

Environmental Audit Committee

Oral evidence: National Highways and environmental sustainability, HC 1284

Wednesday 3 September 2025

Ordered by the House of Commons to be published on 3 September 2025.

[Watch the meeting](#)

Members present: Mr Toby Perkins (Chair); Olivia Blake; Julia Buckley; Barry Gardiner; Anna Gelderd; Pippa Heylings; Chris Hinchliff; Martin Rhodes; Alison Taylor; Cameron Thomas; John Whitby.

Questions 47 - 102

Witnesses

[III](#): Nick Harris, Chief Executive, National Highways; Stephen Elderkin, Director of Environmental Sustainability, National Highways.

Examination of witnesses

Witnesses: Nick Harris and Stephen Elderkin.

Q47 **Chair:** Welcome back to the third panel of today's event. We are looking at a brief study into National Highways. For this third panel, we are joined by Nick Harris, chief executive of National Highways, and Stephen Elderkin, the director of environmental sustainability. Welcome, gentlemen.

I will start by just asking you—we probably broadly understand what the chief executive does—to explain broadly your responsibilities within the organisation. We will get into the first panel on the subject of biodiversity net gain and tree planting, and then the second session on pollution, which we have just been listening to.

Nick Harris: I am Nick Harris, chief executive of National Highways. I am responsible for the day-to-day operation of the business. I have been with National Highways and Highways England, as we were before, for 10 years now. National Highways/Highways England was created through the roads reform in 2015. Before 2015 we were the Highways Agency; now we are National Highways.

Stephen Elderkin: Good afternoon. I am Steve Elderkin, director of environmental sustainability at National Highways. My team is responsible for the three strategic outcomes in our environmental sustainability strategy: making the transition to net zero highways; being positive for nature; and tackling local environmental pollution for the benefit of communities. I have also been with National Highways for about 10 years. Prior to that, I had 10 years as a Government economist working mostly in environmental policy.

Q48 **Chair:** We will direct our questions to you, Mr Harris. If you want to bring Mr Elderkin in, that is for you to do as you see fit. As I said, we are talking first about the issue of tree planting and the first part of our session that we heard today. I thank you both for being here to listen to the first two panels, because that is very relevant.

I would like to talk particularly, first, about issues of planting failure rates. We have seen a reference to the A45/A6 Chowns Mill junction in Northamptonshire and the A14 Cambridge to Huntingdon road. Can you explain to us what went wrong and what you are doing to remedy it in these specific cases?

Nick Harris: I will just put that in context, if I may, and then I will hand over to Steve, who will talk about some of the lessons we have learned from the A14.

The first thing that I wanted to share with the Committee is that we are a big landowner. We operate the 4,500 miles of the strategic road network, mainly the motorways and larger A roads, and all the land that is



alongside them. We are a large landowner, so we care about the long-term sustainability of the environment around the roads that we look after. A very small percentage of that road network is new schemes. It is important that we get those right, but they make up a small percentage of the whole environment or land that we are responsible for.

We plant a lot of trees. We are probably only second to the Forestry Commission in England in the number of trees we plant. We employ, mainly in Steve's team, experts in not just tree planting but hedges, biodiversity and looking after grasslands. We follow very keenly a lot of the developments in knowledge around climate resilience and climate adaption, and choosing the right species. One of the big issues we are dealing with at the moment is ash dieback. As the ashes are dying, we remove them. What are we going to replace them with? We are thinking about trees along the whole network.

As you heard earlier, we have standards in place. We have a lot of detailed technical advice on how to go about tree planting and look after trees. We experience, in general, about the same dieback rate on new planting, which is about 20%.

Moving on to the A14, we saw a much worse performance than that. Of the 356,000 or so trees that we planted alongside the A14, we saw a dieback rate of about 45%. There was reference earlier to what we call a POPE, which is a post-opening project evaluation. We evaluate at different times how well the schemes that we have developed or delivered are doing, so we knew it was not working well there. Of course, we are talking about little saplings with very small root balls. We were addressing that and replacing those trees. We have replaced something like 160,000. We are now seeing a dieback rate of under 15%, so we are beating the average.

Perhaps more importantly, what did we learn from that? What are we going to do moving forward? I will pass that over to Steve, if I may.

Stephen Elderkin: Importantly, we have examples of successful schemes, but we need to learn the lessons from the A14 scheme. Clearly, the level of losses was unacceptably high. It was a particularly challenging summer as a first season for those trees. It was the year that we had the 40-degree summer in 2022. It was an exposed site; the soils were challenging for the planting. We may not have got all the decisions right on the choices of trees.

Chair: We are all in agreement that you did not get all the decisions right.

Stephen Elderkin: On the learnings, what we have applied to the replanting is to use plug-grown plants rather than bare-root plants, which in those soil conditions are more likely to be successful; to add mulch and to make sure, as we heard earlier, that the watering regime afterwards is



in place to do that. For all of our construction projects there is a requirement to have five years of aftercare funded through the project.

- Q49 **Chair:** Can you expand a bit about what went wrong? You have gone through very quickly there. It was a tough summer on an exposed site. These feel like fairly straightforward things that we would expect you to be able to work around. The learnings also sound fairly basic in comparison to what we were listening to in the first panel. Could you expand upon what went wrong to see such a catastrophic and high-profile failure?

Stephen Elderkin: It was a combination of the soil conditions, the weather conditions that summer and the lack of full aftercare that was applied to those whips.

- Q50 **Chair:** We have had another hot summer now. If that hot summer had taken place now, with the benefit of what you have learned since 2022, how would it have been different?

Stephen Elderkin: We undertook the replanting of 160,000 or so trees in the winter of 2023-24. The indications are that those trees are surviving because we have applied the lessons learned to the replanting.

- Q51 **Chair:** What have you done differently?

Stephen Elderkin: We have required that oversight and aftercare. My team is now monitoring the delivery of environmental mitigations more immediately than through the post-opening project evaluation process. Before projects are finished we will go out, audit and check the environmental mitigations that have been delivered.

Nick Harris: Perhaps to add to that, where we have been successful—this has been an ongoing development since our creation in 2015—is in how we better integrate the knowledge and capability that exists in National Highways to everything that we do.

Building schemes were a bit separate, but we are now using the skills that sit in Steve's team. In our regional environmental and operational teams, we have people who, day in, day out, are looking after the verges and trees that we have that are not associated with schemes. We are making sure that we have the right standards in place for contractors and holding them to account.

- Q52 **Chair:** You said earlier that new builds are a very small proportion of what you do. Biodiversity net gain is a new area for you because your major responsibility is the existing road network. You then have occasional major new developments. With these occasional new developments, you now have specific legal responsibilities that were not there previously.

Were you properly prepared for this new responsibility? Whereas previously you may well have thought, "It would be nice to have some trees", now you have to do this. Have lessons been learned in terms of



HOUSE OF COMMONS

the preparation for the BNG world in which we now operate? Each new scheme is going to have far greater legal requirements on you. As a Government body, are you properly equipped to deliver in those cases?

Nick Harris: I will share two or three observations on that and then I will ask Steve to talk a bit about our environmental sustainability strategy.

In general, yes. We are funded in five-year cycles. The last five-year cycle ended in the March just gone, and we are in an interim year before the next five-year cycle starts in April 2026. Within that five-year funding is a clear definition of our targets, so what we have to deliver. That includes, obviously, the need to comply with legislation and environmental targets. That was clear in the last five-year period. We were funded to do that. The overall objective for the last period was no net loss in biodiversity, which we achieved. In fact, we had a small gain in biodiversity, which is composed of looking after our existing green areas as well as what we were doing with projects.

I just wanted to share a few thoughts on biodiversity. Perhaps it is worth talking about an example of a project that we are still on site with, which is junction 10 on the M25. That is where the A3 meets the M25 near Wisley. Some of you might know the Royal Horticultural Society at Wisley; that is the location.

Q53 **Chair:** I am going to stop you for a minute because I am not sure you have answered the question that I had asked before you go on to this new and interesting development. Were you equipped? You talked about the funding cycle. You were saying, "In 2020 BNG did not exist; we had a different set of demands on us". Were you properly equipped to deliver on BNG?

Nick Harris: In 2020, no net loss biodiversity did exist.

Pippa Heylings: It did exist, yes.

Q54 **Chair:** Was it a requirement?

Nick Harris: It was a target. There is a different requirement coming. I will come on to that, if I may, Chair. By using that example, I was going to explain that biodiversity is about much more than trees.

At junction 10, where we are increasing the size of the roundabout above the M25, we are looking at the landscape much more widely. That is looking at the appropriate tree species. That means removing a lot of trees that are no longer the right choice, as we heard earlier, and looking at grassland, hedges, bushes and how watercourses work, which increases biodiversity. Most biodiversity does not come from trees. You have to look at the whole thing.

Why does that matter? Roads sit within the environment. We heard earlier about the challenges we have, and we are going to come on to water quality and drainage. A much more sustainable way of doing this is



by working with nature and looking for nature-based solutions. For us, it is not just a matter of biodiversity and net gain in biodiversity. It is about working with nature to solve sustainably the challenges that we have in operating a road network.

As we look to the next five-year period, we will need our schemes to achieve a 10% increase in biodiversity. That is a challenge that we are organised and ready to do. That is for new schemes that start in the next five years.

If I pass over to Stephen, he can talk about our environmental sustainability strategy.

Stephen Elderkin: Just to build on the biodiversity point, in 2020 we were asked to take on this no net loss of biodiversity target. We were an early adopter of this metric, essentially. There were a couple of learnings that we got from that that would be worth sharing.

First, for all our major projects we set targets on their performance for biodiversity. This was not a legal requirement, but it was a way of incentivising thought and care about biodiversity in the design of schemes. Through the five-year period, we found that we lost about 2,000 fewer biodiversity units through our construction programme than we anticipated. That is because they were designed from an early stage to consider nature; they were delivered more sensitively; and they took the opportunities within the development boundary.

Secondly, we have delivered an awful lot of biodiversity units through partnerships with environmental organisations. We have delivered with the National Trust, wildlife trusts, RSPB and Plantlife. The vast majority of the biodiversity units that we have delivered through the five years were delivered by those bodies. We will achieve the 10% requirement on our projects partly by designing and delivering well, but it will also be by strengthening and deepening those partnerships with the environmental sector.

Q55 **Chair:** I will just ask you one final time, Mr Harris. Given the current requirement for the 10% gain and the budgets you have had from 2020 to 2025 and in the interim period now, are you currently properly equipped to deliver on what is required of you?

Nick Harris: For the projects that will start in the next five years, yes: we have the skills and capability to do it; we have the partnerships, as Steve mentioned; and we are funded to do it.

Q56 **Pippa Heylings:** This A14 improvement scheme is declared to be award-winning. Proudly, at the outset, it was said to be an early adopter. Its 11.5% biodiversity net gain, tree planting—there are differences—and noise and air pollution approach enabled it to get through the development consent order process. This is in Cambridge, where my constituency lies, which has an aspirational target of 20% biodiversity net



gain. Therefore, that was key for the approval process with the DCO.

As you have said, what we have seen is 860,000 trees—I beg to differ around the 350,000 figure—potentially planted in the wrong soil, at the wrong time of the year, with no consideration for climate change or the fact that Cambridge is a water-stressed area and no maintenance follow-up. What we have now, as my constituents and local councillors see, is a desert festooned with the plastic tree containers.

We want to learn the lessons from this. This matters, because it risks undermining trust in biodiversity net gain, the DCO and the way in which we enable large infrastructure projects to come through. As the Chair said, there are new requirements for this. At the time, you claimed you were equipped. That is why I now want to dig down into some of the issues.

First, what surveys took place at the beginning about the species, the soil conditions and the planting times? Can you just explain that to us?

Nick Harris: Are you referring to the original design and the DCO submission?

Pippa Heylings: No, I mean after the DCO, when you then did the design of the actual planting.

Nick Harris: The design would have been done for the DCO. I will come to Stephen on the lessons learned. What did we find from that?

Stephen Elderkin: The 350,000 trees were the ones by the side of the carriageway. There were further trees planted around the borrow pits. There will need to be more replanting to come. We will absolutely stay the course. I know that at the moment it is not looking good, but we will see it through and get the landscape around the road looking as it should.

I cannot give you the precise details of the survey process. The way that we work up to a development consent order is that we work with our supply chain. We bring in qualified landscape architects and expertise to provide the documents that are submitted to the planning process.

Q57 **Pippa Heylings:** I know that, because there were serious local concerns, following the DCO and at the time when the planting was being considered, there was a group between Highways England at the time—now National Highways—the local authorities, the experts that came, the local councils and the local community. There was expertise brought in to consider the concerns around those species, the soil type and the timing, and yet it still went ahead regardless. Having spent money on bringing in the expertise, why was that not then applied?

Nick Harris: What I can talk about is how we do things now.

Chair: We are not interested in now. We are interested in what happened then.



HOUSE OF COMMONS

Nick Harris: We can talk about how the process of designing a DCO is done. We can provide more information to the Committee, but we do not have that detail to hand.

Q58 **Pippa Heylings:** I find it quite shocking that you have come to this Committee, knowing that this particular example would be one of the issues with the greatest lessons to be learned. Chair, if you allow me, I also know that the transport committee of Cambridgeshire County Council asked these same questions and no information was forthcoming. Public scrutiny and accountability is key, is it not? Coming to this Committee, would you not think that you would have prepared some of those answers?

Nick Harris: Perhaps we can go over the answers again. In the design, we employed landscape architects to produce the designs. A whole range of surveys were done, including environmental surveys and soil surveys. Advice would have been taken on species selection. All that went into the DCO application, which then went to public consultation. There were a whole host of questions on that and many other things. Ultimately, there was a decision process around the DCO. That is the scheme that we have then implemented.

As we talked about earlier, we found that the approach that was used to establish the planting failed, which is not good, which is why we are addressing that. We looked at why it failed in terms of the particular climatic conditions, the type of species and rootstock being used, and the preparation of the soil. We have learned from that, which is why with the planting that we have now done there we are seeing normal survival rates.

Our focus as an organisation is not just building a scheme and then moving on; our focus is establishing the planting scheme for this project and looking after it well into the future, because it forms a really important part of the biodiversity we are creating alongside our network. One of the other lessons that we have definitely learned through it is the need to have the right supervision and control both on the contractors when they are doing the work and in the follow-up. That is what we are applying.

Q59 **Pippa Heylings:** We heard from the previous panel how important monitoring and data is, and you have just mentioned that. Through the DCO, the local authorities have the role to do the monitoring. That information should be available to the local authorities for scrutiny, to bring back that trust and to be able to know what is happening. Would you agree that that should be available?

Nick Harris: We have an obligation to meet the requirements of the DCO, which we take incredibly seriously. Overall, we are monitored by the Office of Rail and Road, which looks at our compliance with DCOs among a whole host of things. That is one of the reasons why we are very keen to build partnerships with local organisations and



HOUSE OF COMMONS

environmental organisations. We recognise that we are not the experts in this, although we employ a number of experts, and we look to work with them to adopt best practice.

We are more than happy to be transparent and share information.

Pippa Heylings: You are?

Nick Harris: The post-project appraisal process is about sharing that data. If there is interest in adding to the data that we share, I am sure we would be happy to do that.

Q60 **Pippa Heylings:** At a future meeting, you would be prepared to provide that information, given that you have given a commitment today that there will be—

Nick Harris: If there is an interest locally and they do not feel there has been that connection, we would be more than happy to meet with them and go through what we have done in detail.

Q61 **Pippa Heylings:** From what I am hearing, you do understand that because of this it is hard for many to have trust in both biodiversity net gain and tree planting for large infrastructure. You have a commitment not just to the engineering and building of the infrastructure, but to the land and the tree.

Nick Harris: We go much beyond that. We have a very clear objective not only to connect the country from a transport point of view, but to connect it from an environmental point of view. That is absolutely in our mission, and we are very successful with it in other locations. It has not gone right here. We would be happy to come to Cambridge and talk about it.

Pippa Heylings: Would you? Thank you.

Chair: Yes, we would be grateful for more transparency. On the surveys, I would ask you to write back to us after this session to let us know about what surveys took place. I understand you are keen to move to what you are doing now, but, in terms of this inquiry, we are keen to know what happened then too.

Q62 **Barry Gardiner:** I did not feel that we got real clarity from what you said. You explained that, as part of the DCO, you employed consultants and they prepared the scheme and established the criteria for the planting. You then said why it had gone wrong. You did not say whether the experts whom you involved got it wrong. Did they not understand the soil quality or the nature of the trees that they ought to have been planting there? Did they give you the wrong information to establish the DCO, or was it that your contractors did not comply with what your experts said?

We are trying to locate what the damage resulted from. Was it the experts—in which case, what have you done to sue them? Was it the



HOUSE OF COMMONS

contractors—in which case, what have you done to sue them?

Nick Harris: Just to step back a little from that, we have a set of standards called the *Design Manual for Roads and Bridges*. That covers the way in which we maintain, renew and improve the strategic road network. When we go to contract with a project such as the A14, there is a very detailed specification that will have come from the consultants and we will then manage the contract.

Turning to the lessons we learned from what went wrong with the A14—

Barry Gardiner: I have asked very specific questions and, with respect, you are not giving me very specific answers.

Nick Harris: If we turn to looking at what went wrong, most of the issues lie with the execution—the construction, not the design. We understood the soil and the appropriate species were selected, but it was not executed, which is why the replanting that we are doing is a contractual conversation with the contractors, because they have not met the quality obligations.

Q63 **Barry Gardiner:** Thank you. That is clear. Who were the contractors?

Nick Harris: It was a consortium. The overall contractors for this was a consortium of Costain, Balfour Beatty and Skanska. They will have subcontracted the planting to another organisation.

Q64 **Barry Gardiner:** Was the element that you found to be wanting in the original specification about the time of year of planting?

Nick Harris: One of the big issues, as Steve mentioned, was the time of year of planting during an unusually hot and dry period—

Barry Gardiner: Indeed; that is why I am asking the question. Did the experts put into the brief that it would be best to try to do this planting in the autumn or the spring rather than in the heat of the summer?

Stephen Elderkin: Yes. Our specifications set out that planting should take place between November and March.

Q65 **Barry Gardiner:** But it did not.

Stephen Elderkin: We will have to come back to you on that. I am not aware of it being outside that.

Nick Harris: We will confirm whether it was done in the correct window, but, from the follow-up, I think it was more an issue of the aftercare, not the planting.

Q66 **Pippa Heylings:** Our concern is that you said deep lessons have been learned, and yet we are not hearing them. That is the key thing here. It is worrying, actually. We are ready to hear that there is improvement.

Nick Harris: I return to what I said before: there have been lessons learned, not only from this, but more widely. The biggest one has been



integrating how the organisation delivers work like this. We are using the expertise that we have effectively to make sure that, when we are doing projects, they are supervised well and our specification and quality are met.

Every two months, we have a meeting that I sit in on, which looks at not only safety, but quality. We look specifically at quality instances. It is not just about asphalt and steel, and the normal things that you might imagine looking after roads; it is also about how we are doing on our environmental work. The lessons have been learned, but we would be more than happy to write to the Committee on what we have done to change the way that we approach things.

- Q67 **Pippa Heylings:** If we could be positive, following on from Mr Gardiner's questions, sometimes the delivery programme and the need to get it done, for the value for money reasons that were quoted, could challenge or be in contradiction with the expertise and advice given about the planting season. I do not want you to answer that now, but please consider it when you go back. That is an important thing for the future, if there are these kinds of challenges and contradictions.

Nick Harris: Very briefly, I would say no. The DCO obligations have to be achieved. We care about the long-term achievements. We care about the planting being successful and continuing to be successful long into the future. There is not a conflict in terms of money or progressing the project.

- Q68 **Chair:** You were here for the first panel that we had, and you heard from the gentleman from Kew Gardens about the lack of skills and expertise within horticulture, which is a global issue. He spoke incredibly knowledgeably about many of the issues that face us. Given what you are saying, do you have the same confidence about the experts that you are listening to and who were advising you on this project? I have to say that the sorts of things that we are hearing from you seem to be pretty basic stuff. It does not sound like something that someone who has who spent years and years at university should be incapable of delivering.

Are you confident that the quality of expertise that you have supporting you, whether that is subcontractors, partners or people you employ, is of the sufficient quality or was of the sufficient quality in this programme?

Nick Harris: We select our consultants and partners rigorously based on capability and quality. More than that, we work with partners to improve—in fact, Kew is one of the partners that we work with on this. We rely on their advice. Steve, you are working on this.

Stephen Elderkin: We made a commitment to plant 3 million trees beyond our essential mitigations for major projects. We partnered with the Tree Council to provide that assurance of our approach. We have been working with it to choose the seed stock and the species that we are growing. We have been looking to use that to develop the capacity within



HOUSE OF COMMONS

the British nursery sector to grow trees. We are trying to use our commitments and funding in this space to improve the capacity.

Q69 **Chair:** It is great to hear that we have these experts working on it. You would think things such as what time of year to plant trees and which species they use might be part of the expertise that they have built up, wouldn't you?

Nick Harris: We are very clear about the time of year that trees should be planted. That is based upon expert advice. I believe it is sound advice.

Q70 **Alison Taylor:** I have a few brief comments, Chair. My background is in surveying. I just want to ask a few questions. Was it all external consultants, or was an element of the project management dealt with internally by your own team?

It is really good that you are learning lessons from it. That is really important. Going forward, are there plans to change the way you procure these projects? Is it possible that this was due to the way that the procurement brief was written? I am trying to work out whether any gaps have been identified in the whole project.

Nick Harris: With the A14, we are talking about a procurement that took place in about 2014. We have changed the way that we procure at least twice since then. Within National Highways, we have built up a much stronger level of knowledge. Steve's team is now advising on contract specification, development and how we select and hire for projects. Those are big changes that we have made over the last 10 or 12 years. We are spending a lot of time talking about decisions that were made 15 years ago.

Alison Taylor: I had not appreciated that.

Nick Harris: We have made a lot of improvements since then and we continue to improve.

Alison Taylor: That is good to hear. Thank you very much.

Q71 **John Whitby:** The DCO states that any tree or shrub that dies within that five-year period needs to be replaced. You have already said that you have replanted 160,000. I have done the maths, and that seems like 45% of 336,000 trees. You have obviously replanted once. We are still in that five-year window. We have heard today that you would naturally normally lose about 20%. Are you monitoring this often enough to know that there is probably another 32,000 trees that you will need to re-plant in that window?

Nick Harris: Yes.

Stephen Elderkin: Yes, that will happen.

Pippa Heylings: It is 860,000.



HOUSE OF COMMONS

John Whitby: That is if we use Pippa's figures. I am going with your figures.

Stephen Elderkin: For the trees planted by the carriageway, 160,000 was replacing the ones that had been lost. The ones that have failed from that replanting will be replanted this winter. There will also be extensive replanting around the borrow pits and the remediation scheme in that area. There will be a very significant number of trees that still need to be planted this winter.

Q72 **John Whitby:** What is your understanding of your responsibility once you have replanted, let us say, a year or two after the original construction? Are you then responsible for another five years to maintain those trees? We have already heard today that they need between five and seven years to establish themselves and for us to have some confidence they are going to survive. Are you going to be around for another five years and maybe the second lot of replanting another five years after that, or do you just get five years?

Nick Harris: Like all of the road network that we are responsible for, we remain responsible for the wildlife and the trees in perpetuity. For some of the borrow pits, we are looking to make other arrangements and find others who want to take those on, because there are some opportunities to create habitat connections and improve biodiversity further there. We are looking at those. Of course, the responsibility for looking after those ultimately will pass on.

Q73 **John Whitby:** How can planning officers, and Ministers in the case of major projects, have any confidence that mitigation and BNG commitments in planning applications will be fulfilled?

Nick Harris: We have to report annually on what we are achieving with biodiversity. More than that, we have our sustainable environmental strategy. That requires us to be transparent about what we are achieving and to report periodically to Ministers on that. We are very proud of what we are achieving and are setting out to achieve, and I am very keen to share that.

Chair: We will make that dream come true.

Q74 **Olivia Blake:** I just want to pick up on what all this has cost in terms of the A14. In particular, what has so far been spent on putting this issue right? Going forward, what are the estimated costs of keeping on putting it right, if that makes sense?

Nick Harris: On the planting, that is a commercial conversation with the contractors. They have not met the quality standards, so that planting is at their cost.¹

¹ Please see correspondence dated [30 September 2025](#), [3 November 2025](#) and [13 November 2025](#) correcting the record on this matter.



HOUSE OF COMMONS

Q75 **Chair:** Just to clarify, that falls on them, not the public purse.

Nick Harris: That falls on them, yes.

Q76 **Olivia Blake:** Is that true for all the trees that you have?

Nick Harris: It depends on how they have been established. For example, I mentioned earlier the issue of ash dieback. That is a cost that falls on us because that is our estate to manage.

Q77 **Olivia Blake:** So you are doing good contract management, in your opinion.

Nick Harris: We are doing good contract management. We are always seeking to improve how we manage our contractors. It is our responsibility.

Q78 **Olivia Blake:** Thank you, Chair. It is useful to clarify that. Moving on then to pollution, which is the other issue we have been highlighting today, our predecessor Committee's recommendations on water quality in rivers focused on accelerating improvements to highway drainage and the Government accepted that a level of increased ambition and delivery in this area should be supported.

Can you outline how this programme has developed since the 2022 report? How many assets have been assessed since the report was published? How many high-risk sites now have mitigations in place?

Nick Harris: Certainly, the recommendations of the Committee have helped accelerate the process significantly. That is definitely worth noting. Since I was in front of the Committee in 2021, we have been working hard on this. I mentioned that there were 1,236 locations where we believed there was a high risk of pollution.

I would go back to some of the earlier conversations about the Highways Act. First of all, I should perhaps describe how the system works. We have the 4,500 miles of strategic road network, and we are only talking about those—not all the other roads, which have the same challenge. We need to drain the rainfall that is falling on the land adjacent to the roads and on the roads, so they are safe to drive on. There is a series of drainpipes that collect all that and then there are points where that is discharged either into a soakaway, so it goes into the ground and is soaked away, or into watercourses, such as streams, sometimes via settlement ponds and sometimes directly.

We identified these 1,236 locations. We needed to understand what was there and whether we need to put in place mitigations or build something that would manage the pollution that could come from those locations. It is probably also worth saying that at the same time we have been working very closely over the last 12 years or so with the Environment Agency on what we do to mitigate pollution. I mentioned the *Design Manual for Roads and Bridges* before. We have detailed design specifications for what we put in place, how much sediment it can remove



HOUSE OF COMMONS

and what pollutants it can remove. There are design standards, which have been peer reviewed. They are not just our view.

We have assessed all of them. We have been developing a programme. When I was here in 2021, I said that we expected that about 10% of those 1,236 would need work doing on. The others we would find already had mitigations, did not exist or there were other reasons why they did not need addressing. So far we have 180 locations where we are going to be developing designs. We already have about 100 in development.

We expect that to grow to about 250. Why? Since I was here and since we have been doing that work, we have been working with other organisations to gain information from them about locations that we may not have had knowledge of. We expect, therefore, to be delivering a programme of about 250 that we need to do by 2030.

We do not rest there. As we heard earlier, this is a serious issue. We should care very much about the pollution that is going into the environment, and we do, as an organisation. This is a matter of how we prioritise how we do that. We are identifying, hopefully, the very worst locations that we can get stuck into and do something about, but that should not be the end of it.

Q79 Olivia Blake: That is the identification, but how many of those high-risk sites now have mitigations active and in place?

Nick Harris: Since I was here we have done 40, and we are now expecting to do another 250.

Q80 Olivia Blake: Okay, that is useful. Are you confident that the methodology has identified all the high-risk sites? The numbers that you have cited sound quite different from what we have heard from other witnesses.

Nick Harris: Everything that we have built since around 2010 we understand and we have had design standards in place to deal with. We have a huge legacy of network that goes back decades. It would be presumptuous of me to say that we understand every one. That is why we are very open to anyone sharing with us any information that we can act on.

Q81 Olivia Blake: Are you supporting citizen science in flagging any issues? I know the water companies support that, although I am not sure how successful that has been.

Nick Harris: Yes, I will hand over to Steve on that. The issue of chalk stream rivers was mentioned earlier. We have been working together with Southern Water in the case of Hampshire. We are in the process of finalising new standards for discharges around chalk streams. I will go to Steve particularly on the point of citizen intervention.



HOUSE OF COMMONS

Stephen Elderkin: We prioritised the reassessment of those 1,236 locations based on some characteristics that made us worry that they could carry a high risk of pollution. We are absolutely not confident that all the high-risk outfalls are going to be in that set. We have been holding a number of roundtable sessions involving CIWEM, Natural England and the Environment Agency looking at particular receiving water bodies that we should put more attention on. We are going to reassess the risk at a number of other sites. That is why we expect the number to grow from the 180 that we have confirmed today to a larger number by the time we have gone through that process.

In terms of citizen science, we are absolutely aware that we do not have perfect data on our drainage assets. We are open to information that is provided to us. We were given information about the M6 at Chorley and then we were able to implement a renewal scheme for an area that had fallen into disrepair in that place. Similarly, we received information about the River Lambourn and we were able to renew the treatment works that were in place.

Q82 Olivia Blake: Monitoring is one gap that we are aware of, but the other recommendation that our predecessor Committee's report focused on was giving a greater amount of the budget to mitigating pollution. You have only received an interim settlement. The third road investment strategy is now due next year. How certain are you that you will be able to meet the target to mitigate all high-risk outfalls by 2030?

Nick Harris: We are proceeding on the basis that we will be funded to do all 250. The interim year has not affected our planning design work. We are moving forward with the assumption that it is all going to be funded.

RIS3 is not yet finalised. You may have seen that the draft funding was published last week. We are now going through a process in which the Office of Rail and Road is evaluating what is in it and the deliverability and efficiency targets that we need to hit. Our response will be a draft strategic business plan, which will include this programme. Assuming all of that is signed off and agreed by Ministers, we will continue delivering.

Q83 Olivia Blake: Just briefly on risk, you are focusing on high-risk areas. I completely understand that. Because we do not know enough about the harms, as our witnesses highlighted, are there potentially more resources needed to go down to what you would consider medium risk? How are you evaluating medium risk as well?

Stephen Elderkin: We are using a risk assessment tool that was developed after a 12-year joint monitoring programme that we ran with the Environment Agency. We think that is the most extensive monitoring evidence that underpins the management of highways run-off anywhere in Europe. We ran that for 12 years. That provided the data that allowed us to understand the relationships between traffic volumes, surface area and the risks that it presented to the receiving water bodies.



HOUSE OF COMMONS

We know that is not the final word. We are in the third phase of some further monitoring work around microplastics and understanding those. We have also been looking at a suite of other chemicals, including PFAS, and looking for further evidence.

What we have found is that, broadly, the relationships that were found in that previous monitoring hold in terms of the scale of the pollution. We continue to use it for the moment to identify the highest-risk outfalls that we are going to address first. That is not the end—you can keep going on this agenda—but the commitment we have made is to address the high-risk ones by 2030.

Q84 Olivia Blake: Given that so much of the UK is now at flood risk, do you see these risks or the patterns of these risks changing over time? How are you going to stay fleet of foot on that?

Nick Harris: For the projects that we are building now, where we are renewing or replacing existing assets, our current standards include climate change. We are addressing that. Of course, that leaves a large legacy of roads that will be susceptible to climate change.

Stephen Elderkin: We updated the drainage capacity for drains in our standards in 2006.

Olivia Blake: That is a while ago now.

Stephen Elderkin: Since then only 7% of our drainage system has been constructed, so 93% of our drains predate the 20% capacity increase that we put in place at that time. We will be publishing new capacity standards, which will go between 20% and 35%, depending on the catchment area, to allow for those climate scenarios. The challenge is retrofit, just as with the treatment works. How do you retrofit? Digging up and replacing 93% of our drains is unlikely to be affordable and the customer impact is unlikely to be acceptable.

It is also going to be a question of working with nature. We have had a scheme running through the last five years where we have been helping to regenerate the moorland around Manchester. A healthy blanket bog absorbs rainwater and acts like a sponge. It holds it when it is raining, so it attenuates the flow of water on to our network. It also holds the water in dry spells and reduces the risk of wildfire.

We have run a feasibility study with Moors for the Future Partnership. We are expecting an extensive set of works around the M62 and the A628 to regenerate the moorland and get sphagnum moss in place. It is good for nature, good for carbon and good for the economy, because it will keep those two vital arteries open.

Q85 Olivia Blake: Finally, we have spoken about getting the mitigations in place, but, once they are in place, do you have the resources to maintain these, given that you are probably going to have to deal with more things to maintain?



HOUSE OF COMMONS

Nick Harris: Yes, it is a challenge. There is a continual squeeze on operating costs. Most businesses face that. We are not unusual in that. We are constantly looking for ways of operating more efficiently. That does bring us back to nature-based solutions.

Q86 **Olivia Blake:** I mean specifically on maintaining the mitigations that you have.

Nick Harris: Rather than coming up with hard solutions that need active management, we are looking at whether we can increasingly use reedbeds and other such solutions, which have far lower operating costs and add to the environment at the same time.

Q87 **Pippa Heylings:** To follow up on what Olivia was asking, from the previous panel we heard that the monitoring that you have been talking about is really difficult because the Environment Agency is not doing it. You say that you have been doing this 12-year joint monitoring project that is the first of its kind, and yet it is not actually monitoring. Can you just help us understand? It seems like a direct contradiction between the two panels.

Stephen Elderkin: I am happy to clarify. We ran a 12-year research programme jointly with the Environment Agency. A big part of that was extensive monitoring around our network.

Nick Harris: This is not regulatory monitoring; it is monitoring to provide data for—

Stephen Elderkin: That helped us understand the relationships between traffic volumes and pollution loads, which is what underpins the model that we use for making risk assessments.

Q88 **Pippa Heylings:** Would you be supportive of the recommendations that the Committee was considering from the previous panel that the Environment Agency should be doing more of that monitoring?

Nick Harris: Our focus is on solving the pollution problem. That is where our resources are going. Of course, we need data to support that.

Going back to the wider question, I was listening to the conversation earlier. Permitting is not a magic solution. If we know more, we have to have the resources to do something about it. It is more a question of, "Okay, we know the problem exists. How are we going to do that in a constructive way that prioritises the issue?"

Q89 **Pippa Heylings:** Is that a no to my question?

Nick Harris: It is not a question for us to answer. It is definitely a question for DEFRA Ministers and the Environment Agency.

Q90 **Barry Gardiner:** Just picking up on exactly the same points, we heard from Ms Bradley about the absolute toxicity of one of the outflows that she monitored. We know that the Environment Agency says that it is not



monitoring these outflows and does not perceive itself to have a regulatory role in monitoring them. It is not funded for it. You are not funded for it. Therefore, what was the point of the 12-year study?

Nick Harris: We want to make sure that the large sums of money that we are using to mitigate pollution are being used effectively. That is one reason for all that work. We are also conscious of the new understanding of contaminants and pollutants, whether that is microplastics or PFAS, as we talked about earlier. We want to understand that, so we are raising the question and giving—

Q91 **Barry Gardiner:** The results of that 12-year study you will be presenting to the Department for Transport and saying, “We have a problem here. This is what we are producing”—the sort of stuff that Ms Bradley told the Committee about earlier—“and we need to mitigate it, because otherwise we are polluting the environment”. Is that the plan? Otherwise, what is the point of that 12-year study?

Stephen Elderkin: The 12-year study allowed us to produce a risk assessment tool, which allowed us to make prioritisation decisions. It underpinned the rewriting of our standards in 2010 and which treatment works we felt were appropriate for given locations.

We are continuing now to develop our understanding of other pollutants, microplastics and other chemicals. That will feed in, and we intend to review the risk assessment tool within the next 24 months and work with partners such as—

Q92 **Barry Gardiner:** What you have identified is a problem, and it therefore is incumbent on you to hold your hands up and say, “We have a problem. We are now coming to Government for help in solving that problem”. As you said, that may well involve finance.

Nick Harris: The process of setting the five-year funding period starts with us issuing what is called the initial report, which sets out the things we think should be addressed. That kind of ask goes in that initial report. If everything pans out, our water quality plan will end up in the next road period. We will then be doing another initial report for the subsequent five-year funding period. We would like to do more to address this issue.

Q93 **Barry Gardiner:** Surely it would make sense for the Environment Agency, or its successor body, to be doing some regulatory monitoring to ensure that you are then meeting the standards that you have set and had accounted for in your plan going forward.

Stephen Elderkin: We are running a series of roundtables, which include the Environment Agency. We have developed a set of standardised design solutions, which we will be looking for stakeholder feedback on at an event on 29 September. The Environment Agency is part of the process of identifying where we need to act or intervene.

Q94 **Barry Gardiner:** With respect, that is not regulatory monitoring.



HOUSE OF COMMONS

Stephen Elderkin: The interventions are very largely passive. Where we have made a risk assessment and decided that a treatment facility needs to be in place, if we put it in place, that goes a long way to addressing the risk.

Nick Harris: This is not like a complex sewage treatment works that has a need for monitoring. If the solution was the right design and is working, it is mitigated.

Q95 **Barry Gardiner:** In that case, it will be very easy and very cheap for the Environment Agency to inspect them in a regulatory capacity and say, "What a fine job you are doing!".

Nick Harris: That is a good challenge for it. More seriously, you talked about the Cunliffe report earlier. Looking at this at catchment level is a good approach. We absolutely understand that we would have to work in partnership as part of that catchment to address the health and quality of rivers and watercourses in the catchment. There is a good question about that approach.

Q96 **Barry Gardiner:** Would you support this Committee making a recommendation that there should be regulatory monitoring of your outflows?

Nick Harris: The way that we are looking at it is that we are understanding how we mitigate. We are confident that that can mitigate, and therefore our focus is on making sure that it is working. How it is regulated is a question for others.

Q97 **Barry Gardiner:** No, I am talking about the recommendations that this Committee should make. You want to get it right. That is what you are assuring us of. You want to get it right and you are taking steps now to do that. If you are confident in what you are doing, it should be perfectly natural that you say, "Let's be transparent. Let's have regulatory monitoring of what we do, so the public can be assured that they can trust us".

Nick Harris: We are more than happy to be held to account and to demonstrate what we are doing. You will have to think about your recommendation and what is the best use of public money to achieve the outcome that we are all looking for.

Q98 **Alison Taylor:** Thank you very much for all your answers. This is the last question. The previous Government rejected the previous Committee's call for the Environment Agency to require discharge permits for outfalls on to roads with heavy traffic, but they said it should be kept under review. We know there are wider changes to regulation in the water sector. Have you had any discussions with DEFRA that might affect your approach to the national highways and the regulation of pollution going forward?



HOUSE OF COMMONS

Stephen Elderkin: There has been nothing in the space of regulatory change or change to the regulatory bodies.

Q99 **Alison Taylor:** Just to sum up, are there any measures that the Government should be looking at to reduce road pollution at source rather than just mitigating it?

Nick Harris: As we heard earlier, dealing with these issues at source is always the most effective way to deal with them. Adopting the European standards around particulates would be a positive move. We would definitely support that.

Stephen Elderkin: We ran a research programme looking at the variability in the wear rate for tyres and found that they are highly variable. With energy-using products, we have choice edited out the most energy-inefficient; there is a strong argument for a similar approach with tyres.

Q100 **Chair:** Mr Harris, you said something very revealing earlier, which was that, effectively, if we improve monitoring, it will create a demand. It will give us more knowledge, but it will then create a demand for us to do something about it. It will create a demand for you to do something about it and there will be cost implications to that.

On the previous panel, Jo Bradley was reflecting that there is nothing like the public interest in the issue of road pollution in comparison with water pollution. If we knew what we were talking about, there might be exactly that interest. Is it not the case that, in terms of both the Government's perspective and your own budgets, it suits you very well for us not to know too much about what the level of pollution is and where exactly it is going? If we did know, there would be a demand for more to be done about it, wouldn't there?

Nick Harris: I disagree with that. I offer two observations. We are more than happy to respond to Government's ask on pollution. We are happy to do whatever is necessary. There is nothing that we are trying to avoid. We are working very hard to make sure we understand in detail the issue so that we respond with the right priority and we are effective in what we do.

As I said earlier, looking at catchments rather than looking at each polluter or potential polluter separately is a very effective way forward and we support that.

Q101 **Chair:** What would you be saying to Government if they said, "We are going to make this a real priority. We are going to spend a great deal more of your resources on reducing road pollution run-off"? What would be the trade-offs that they would have to consider? What would you not then be spending money on?

Nick Harris: If we looked at things on a catchment level and understood what the most significant polluters were for a particular watercourse, we



HOUSE OF COMMONS

could be addressing it in proportion. That would be an effective use of everyone's money. It would definitely be a way forward. Certainly, we have been working to bring together organisations to work jointly on nature-based solutions that can help this.

Speaking just about ourselves and the way that we prioritise, our first priority has to be the safety of everyone using roads. We cannot compromise on that. After that, it is up for discussion.

Q102 **Chair:** It might be that, if we spend more money on this, we will have less money to build new roads, maintain them or whatever else it might be. There would be trade-offs for Government.

Nick Harris: Beyond the question of safety, everything becomes a matter of trade-offs, perhaps.

Chair: Mr Harris and Mr Elderkin, thank you very much indeed for coming on to today's session. We are grateful. We look forward to hearing from you on those matters that were raised. The Committee staff will communicate with you just to make sure we know what we still feel we need to get from you in terms of further information. I will bring this sitting to a close.