the Bill is enacted you will expect people to start taking steps to install?

Kirstin Green: Yes. There are a couple of things there. You will know about the event duration monitors that have increased over the last number of years to 80% coverage and that will be at 100% coverage by the end of 2023. That will mean that all the overflows will be monitored. The new provisions that have just come in through amendments to the Environment Bill are about the near real-time monitoring and the monitoring up and downstream of sewage treatment works and overflows. We need to do a bit more work to determine exactly when that can start. They will need to be brought in by regulations when we have done a bit of detailed work, including that costing work, but we want to press ahead as soon as is practicable.

Q398 **Chair:** DEFRA reviewed the non-statutory SuDS standards and recommended that there should be a standard for water quality specifically. When is DEFRA intending to introduce that standard or consult on it?

Rebecca Pow: I will have to get back to you. I know that we have consulted on it, but I will have to get back to you with the actual date, if that is all right.

Q399 **Chair:** That will be welcome. Finally, the drains and sewerage management plans being introduced as part of the Environment Bill, which are very welcome, could be used to reduce diffuse pollution from surface water. Do you envisage that there is a prospect of including that within the plans so that sort of pollution is not missed by water companies, which of course have to receive most of the output from the surface drains?

Rebecca Pow: You touch on an interesting point there, Chair. As I am sure you have picked up, the whole issue of urban diffuse pollution is a complicated one and there are many actors in the space. There are the local authorities, which don't have any water quality responsibilities but



are responsible for managing drains and so forth on the road. We have water companies that do have some involvement in the road drainage assets, so they would potentially come under their drainage and sewerage water management plans. But we also have Highways England, which is responsible for its share of what is on its roads. It is a very complicated picture and there is a whole lot of different sources of pollution coming from our urban areas as well, even what is coming off car tyres and oil, so it is not just rainwater.

The drainage and sewerage wastewater management plans will help with urban diffuse pollution, particularly where we have surface water connecting into the sewerage network, and surface water is a big issue in many respects, not least when we are trying to tackle flooding. That is why I go right back to my statement at the beginning. We need to work very holistically across this whole space. It is not just about water quality, because that really touches on flooding. Two thirds of all our flooding incidents relate to surface water drainage, which is why we are adopting this much more joined-up approach.

Q400 Chair: We can expect, from what you say, that these management plans over time will try to incorporate the surface water drainage schemes and look to increase the separation of schemes, where practicable, over successive plans?

Rebecca Pow: You are trying to put words into my mouth, Chair. I agree on the first bit and we are taking a rain check on the second bit. But what also should be reiterated is that in those plans, because everyone has kept asking how we hold the water companies to account, the Secretary of State has a power, a direction to direct them to do more if he or she thinks that the water companies are not doing enough.

Chair: Thank you very much for your time, Minister, and to Kirstin Green and Simon Gallagher for joining us today. Thank you also to our Clerks, Nick Davies and Laura Grant, and our specialist adviser, Ian Barker, who helped prepare our brief. Thank you to the Committee. It has been a day of parliamentary reshuffles, so colleagues have been looking at their phones just in case they get a call to Downing Street, and it looks as though several have.