

Ten recommendations to prevent water pollution from agriculture

November 2024

Summary

The UK's rivers are in a dire state. Only [14 per cent](#) in England are in 'good' ecological health. Though sewage pollution has received the most political attention, [at least half](#) of water pollution comes from agriculture.

The government was elected on a pledge to clean up our waterways, and Environment Secretary Steve Reed recognised in [his 2024 party conference speech](#) the support farmers need to "stop animal waste, fertiliser and pesticide pollution running into our waterways." It will be impossible to clean up Britain's rivers, streams and lakes without taking decisive action to reduce agricultural pollution.

This briefing outlines a package of cost neutral quick wins to achieve in the next six months, policy changes to make in the next year and longer term priorities that would all enable the government to cut water pollution in line with its legally binding targets.

We estimate these changes will not add to public spending because they will close loopholes in regulation, unlock private finance from water companies and redirect some of the farming budget to support farmers in managing their land differently.

Having inherited a problem on which public feeling runs very high and much needs to be done, the government could act decisively now to demonstrate a departure from past failure and make very clear progress on this key electoral pledge over this parliament.

Introduction

Tackling water pollution is one of this government's most visible and symbolic priorities. While the government has been quick to crack down on sewage pollution, [commitments](#) to work with farmers to reduce pollution from agriculture have yet to amount to concrete policy.

Agriculture is [responsible](#) for 50-60 per cent of nitrate, 20-30 per cent of phosphorous, and 75 per cent of the sediment entering water bodies in

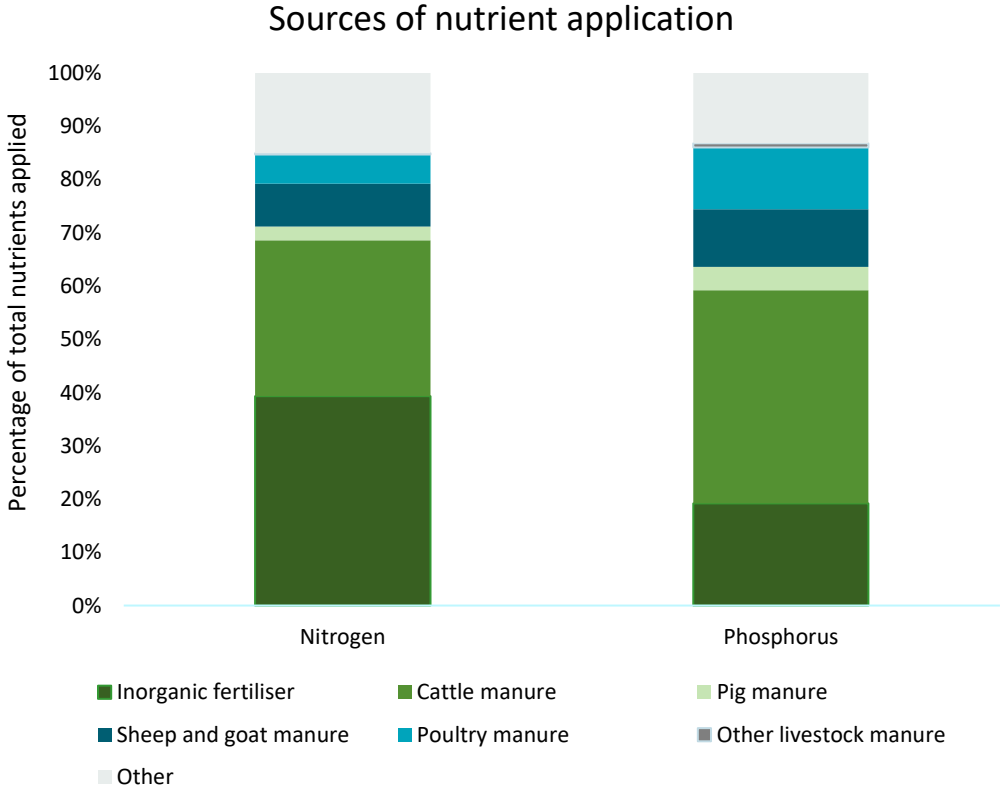
England and Wales. This has polluted our rivers and become a serious threat to human health and biodiversity.

Crops need sufficient nitrogen and phosphorus to grow well, but if these nutrients are applied as fertiliser in too high quantities, or in wet weather, they leach into our rivers before plants can take them up.

In the worst cases, such as the expansion of large scale chicken farming in the Wye Valley, manure waste is being applied as fertiliser to the surrounding land far in [excess](#) of what it can hold, enabled by [loopholes](#) in regulation. The subsequent nutrient runoff has caused the catastrophic decline of the river’s ecosystem.

Beyond the farm gate, the meat and dairy industry has become dominated by a small number of large [agribusinesses](#) running extractive supply chains that prioritise their profit margins. As farmers’ margins are already incredibly tight, the cost of fixing the problem cannot fall on them. But investment through the farming budget, supply chain reform and regulation levelling the playing field is the route to change.

We were unable to find a breakdown of nutrient pollution entering rivers. Data showing the source of nutrients applied to the land [is available](#) (see below). Some nutrients are taken up by the soil, crops and livestock, whilst an unquantified amount is running unchecked into waterways.



The government is committed to meeting targets set to address this problem, including:

- restoring 77 per cent of water bodies in England to achieve or maintain good ecological status or potential by 2027, in the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017;
- restoring 75 per cent of water bodies to good ecological status ‘as soon as practicable’, in the Environmental Improvement Plan 2023;
- a legally binding target to lower nitrogen, phosphorus and sediment entering the water environment through diffuse agricultural pollution by 40 per cent in 2038 compared to 2018, in the Environment Act 2021, with an interim target of a ten per cent reduction by 2028.

But, if the government only focuses on sewage pollution it will fail to meet its 2027 target because [40 per cent of water bodies](#) are not in good health due to pollution from agriculture.

In addition, progress on [housebuilding](#), another of this government’s prominent commitments, is being held up because catchments are already too polluted. ‘[Nutrient neutrality](#)’ rules in heavily polluted areas require mitigation measures are taken so that house builders do not increase nutrient pollution in the water courses surrounding their developments. With [livestock production a key driver](#) of pollution in many of these catchments, the mitigation housebuilding needs could be found through improving farm practices.

Our recommendations outline how the government could rapidly cut pollution from agriculture to give the public access to cleaner, healthier rivers, enable more housebuilding and hold food corporations to account for unsustainable practices. This action plan ensures costs do not fall unfairly on small farming businesses, but instead on the corporations which are forcing bad practice and most able to pay.

Ten recommendations to restore rivers to health

Quick wins over the next six months

1. Publish a delivery plan

The government should use its rapid review and refresh of the Environmental Improvement Plan to produce a clear delivery pathway for water quality targets under the Environment Act. This should include measures to reduce agricultural water pollution, as well as sewage, and should encompass our nine recommendations below. The revised plan should specify how different measures will be funded and indicate how investment, regulation and enforcement will work together to provide value for money.

The government should also use the upcoming Land Use Framework to enable spatial targeting of spending through the Environment Land Management scheme and the recently announced [£400 million capital investment](#) for peat restoration and tree planting over the next two years. This capital, in combination with the Landscape Recovery and Higher Tier schemes, must support farmers to create woodland, wetland and riparian habitat which reduces agricultural water pollution when targeted at the right areas. The investment will contribute to restoring nature, mitigating climate change and reducing the [£1.4 billion annual cost of flooding](#). In an earlier [briefing](#) we outlined what a good land use framework could look like.

Cost: neutral (redeploys existing budget)

2. Reform the water industry regulatory framework to enable farm investment in nature-based solutions

The government should reform the regulatory framework for the water industry to enable companies to invest more in farms which provide ‘nature based solutions’. This must be done ahead of the price review in 2029 that will set the price controls for water and sewage companies from 2030-35.

Reform must shift the industry toward [outcome based environmental regulation](#), enabling water companies to invest in farms that can improve water quality across a river catchment. These include measures such as wetland restoration, tree planting along watercourses and agricultural practices that improve water quality and reduce flood risk, as [trialled](#) in the River Petteril, Cumbria. These provide income for farmers, deliver significant co-benefits such as climate mitigation, and [are more cost effective](#) than hard infrastructure solutions, like barriers, dams, drains and storage tanks. The current risk averse regulatory system favours hard infrastructure, resulting in only £2 billion of the £35 billion planned enhancement [expenditure](#) being allocated to nature-based solutions. Under the current system, rather than work with farmers to remove nitrogen from Poole Harbour at a cost of [£9,000](#) per tonne, Wessex Water will be forced to build a traditional treatment facility at a cost of £31,000 per tonne.

Cost: this would allow more of the £33 billion enhancement investment that does not currently go to nature-based solutions to be invested in farming and land management. (However, we were unable to find estimates of just how much.)

3. Close loopholes in the Farming Rules for Water

The government should amend the [statutory guidance](#) on the application of the Farming Rules for Water, before the September 2025 deadline, to close loopholes. If properly enforced, the Farming Rules for Water are a good foundation for improving water, air and soil quality, and ensure those farmers who do follow best practice are not undermined by those who cut corners and costs by continuing to pollute.

However, the guidance issued by the previous government still applies, despite potentially being [unlawful](#) because of the exemptions it creates. In particular, the ‘unless’ clause should be removed [from section 2.2 of the guidance](#). This allows the application of manure above target levels if “it is not reasonably practicable” to do otherwise or if vaguely defined “reasonable precautions” are taken to reduce diffuse pollution. This loophole is [enabling](#) mass pollution in areas like the River Wye catchment from industrial scale chicken production.

Cost: neutral

Policy changes over the next year

4. **Change the Environment Agency’s approach to enforcing Farming Rules for Water**

The Environment Agency should be given greater powers and resource to enforce the Farming Rules for Water. Compliance with the rules is extremely low. In 2022, [39 per cent](#) of non-permitted farms inspected were found to be in breach of at least one rule. However, [no fines](#) were issued before February 2023 and, despite some improvements, enforcement levels [remain low](#). [Analysis](#) by River Action found that the average farm can expect to receive an inspection just once every 50 years.

Government guidance currently requires the Environment Agency to take an ‘advice first’ approach to the enforcement of the Farming Rules for Water, but this is ineffective if not backed up by strong enforcement action for serious or repeat offences.

The Environment Agency should adopt the [‘two-strikes’ model](#) followed by the Scottish Environmental Protection Agency, which has proved to be [effective](#) and is considered [equitable](#) by most farmers. This approach involves offering access to free advice if warnings are issued based on much more thorough inspections, followed by repeat visits to assess progress, with good performance rewarded with fewer inspections, and there are sanctions or prosecutions if no action has been taken.

Adopting this model would cost [£5.8 million per year](#) over a five year period, after which costs would significantly reduce. This could be paid for from revenue generated by reforms to the permitting system proposed below. Additional revenue from fines could be diverted into additional farm advice.

Cost: £5.8 million per year, funded by reforms to the permitting system (see recommendation five)

5. **Reform the livestock permitting system**

The government should [reform the permitting system](#) to lower the threshold at which poultry and pig units need to apply for permits and it should introduce permits for intensive cattle and dairy units. Permitting is useful as it establishes a set of baseline rules that producers must meet. There is

evidence this leads to better practice. For example, permitted farms inspected by the Environment Agency in 2022 were much more likely to be compliant with the Farming Rules for Water than those without permits, with unpermitted dairy farms responsible for [31 out of the 41](#) recorded serious pollution incidents. Permits must require farms to have slurry management plans and an end-use waste strategy.

We estimated adding £4.90 per livestock unit to the permit cost would pay for the cost of enforcement (see recommendation four). Beef farms with less than 150 cattle should be exempt (70 per cent of beef enterprises). Businesses with more than one million chickens would pay £34,267 each.

Cost: raises £5.8 million per year to pay for the enforcement of Farming Rules for Water (see recommendation four).

6. Improve value for money by evolving the Sustainable Farming Incentive

The chancellor has rejected [widely backed](#) proposals from the Department for Environment, Food and Rural Affairs (Defra) to increase the farming budget. Ahead of the multi-year spending review, Defra must offer a policy that demonstrates better value for money.

As part of this, Defra should evolve the Sustainable Farming Incentive, which offers incentives for actions that used to be mandatory requirements. The government could save over £43 million per year by incorporating actions that used to be [mandatory](#) under cross compliance, such as creating buffer strips, hedgerow management, nutrient management and soil plans, back into the regulatory baseline for future SFI agreements.

An additional £46 million could be saved by removing the fee that all farms receive just for entering the Sustainable Farming Incentive, which is not contingent on delivering any public good.

Defra needs to act swiftly ahead of the multi-year spending review next spring to make sure it can demonstrate value for money in the farming budget. It could do so by strengthening the regulatory baseline. This would put [right the previous government's rollback](#) on its promise not to weaken regularity standards after Brexit.

Cost: frees up at least £89 million per year for redeployment in the farming budget.

7. Ramp up peat restoration and tree planting

We welcome the recently announced £400 million capital spending for [peat restoration and tree planting](#). We recommend that more internal resources across Defra and Natural England are immediately focused on distributing this funding quickly, with attached annual funding to reward the public goods it generates, to avoid any underspend.

This annual funding will come from the Higher Tier and Landscape Recovery schemes, which should be opened for applications soon.

The Sustainable Farming Incentive, the only ELM scheme currently open, does not reward farms for restoring peat or maintaining woodland. But, without limits, this single scheme, which offers the [larger arable farms](#) a much better deal than small upland farms, could easily use up [all of the £1.8 billion](#) available for the three schemes next year. Defra must urgently ringfence some of this budget for the Higher Tier and Landscape Recovery schemes, to deliver [on the government's promise to upland farmers](#). There should be investment of £1 billion per year in Higher Tier and Landscape Recovery by 2028.

Defra should also improve the payment rate for peat rewetting in the uplands, which is currently [£181 per hectare](#), only a third of the [£590 per hectare](#) offered to arable farms to create 'grassy blocks' under the Sustainable Farming Incentive.

Further funding should come from water companies who pay a [high cost](#) to remove sediment from water that has run off degraded peatlands. The regulatory reform, outlined in recommendation two, would generate funding from water companies that could flow to farmers via the Landscape Recovery scheme, which is set up to absorb private finance.

Cost: neutral (uses existing funds)

8. Support farms to improve slurry management, including making grants accessible to smaller farms

The Slurry Infrastructure Grant provides capital grants of between £25,000 and £250,000 to farmers to improve their slurry stores and purchase equipment to help with slurry management. However, at present, farmers can only claim a standardised cost or up to 50 per cent of the total cost of each item. This excludes smaller farms from the scheme as they are not able to raise the remaining capital. The government should introduce a sliding scale where it covers a larger percentage of the costs at the lower end of the grant range.

In addition, the government should widen its focus to several other aspects of manure management. First, by [extending](#) the scheme to silage, which is also a major driver of river pollution. Second, it should consider promoting solutions like the [acidification](#) of slurry, which reduces [methane emissions](#) as well as water pollution. Finally, it should explore the potential of a [smarter circular economy approach](#) that transports excess manure to other arable areas in need of nutrient input.

Cost: neutral to make the slurry grant scheme more accessible to small farms (redeploys existing funds), with additional investment needed for other solutions which could come from regulation of the supply chain.

Longer term priorities: the next two years

9. Introduce a new food strategy that drives demand towards what can be sustainably supplied

Policies are needed to support a fairer, healthier and more sustainable food system, such as those outlined in Henry Dimbleby's 2021 [National Food Strategy](#). We must ensure that farmers benefit from the opportunities diet changes bring. For example, Changes in meat consumption are already happening. There has been a reported 15 per cent [reduction](#) in UK beef consumption over the past five years. In the face of these changes, the Environmental Land Management scheme offers farmers a route to stabilising their incomes by delivering public goods, such as flood mitigation, nature restoration and carbon storage, whilst maintaining smaller herd sizes. This approach can, in fact, [increase](#) the overall profitability of livestock farms.

Cost: the existing farming budget should be used to support livestock farms to deliver public goods. The total cost of a food strategy will depend on its scope (we are planning more work on this soon).

10. Make supply chain agribusinesses bear the cost of polluting activities

The government should hold large agribusinesses accountable for farm pollution. None of the ten largest [agribusinesses](#) in the UK have public strategies capable of preventing water pollution, despite putting over [144 million](#) animals through their supply chains which produce more than double the human excrement from the UK's [ten largest cities](#).

These companies should be required, by law, to publish annual strategies for preventing nutrient pollution throughout their supply chains. This would force them to offer farmers a price that allows them to adopt higher standards. Where there are breaches, these businesses should be held to account through monitoring and enforcement by the Environment Agency. Supermarkets should also be required to source only from those companies which have stated strategies in place. Major [improvements](#) are needed in the inadequate certification schemes supermarkets rely on presently.

Cost: neutral

Conclusion

The government has set high expectations of the progress it will make to clean up our rivers over this parliament. But, by focusing on sewage alone, it cannot hope to achieve the progress it seeks. Cleaning up agricultural pollution requires a careful approach that makes those most responsible pay for the action needed and avoids punishing smaller farms who have least agency to change the system or pay the cost of restoration.

Our ten recommendations form the basis of a plan that could begin to deliver progress through regulatory and supply chain reforms that also support farmers and raise private investment.

While change will take time, the quick wins we outline as part of this plan mean the government can begin to restore public confidence in its ability to eventually make our rivers clean, healthy and swimmable again.

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