

Briefing

The impact of nature loss and climate change on the cost of living



April 2025

Summary

The commitment to kickstart economic growth and give people more disposable income is seen by the government as the most important of its five missions.¹ To address the cost of living to date, the government has focused its attention on bringing down energy bills through expanding renewable energy and improving efficiency, measures which also mitigate climate change. But this is not the only area where action to address climate change, and environmental degradation more broadly, would bring down household bills. In this briefing, we identify escalating household costs that could be brought under control through managing our land to restore nature and protect food security.

Here, for the first time, we estimate the impact nature degradation and climate change on land are having on household budgets and the cost of living in England. We have calculated that impacts on regular costs like water bills, insurance premiums and food prices mean that **households are paying an average of £233.49 each more a year** than they should without these negative effects.²

This figure is not a complete estimate of the total cost of climate change and nature loss. We have focused our analysis on three readily quantifiable household bills driven by problems that could be managed through good land management. Trends indicate that these household bills will continue to rise, but new YouGov polling for Green Alliance shows that three in five people are already concerned about being able to afford their household bills.³

Global uncertainties have made economic planning increasingly challenging for the government. But it is in government control to restore the ecosystems needed to protect communities and food systems from extreme weather events. This is what is needed to avoid these costs escalating. Our polling reveals that climate and nature action isn't the politically polarising issue some portray it as, though there is relatively low awareness that these issues impact bills: only two in every five Reform, Labour and Liberal Democrat voters, and one in three Conservatives, think that climate change and nature degradation must be increasing their bills, with the remainder assuming no effect.⁴

Reversing the impacts of climate change and nature loss requires a broad range of strategies, regulations and investment, but here we focus on the role of the relatively new Environmental Land Management scheme, which supports farmers and land managers to deliver public goods for public money. This scheme is central to getting land into a state where it can mitigate climate change by storing carbon, reduce flooding by storing water and restore nature to help create a more resilient food system.

Existing evidence suggests the annual budget for this scheme should be £3.1 billion to enable action to take place at the necessary scale to reverse current trends, and therefore arrest the rising costs being paid by households due to continued environmental degradation.⁵

Our analysis shows that investing in protecting and restoring nature is a cost effective use of limited government resources, as healthy ecosystems will deliver multiple benefits in return, to the economy and wider society, including bringing consumer bills down.

Three ways nature degradation and climate change increase bills

We used existing evidence and conducted new analysis to estimate how much nature degradation and climate change are adding to household bills in England in three key areas: home insurance, water and food.

We focused our analysis on these three readily quantifiable areas. Climate change and nature loss undoubtedly raise other costs, such as to public health, but these were out of scope of our assessment.

All the costs we have calculated are presented as averages across England, meaning some households experience higher increases, while others face smaller rises. But there is no question that all households are paying more than they would in a scenario where nature was thriving and could perform the ‘services’ it provides to society well and where climate impacts were reduced.

Our results are summarised below and described in more detail in the following sections.

Average annual increase in bills due to nature loss and climate change

Source	£/year
Home insurance premium	£42.25
Water bill	£10.74
Food shop	£180.50
Total for the average household in England	£233.49

1. Flooding is increasing home insurance premiums

Adverse weather impacts, including flooding, have added £42.25 to the average household's home insurance premium in England.⁶

Flooding is increasing all homeowners' insurance bills, not just those in flood affected areas. The rising cost of insurance payouts due to adverse weather has led insurers to increase premiums for the average household.^{7,8}

We calculated that the £1.2 billion in weather-related insurance payouts in 2024 added £42.25 to the average home insurance premium in England.

Our estimate does not account for the further negative financial impact of the fall in house prices affecting those who live in flood risk areas.⁹

Previously flooded homes and those at risk of flooding pay more to insure their homes.¹⁰ In England, 6.3 million properties are at risk of flooding from rivers and the sea, and this is predicted to increase to eight million by mid-century, affecting more households with increasingly unaffordable home insurance premiums.¹¹

A combination of climate change driven weather shifts and poor land management practices are largely responsible for these flooding risks. The frequency and size of floods has intensified over the past three decades, particularly in London, the North West and the East of England.¹² And flooding is more likely from extreme weather events due to the loss of ecosystems, such as wetlands or peatlands, that hold water and protect communities downstream.¹³

Managing flooding using nature can be a cost effective buffer, reducing flood risk and its severity. At Wicken Fen in Cambridgeshire, restored marshland now protects houses and surrounding farmland from flooding.¹⁴

However, the more common approach to flood defences tends to favour built infrastructure, such as flood walls, over natural flood management. The government recently announced a record package of £2.65 billion for building and maintaining 1,000 flood defence projects, of which only 3.4 per cent will use natural flood management.¹⁵ The government should prioritise nature-based solutions, like peat restoration and woodland planting which can provide many other benefits for people and nature, alongside cost effective flood mitigation.¹⁶

2. Climate change is increasing the price of our food shop

The impact of climate change on a household's annual average food bill, estimated by the Energy & Climate Intelligence Unit, is £180.50.¹⁷

For the impact of climate change on food bills, we have used the Energy & Climate Intelligence Unit's estimate that climate-related impacts added £361 to the average household's annual food shop over two years in 2022-23, so an

average £180.50 each year.¹⁸ This reflects supply disruptions, yield variability and subsequent higher prices on agricultural markets because of global warming and extreme weather events.

As well as mitigating climate change, addressing nature degradation is essential to food security. A depleted natural environment affects the ability to grow food and also makes the food system much more vulnerable to climate shocks, with inevitable impacts on food bills that are difficult to quantify.

For example:

- **Poor soil management** limits crop growth. Loss of top soil and nutrients lowers crop yields, reducing farm profits.¹⁹ Farmers may need to apply fertilisers to crops more frequently, driving up input costs.
- **Loss of pollinator species**, which have declined by 24 per cent in the UK since 1980, can lead to yield losses for certain crop varieties.^{20,21} Farmers can compensate by increasing inputs of fertiliser or using pollinator services to maintain yields, but this increases the production cost of food.

To protect food supplies, farmers' incomes and household budgets, it is essential to strengthen the resilience of our farming system by investing more in nature restoration and climate change mitigation via the Environmental Land Management scheme.

3. Water pollution and climate impacts are raising water bills

From April 2025, the average household in England will pay £10.74 a year more for their water due to climate change and pollution impacts.²²

Household water bills across England have risen by an average of £30 per year, a 34 per cent rise, before inflation, as of April 2025.²³ Water bills are predominantly rising due to the need for greater investment in infrastructure, including due to increasingly dry summers, and the higher cost of water treatment.²⁴ Water companies pass on much of this cost to their customers.

In our analysis, we identified the portion of this increase attributable to climate change and pollution. We found that, on average, households will pay £10.74 per year on their water bill as a result of these issues.

The condition of the natural environment, land management practices at the catchment level and the impact of climate change on water security have increased investment costs for water companies, resulting in higher customer water bills.

For example:

- UK water supplies are increasingly blighted by pollution from sewage and agricultural run-off, accelerated by loss of vegetation from land and riverbanks which would otherwise filter and reduce this impact.²⁵

Polluted run-off lowers the quality of raw water extracted for public use, increasing treatment costs and leading to higher customer water bills.²⁶

- Climate change will decrease summer rainfall by 15 per cent by the 2050s.²⁷ Current water abstraction levels are judged to be unsustainable for more than a quarter of all groundwater bodies and one-fifth of surface water, ie there is too much abstraction in relation to supply.²⁸ The rise in drought warnings is prompting water companies to invest in new reservoirs, contributing to higher consumer bills.

When healthy, nature can provide water filtration services but the loss of important water regulating habitats, such as wetlands and healthy peatlands, puts a higher burden on man-made water treatment systems. Nature-based solutions can be up to 50 per cent cheaper and can provide 28 per cent better value for money than traditional ‘grey’ infrastructure, in tackling water quality and system resilience.²⁹

Anglian Water is treating water by investing in wetland restoration at Ingoldisthorpe in Norfolk, which now cleans 1.4 million litres of water a day.³⁰ However, as with flood defences, current regulations do not encourage this and prioritise the use of hard infrastructure over nature-based solutions.

Again, the Environmental Land Management scheme can play a useful role in addressing nationwide issues of poor water quality, for which the average consumer is paying the price. The scheme should invest in large scale projects that increase water retention and reduce run-off, including restoring peatlands, wetlands and riverbank habitats.

The household costs of nature degradation and climate change

Our calculations of the cost impacts of climate change and nature degradation on insurance premiums, food prices and water bills add up to an additional £233.49 a year for the average household in England.

To achieve its mission to grow the economy and give people more disposable income, this government must invest in addressing climate change and nature degradation. Continued escalation of their negative impacts may otherwise offset the gains from growth in other areas of the economy.

Tackling these issues requires a broad set of tools and strategies. But the importance of investing in landscape-scale restoration and protection is clear.

The Environmental Land Management scheme is the best tool England has to reduce flooding, improve water quality and safeguard UK food supplies. The costs of not doing so are clear. Because of its multiple social and economic benefits, investing in nature is a cost effective use of the government’s limited resources.

The government’s spending review in 2025 should ensure the Environmental Land Management has the budget of £3.1 billion needed to tackle these issues, rather than leaving households, now and in the future, to shoulder the considerable and increasing costs.³¹

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Endnotes

¹ Prime Minister’s Office, ‘Plan for change: kickstarting economic growth’, www.gov.uk/missions/economic-growth, (last accessed 1 April 2025).

² While the direct attribution of rising costs to nature degradation can be challenging due to the complex interactions of ecosystem services with other factors, the examples presented within this briefing focus on evidence where direct links can be made between nature degradation and costs to individuals.

³ Result of a poll run by YouGov and commissioned by Green Alliance on a sample size of 2209 adults in GB from the 27-28 February 2025 found that 61 per cent of total respondents selected the responses “very concerned” or “fairly concerned” to the question: “Over the next 12 months, how concerned, if at all, are you about being able to afford [...] household bills (e.g. heating, water, electricity, home insurance etc.)”

⁴ Result of a poll run by YouGov and commissioned by Green Alliance on a sample size of 2,209 adults in Britain from the 27-28 February 2025 found that, in response to the question “Generally speaking, what impact, if any, have each of the following had on your current cost of living?: Environmental impacts (eg climate change, nature loss)”, 45 per cent of Labour voters, 42 per cent of Liberal Democrat voters and 40 per cent of Reform UK voters selected either “a fairly negative impact” or “a very negative impact”.

⁵ Rayment, 2024, *For farming, nature and climate: investing in the UK’s natural infrastructure to achieve Net Zero and nature’s recovery on land*, RSPB, National Trust, The Wildlife Trust.

⁶ This figure is derived from the estimate that weather-related insurance claims in 2024 resulted in £1.2 billion in payouts from insurance companies due to adverse weather impacts, including storm and flood damage (source: Deloitte, 2025, ‘Deloitte: 2024 property insurance payouts expected to hit highest level in almost two decades’). In response to this significant rise in claims, insurance companies increased premiums across the UK (Source: The ABI, 2025, ‘More action needed to protect properties as adverse weather takes record toll on insurance claims in 2024’). Assuming that these higher premiums are distributed evenly across all UK households (the total number of UK households is 28.4million according to the [ONS](https://www.ons.gov.uk/peoplepopulationandcommunity/healthandwelfare/inequalitiesanddeprivation)) to cover the increased costs, this would lead to an estimated rise of £42.25 per household due to adverse weather.

⁷ Farrell and Nicholas, 2024, ‘Why have insurance premiums gone up so much?’, *Economics Observatory*

- ⁸ Keys and Mulder, 2024, 'Property Insurance and Disaster risk: new evidence from mortgage escrow data', *National Bureau of Economic Research*.
- ⁹ Skouralis et al, 2024, 'Does flood risk affect property prices? Evidence from a property-level flood score', *Journal of Housing Economics*, vol 66, doi.org/10.1016/j.jhe.2024.102027
- ¹⁰ C Kapani, 18 February 2025, 'Home insurance premium uptick slows – but figures remain elevated', *Insurance Times*.
- ¹¹ Environment Agency, 2025, 'National assessment of flood and coastal erosion risk in England 2024'.
- ¹² Environment Agency, 2018, *The state of the environment: water resources*
- ¹³ Gulbin et al, 2019, 'Wetland loss impact on long term flood risks in a closed watershed', *Environmental Science & Policy* vol 94, pp112-122, doi.org/10.1016/j.envsci.2018.12.032
- ¹⁴ Nature based Solutions Initiative, 'Case study platform: restoration of lowland fen for flood management in Wicken Fen, casestudies.naturebasedsolutionsinitiative.org/casestudy/restoration-of-arable-land-to-lowland-fen-for-natural-flood-management-nfm-in-wicken-fen-uk/, (last accessed 1 April 2025)
- ¹⁵ Defra, Environment Agency and The Rt Hon Steve Reed OBE MP, 'Record investment to protect thousands of UK homes and businesses', 4 February 2025, www.gov.uk/government/news/record-investment-to-protect-thousands-of-uk-homes-and-businesses
- ¹⁶ Shuttleworth et al, 2019, 'Restoration of blanket peat moorland delays stormflow from hillslopes and reduces peak discharge', *Journal of Hydrology X*, doi.org/10.1016/j.hydroa.2018.100006
- ¹⁷ The Energy & Climate Intelligence Unit, 2023, 'Climate, fossil fuels and UK food prices'
- ¹⁸ Ibid
- ¹⁹ Graves et al, 2015, 'The total costs of soil degradation in England and Wales' *Ecological Economics*, vol 119 doi.org/10.1016/j.ecolecon.2015.07.026 Pg 407: "on-site costs (£40million a-1) comprise loss of yield potential due to loss of soil depth [...]"
- ²⁰ Joint Nature Conservation Committee, 2024, '[UK biodiversity indicators: status of pollinating insects](#)', (last accessed 1 April 2025)
- ²¹ Vezzani et al, 2025, 'Global relationship between crop yield and pollinator abundance', *Journal of Applied Ecology*, doi.org/10.1111/1365-2664.70042
- ²² This figure is based on a review of each English water and wastewater companies' 2024 Price Review (PR24) final determinations (www.ofwat.gov.uk/regulated-companies/price-review/2024-price-review/water-companies-final-determinations/). The expected expenditure for each company over the next five years funded from bills and the total expenditure on actions linked to climate change and nature loss was extracted from the reports to calculate the proportion of each bill rise dedicated towards these specific actions. An overall weighted average was calculate taking into consideration the number of customers serviced by each English water and wastewater company to provide the final figure £10.74 per year.
- ²³ Ofwat, 2024, '[PR24 final determinations: sector summary](#)'
- ²⁴ Ibid
- ²⁵ The River Trust, 2024, *State of our rivers*

²⁶ Ofwat, 2011, *[From catchment to customer: can upstream catchment management deliver a better deal for water customers and the environment?](#)*

²⁷ Environment Agency, 2021, 'Lack of water presents 'existential' threat, says Environment Agency chief', www.gov.uk/government/news/lack-of-water-presents-existential-threat-says-environment-agency-chief (last accessed: 1 April 2025)

²⁸ Environment Agency, 2018, op cit

²⁹ IISD, 2021, 'Using nature in infrastructure projects could save USD 248 billion per year – study', www.iisd.org/articles/nature-based-infrastructure (last accessed: 1 April 2025)

³⁰ Anglian water, 'Wetlands', www.anglianwater.co.uk/environment/river-health/river-biodiversity/wetlands/, (last accessed: 1 April 2025)

³¹ Rayment, 2024, op cit