Department
for Environment,
Food & Rural Affairs

Environmental Improvement Plan annual progress report

April 2024 to March 2025

Published: July 2025

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We are responsible for improving and protecting the environment. We aim to grow a green economy and sustain thriving rural communities. We also support our world-leading food, farming and fishing industries.

Defra is a ministerial department, supported by 34 agencies and public bodies.

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Introduction

This year's Environment Improvement Act (EIP) Annual Progress Report is the final one in the series that reports on action taken to deliver the Environmental Improvement Plan, published in 2023 under the previous government. In this plan 10 goals were set out, with Thriving Plants and Wildlife the apex goal into which all other goals feed in to.

Later in 2025 we will publish a revision of the EIP (EIP25) to protect and restore our natural environment. EIP25 will include delivery information to set out how we will meet the ambitious Environment Act targets. The government's number one mission is to kickstart economic growth. We know that the natural resources that underpin our economy are finite and under increasing pressure. The natural environment is amongst our most valuable national assets. EIP25 will set out the approach to improving the natural environment we need to take to grow our economy, build 1.5 million homes, boost food security and meet our environment and climate targets with nature as the enabler, driver and protector of growth.

Improving on EIP23, EIP25 will be a clearer, prioritised plan for achieving environmental outcomes such as reducing waste across the economy, planting more trees, improving air quality and halting the decline in species.

Our revised EIP will be a document that guides action and decision making, with achievable delivery plans for restoring nature and improving the natural environment, underpinned by world-leading environmental science and consultation with experts. The EIP25 will include a clearer monitoring and evaluation framework through which we will assess progress and interim target delivery.

As part of EIP25, we are committed to strengthening our annual reporting on progress and changes to the condition of the natural environment using the monitoring and evaluation framework. In next year's annual progress report, we will report on progress made under EIP25.

Overview

In 2023 the Environmental Improvement Plan (EIP23) was published, in accordance with the Environment Act 2021, as a revision of the 25 Year Environment Plan (25YEP) published in 2018. This annual progress report covers April 2024 to March 2025.

EIP23 is set out in 10 goals. Each goal has specific targets and commitments described in the EIP23 that contribute to the goal outcome, including the legally binding targets set under the Environment Act 2021. The annual progress report is set out under these goals. This report provides a selection of key achievement updates related to each EIP23 goal. The 10 goals are:

1. Thriving plants and wildlife

2. Clean air

3. Clean and plentiful water

4. Managing exposure to chemicals and pesticides

5. Maximise our resources, minimise our waste

6. Using resources from nature sustainably

7. Mitigating and adapting to climate change

8. Reduced risk of harm from environmental hazards

9. Enhancing biosecurity

10. Enhancing beauty, heritage and engagement with the natural environment

Further information on progress towards the targets can be found in the accompanying monitoring annex, which forms part of the annual progress report.

Apex Goal: Thriving plants and wildlife

There are 6 legally binding Environment Act targets, and 5 interim targets associated with the apex goal of 'thriving plants and wildlife'. More information on these can be found in the accompanying monitoring annex.

Goal 1: Thriving plants and wildlife

Achieving thriving plants and wildlife is the apex goal of the EIP23. Achieving all the other EIP23 goals will support achieving the thriving plants and wildlife goal.

Key activities over the past year

Since the period covered by the annual progress report for 2024 (APR24), the following additional progress has been delivered.

Habitats and species

- In May 2024, the *Management of Hedgerows (England) Regulations 2024* introduced management rules into domestic legislation to protect hedgerows on land used for agriculture in England.
- Between April 2024 and March 2025 Natural England declared a further 4 new National Nature Reserves (NNRs) and significantly extended another.
- In October 2024, we confirmed our vision for delivering 30by30 on land in England and published the criteria for areas which can count towards this target.
- The government allocated £13 million to Protected Site Strategies to create and implement restoration plans for priority sites where nature recovery can also contribute to the government growth mission in 2025 to 2026.
- Between Oct 2024 and April 2025, we ran 2 phases of 30by30 pilots with a small number of partners, to inform the ongoing development of 30by30 guidance and assessment and reporting processes, which are both crucial for enabling 30by30 rollout.
- Between April 2024 and March 2025 Natural England declared 4 new National Nature Reserves and extended another by more than 7 times its original size. Combined, these 'King's Series' declarations increased the area of National Nature Reserves by almost 5.5%, to over 115,000 hectares

Green finance

- The Defra-sponsored BSI Nature Investment Standards Programme published a new Biodiversity Standard (BSI Flex 702) for consultation.
- We have commenced work on new urban nature markets, starting with an urban greening code which is linked to the British Standards Institution (BSI) - BSI Flex.

An announcement is expected shortly on the successful grantees who collectively will receive £15 million capacity and capability grant funding.

- In 2024 to 2025, the Natural Environment Investment Readiness Fund evaluation demonstrated strong results. 86 projects have been supported in England across rounds 1 and 2, and of these, 17 projects have secured additional investment up to £2.5 million, and 4 projects generated over £2.9 million in environmental unit sales. The third funding round launched in June 2024, bringing total supported projects to 127.

Land use

- In April 2024, biodiversity net gain (BNG) became mandatory for small sites (unless exempt) following its introduction for larger sites 2 months prior to that. To note that recently in May 2025 the government launched a consultation on improving the implementation of biodiversity net gain for minor, medium and brownfield development, as well as a consultation on how BNG will apply to nationally significant infrastructure projects from May 2026.
- Between April 2024 and March 2025, 2 Local Nature Recovery Strategies (LNRSs) were published, and a further 13 had begun or completed the required public consultation on their draft strategy. The remaining 33 were either preparing to consult or at an earlier stage of the preparation process.
- In February 2025, government published updated Planning Practice Guidance to explain how planning authorities should consider LNRSs.
- In March 2025 the Planning and Infrastructure Bill was introduced into Parliament. Nature Restoration Fund measures in the Bill will unlock the positive impact development can have in driving the recovery of protected sites and species.
- The Planning and Infrastructure Bill also proposes that Spatial Development Strategies will have to take account of LNRSs and that Natural England will have to have regard to LNRSs when preparing Environmental Delivery Plans.
- In October 2024, we launched the Nature Towns and Cities programme. This coalition is working together to deliver greener, fairer, healthier and more connected towns, cities and neighbourhoods. This will enable millions more people to enjoy nature close to home. The goal of this programme is to ensure at least 30% of green and blue space network contributes to nature's recovery.
- The Green Infrastructure (GI) Framework has been live for one year. Natural England has worked proactively with over 60 local authorities to embed GI standards within local plans and policies, which results in a nature positive approach to development and growing the economy.

Farming

- The Farming in Protected Landscapes programme (FiPL) was originally set to run until the end of March 2024. In recognition of the positive feedback and outcomes delivered by FiPL, we extended the programme until March 2026 and increased the overall funding to £130 million. The programme will continue to help Protected

Landscapes teams work with farmers and land managers to deliver more for climate, nature, people and places.

- The expanded sustainable farming incentive offer (SFI24) launched in May 2024, including 102 actions covering all farm types in England. This includes actions on soil health, moorland, hedgerows, integrated pest management, farmland wildlife, buffer strips, agroforestry, precision farming, and grassland.
- In March 2025, with 37,000 live multi-year SFI agreements and the sustainable farming budget successfully allocated, the scheme was closed to new applications.
- We have a record number of farmers in Environmental Land Management agreements, and continue to refine and improve the offer.

Trees and woodlands

- Government supported the planting of 5,765 ha of woodland and 888,000 trees outside woodland in England between April 2024 and March 2025, equivalent to a total of 7,164 ha of tree canopy and woodland cover or 10.4 million trees.
- In July 2024, the Forest for Cornwall announced it had reached a major milestone of planting one million trees since it was created in January 2019.
- In November 2024, a Defra-commissioned review was published which analysed how provisions of the National Planning Policy Framework (NPPF) relating to ancient woodland and ancient and veteran trees were applied in practice.
- In late November and early December 2024, the government celebrated National Tree Week with activities including publication of the Tree Species Guide for UK Agroforestry Systems.
- As part of this, the government also launched a UK-wide Tree Planting Taskforce, which brought ministers from Scotland, Wales and Northern Ireland together, alongside key delivery partners and arm's-length bodies, to work to resolve barriers to tree planting, boost biodiversity and grow the UK's forestry sector to help meet net zero targets.
- In March 2025, the new Western Forest was announced, the first new national forest in over 30 years.
- The Western Forest will see 20 million trees planted across the west of England by 2050 and the creation of 2,500 hectares of new woodland by 2030. This is the first step towards delivering the government's manifesto commitment to create 3 new national forests.

Global environment

- In April 2024, the government funded the first project under Darwin Plus Strategic. This is a new grant scheme designed to fund larger-scale, longer-term conservation projects in and between the UK Overseas Territories.
- At the 16th Conference of the Parties to the Convention on Biological Diversity the UK co-chaired the negotiations of the new multilateral benefit sharing mechanism, facilitating the launch of the Cali Fund. This global fund provides a route for companies using genetic information from nature to contribute finance for

biodiversity. A strategy for raising finance from all sources for delivery of the Global Biodiversity Framework was agreed.
- The independent International Advisory Panel on Biodiversity Credits (co-sponsored by UK and French Governments) also launched a Framework for high integrity biodiversity credit markets, bringing together High-Level Principles, market actor guidance and pilot projects to help accelerate investment in nature.

Defra has continued to deliver its Official Development Assistance (ODA) portfolio which is focused on tackling nature loss, climate change and poverty reduction in developing countries. In 2024 to 2025 this has included continued implementation of the Biodiverse Landscapes Fund, continued delivery of the Darwin Initiative and Illegal Wildlife Trade Challenge Fund which conserve biodiversity and safeguard the environment for local people. This is alongside delivery of the Blue Planet Fund, including the marine challenge fund OCEAN which works to build resilience for coastal people and communities.

Alongside this we are continuing support to address critical research gaps through the Global Centre for Biodiversity for Climate (GCBC). GCBC has funded 18 new projects this year and launched a third grant competition focusing on 2 themes: biodiversity in agriculture, food and bioeconomy value chains and biodiversity hotspots in Small Island Developing States.

Examples of official development assistance programme impact reported in 2024 to 2025 include:

- £15.9 million of public and £8 million of private finance leveraged for climate and nature respectively, around 19,000 people with improved resilience to climate change, and 1,600 hectares under ecological management through Defra's investment in the Global Fund for Coral Reefs since 2021.
- Around 570,000 tonnes of greenhouse gas emission reduce or avoided, over 6,000 hectares of ecosystem loss avoided, over 46,000 hectares of land under ecological management, around 17,000 people with sustainable livelihoods created or protected, and over 8,000 people with improved tenure or access rights through Defra's support to Rural Sustentavel in Brazil since 2021.
- Over 500,000 tonnes of greenhouse gas emissions avoided or reduced, £59.5 million and £38.6 million of public and private investment leveraged for climate and nature respectively, around 100,000 hectares of land under ecological management, and over 80,000 people with sustainable livelihood created or protected through Defra's investment in the Eco Business Fund and Land Degradation Neutrality Fund since 2017.

Marine

- In March 2025, the Marine Management Organisation (MMO) launched a consultation on proposals for a byelaw to prohibit anchoring in the Allonby Bay Highly Protected Marine Area.

- In March 2025, Defra's £37 million marine Natural Capital and Ecosystem Assessment (mNCEA) programme completed. Over 3 years, the programme delivered natural capital evidence, tools and guidance to inform policy and decision making for marine and coastal environments. mNCEA evidence and approaches will help us to factor the wider (environmental, economic and social) value of nature into decision making, so we can manage our natural resources in a way that drive benefits for both people and nature.
- In 2024 to 2025, Defra and Innovate UK invested £1.3 million into small and medium-sized enterprises to develop complete end-to-end marine monitoring systems. This was part of a £2.1 million competition to improve the way we monitor marine biodiversity in UK waters.
- At the end of 2024 the 5 year, £2.5 million EU Life Recreation ReMEDIES project led by Natural England was delivered. This project sought to improve the protection of seagrass beds across 5 marine protected areas in Southern England through improved management of recreational activities such as boating and associated anchoring damage.

Improving environmental quality

A healthy environment is essential to restore nature. The following EIP23 goals are critical to improve the quality of our environment:

- **Goal 2: Clean air**
- **Goal 3: Clean and plentiful water**
- **Goal 4: Managing exposure to chemicals**

There are 6 legally binding Environment Act targets and 9 interim targets in the 'improving environmental quality' theme. More information can be found in the accompanying monitoring annex.

Goal 2: Clean air

For this goal, the state of the environment is improving with levels of most air pollutants decreasing over the most recent 5-year period of available data. Progress has been made towards the Environment Act 2021 fine particulate matter ($PM_{2.5}$) targets and there has been good progress towards meeting the National Emissions Ceilings Regulations 2018 for 4 out of 5 air pollutants.

However, significant efforts are still needed to address emissions of ammonia, which impacts ecosystems and biodiversity (Goal 1) and contributes towards $PM_{2.5}$, as well as concentrations of ground-level ozone, which have been rising. Progress is being made to deliver compliance with the annual mean limit value for nitrogen dioxide (see the indicator from the Outcome Indicator Framework (OIF)): A5: Roadside nitrogen dioxide (NO_2) concentrations). Through the NO_2 programme we are working to deliver compliance in areas with remaining exceedances of the limit value.

Current measurement data suggest better than expected progress against the Environment Act $PM_{2.5}$ interim targets. Evidence suggests emissions reductions in UK and across Europe have contributed to these reductions. Many factors that influence $PM_{2.5}$, such as weather, transboundary movement of $PM_{2.5}$ from overseas alongside UK emissions may have both positive and negative impacts on $PM_{2.5}$ in the future, meaning further action is needed to secure progress made and meet the long-term targets.

As well as the Environment Act 2021 legally binding and interim targets, the 'clean air' goal acknowledges 5 emission reduction targets, set in the National Emissions Ceilings Regulations 2018 (which are applicable to the whole UK). The legal emission reduction targets for damaging pollutants by 2030 relative to 2005 levels are to reduce emissions of:

- nitrogen oxides by 73%
- sulphur dioxide by 88%
- PM2.5 by 46%
- ammonia by 16%

- non-methane volatile organic compounds by 39%

We also have legal concentration limits for several other key pollutants under the Air Quality Standards Regulations 2010. We already meet the majority of these limits and are working towards meeting compliance with the annual mean limit value for nitrogen dioxide (40 micrograms per cubic metre).

Key activities over the past year

Since the period covered by the annual progress report in 2024, the following additional progress has been delivered:

- We are continuing to work with English local authorities as part of the NO_2 programme, to meet NO_2 concentration limits. Defra in partnership with Department for Transport (DfT) has provided £1.45 million in financial year April 2024 to April 202524/25, to help local authorities to develop and implement measures to address their NO_2 exceedances in the shortest possible time and improve the health of their residents.
- On 23rd January 2025, Greater Manchester's clean air plan was announced. This investment-led package included funding for bus investment (including zero emission buses and charging infrastructure), local traffic measurement measures and support for moving the city's taxi fleet to cleaner vehicles. The announcement ruled out a charging Clean Air Zone in Greater Manchester and instead, a fleet of new buses and traffic management measures will improve air quality in the region. While local authorities in other areas have found that a Clean Air Zone is the best route to cutting nitrogen dioxide pollution, Greater Manchester provided evidence they can achieve compliance with legal limits faster without charging.
- Through Phase 2 of the Air Quality Competition managed by Innovate UK and ended in March 2025, six companies were funded to develop their ideas from concept to prototype and develop new ways to reduce emissions of ammonia, and emissions of fine particles from domestic burning.
- In April 2024, in response to Government proposals for regulation to reduce ammonia emissions from urea fertilisers, an industry-led scheme to reduce ammonia emissions was implemented through Red Tractor Assurance Scheme standards and FACTS-trained farm advisors.
- Average ambient nitrogen dioxide (NO_2) concentrations are observed to be falling in most local authority Local Plan areas. Where clean air zones (CAZ) have been in place for over 12 months, levels appear to be falling faster and across a wider area. Some residents within CAZ areas have noticed health improvements due to improved air quality.
- In March 2025, the government published its review of the Air Quality Information System, making a series of recommendations aimed at informing the public about the link between poor air quality and ill health.

- The UK supported the World Health Organisation (WHO) pledge to take actions towards a voluntary 50% reduction in the health impacts of air pollution by 2040 at the 2nd Global Conference on Air Pollution and Health in March.
- In August 2024, the Air Quality Hub was relaunched, a key resource for local authorities, which now features improved navigation and updated content based on feedback from authorities and government departments.
- In October 2024, the air quality digital project launched the first public version of the new web service providing air quality information for citizens. The service continues to improve functionality and expand features.
- The $PM_{2.5}$ Interim Planning Guidance was published by Defra on the UKAir website in October 2024 and outlines the considerations for incorporating the Environment Act $PM_{2.5}$ targets into individual planning decisions.
- 35 new $PM_{2.5}$ monitoring sites were delivered in 24/25 taking us to a total of 126 as part of the Air Quality monitoring expansion programme.
- Technical reviews of four sectors were completed under the UK BAT (Best Available Techniques) system, which provides a coherent and predictable regulatory framework for reducing emissions to air, water and land. These sectors were Ferrous Metals Processing Forming, Ferrous Metals Processing Galvanising, Waste Gas Treatment in the Chemicals sector and Textiles. These will be considered for adoption by Ministers. Regulators initiated technical reviews of five sectors: Slaughterhouses and Animal By-Products, Foundries, Ceramics, Large Volume Inorganic Chemicals and Surface Treatment of Metals and Plastics.

Goal 3: Clean and plentiful water

Key activities over the past year

Since the period covered by APR24, the following additional progress has been delivered.

- In February, the Water (Special Measures) Act 2025 received Royal Assent. The Act strengthens the powers of the water industry regulators, giving them the most significant increase in enforcement powers in a decade, and will drive meaningful improvements in the performance and culture of the water industry.
- Since APR 2024, the Water and Abandoned Metal Mines Programme has constructed one new mine water treatment scheme which is now in operation, and three new diffuse interventions. We now have two mine water treatment schemes and 14 diffuse interventions in total contributing towards the interim target and the long-term Environment Act statutory target.
- In December 2024, Ofwat published their final determinations for Price Review 2024 which sets company expenditure and customer bills for 2025-2030. This will deliver substantial and enduring improvements for customers and the environment through a £104 billion upgrade for the water sector. This increased revenue will fund improvements to storm overflows and wastewater treatment works, secure water supply and manage demand, replace water mains pipes and installation of 10 million smart meters. It is the highest level of investment in the water sector since privatisation and is set to the second largest private sector investment programme in this parliament.
- Water companies published their statutory Water Resources Management Plans, informed by collaborative Regional Water Resources Groups. The plans set out how the water companies will provide secure water supplies, sustainably for at least the next 25 years. They show how the gap of 5 billion litres of water per day by 2050 will be filled and include the development of 9 new reservoirs, multiple new water transfer schemes to share resources as well as showing how the companies will meet our water demand target.
- In financial year April 2024 to March 2025, we increased funding to the Water Environment Improvement Fund (WEIF) by £11.5 million, funding 180 local projects led by Catchment Partnerships across England.
- The Water Restoration fund is reinvesting funding based on water company environmental fines and penalties accumulated from April 2022 until October 2023 to improve the water environment. Up to £11 million of funding was made available on a competitive basis to support water restoration projects, which will commence over financial year 2025 to 2026.
- As of 31 March 2025, there are now over 70,000 live agreements across agri-environment schemes (AES). AES pay farmers for the delivery of environmental benefits, including water quality improvements.
- The expanded SFI offer (SFI24) was launched in May 2024 and included 102 actions covering all farm types in England. Many of the additional actions directly contribute to water quality.

- The Environment Agency works with farmers through advice-led enforcement to improve compliance. Between 2024-2025, the Environment Agency conducted over 4,500 inspections. These inspections are targeted to areas of the greatest risk, including the catchments of protected sites. These figures are broadly in line with those from the previous year.
- To address uncertainty around the application of the Farming Rules for Water, the Environment Agency issued statutory guidance in 2022. Defra began a review with industry in November 2024 to ensure the approach aligns with government priorities and supports the Rules' objectives. The review will assess options, evaluate their impact, and recommend next steps. Findings will be published as soon as possible.
- Between January 2023 and September 2024, the Environment Agency and Natural England have developed and agreed Diffuse Water Pollution Plans (DWPPs) (in accordance with a Judicial Review Consent Order) for Yare Broads & Marshes, Ant Broads & Marshes, Trinity Broads, River Axe, Oak Mere, Dorset Heaths, Marazion Marsh and the River Kent.
- On 1 September 2024 Section 79 of the Environment Act 2021 came into force; it is now a statutory obligation for water and sewerage companies in England to prepare, publish and maintain a Drainage and Wastewater Management Plan (DWMP), referred to in legislation as a Drainage and Sewerage Management Plan. On 1 March 2025 the same duties came into force for water and sewerage companies in Wales.

Goal 4: Managing exposure to chemicals and pesticides

Key activities over the past year

Since the period covered by APR24, the following additional progress has been delivered.

- In March 2025, The UK Pesticides National Action Plan (NAP) was published. It promotes the sustainable use of pesticides to minimise impacts on the environment and human health, while supporting food security and managing pests and pesticide resistance effectively.
- The NAP introduces a domestic reduction target for pesticides in the UK, to reduce the potential pressure on the environment from pesticides by reducing each of 20 Pesticide Load Indicator metrics by at least 10% by 2030 (measured against a 2018 baseline). The actions in the NAP set out how this will be achieved, while supporting food production.
- In Summer 2024 we launched 4 new paid actions on precision application, including robotic weeding and camera or remote sensor guided herbicide spraying as part of the Sustainable Farming Incentive (SFI) to minimise use of pesticides. This built on actions already available for Integrated Pest Management (IPM).
- An Integrated Pest Management (IPM) guidance page was launched on GOV.UK in November 2024 to provide clear and practical information to support increased use of IPM approaches.
- On 25 July 2024, a consultation on an Alternative Transitional Registration model for the UK regulation on the registration, evaluation, authorisation and restriction of chemicals (UK REACH) and further improvements to UK REACH was completed.
- The consultation aims to significantly reduce the costs to industry of transitioning to UK REACH while preserving a high level of protection for human health and the environment from chemical risks.
- The Environment Agency continued targeted risk-based compliance activity to increase the destruction of Persistent Organic Pollutants (POPs). This included work with Local Authorities (LAs) to ensure Waste Upholstered Domestic Seating (WUDS), such as sofas, were collected separately, treated (by shredding) and destroyed at municipal waste incinerators rather than sent to landfill.
- The Environment Agency supported holders of equipment contaminated with polychlorinated biphenyls (PCBs), such as equipment used in energy infrastructure, to identify, register, and remove this equipment from use by the end of 2025. This has led to a reduction of contaminated equipment by over 63% from 2016 to September 2024.
- The Environmental Pollution Programme has delivered projects to help countries in sub-Saharan Africa and southeast Asia deliver low cost and financially sustainable solutions to tackle pollution challenges, improving health outcomes and reducing environmental harm.

- For example, in Vietnam, by demonstrating alternatives to open burning and adopting Integrated Pest Management (IPM) practices the programme has delivered several benefits to communities, including increased farmer incomes, higher crop yields and reduced use of hazardous pesticides. The programme has trained over 6000 farmers in techniques which have reduced pesticide use by up to 70%.
- The UK played a role in the development and adoption of the new UN Global Framework on Chemicals. Progress has been made in establishing an intergovernmental Science-Policy Panel for Chemicals, Waste and Pollution Prevention (SPP).

Improving our use of resources

To implement the Environmental Improvement Plan, the following goals will improve use of resources:

- **Goal 5: Maximising resources, minimising waste**
- **Goal 6: Using resources from nature sustainably**

There is 1 legally binding Environment Act target and 8 interim targets that contribute to the Improving the use of our resources theme. More information can be found in the accompanying monitoring annex.

Goal 5: Maximising resources, minimising waste

The resources that our livelihoods depend on are finite, but we use them as if they are not. Indeed, if everyone in the world lived as we do in the UK, the planet would need to produce nearly double what it can currently produce each year just to sustain our consumption. This cannot continue if we want to continue growing, innovating, and improving our day to day lives.

This government is committed to moving to a circular economy – a future where we keep our resources in use for longer, waste is reduced, we accelerate the path to net zero, we see investment in critical infrastructure and green jobs, our economy prospers, and nature thrives.

The circular economy is a system that aims to eliminate waste and promote sustainability. A circular economy takes a whole lifecycle approach to eliminate unnecessary and problematic products and materials, maintaining a circular flow of resources, by regenerating, retaining or adding to their value, and contributing to sustainable development.

Through sharing, repairing, refurbishment, remanufacturing and recycling, this model creates a closed-loop system that minimises the amount of resources used. It also reduces the creation of waste, and associated pollution and carbon emissions.

Key activities over the past year

Since the period covered by APR24, the following additional progress has been delivered.

- We announced significant updates progressing the Collection and Packaging reforms which aim to simplify household recycling and reform in the waste system to boost recycling rates and protect the environment.
- This includes delivering Simpler Recycling in England, which will ensure the same recyclable waste streams are collected for recycling from all households and businesses, was introduced for workplaces with 10 or more full-time equivalent employees from 31 March 2025. It will be introduced for households from 31 March

2026, and for workplaces with fewer than 10 full-time equivalent employees from 31 March 2027.

- The Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations 2024 came into force on the 1 January 2025. These regulations change how household waste collections are funded by employing the polluter pay principle to make organisations that place packaged products on the market responsible for the costs of managing this packaging once it is discarded by consumers. In doing so they will incentivise move to towards more sustainable (e.g. reusable or recyclable) packaging.
- In Spring 2025, the Deposit Management Organisation for the Deposit Return Scheme was appointed. The Deposit Return Scheme for drinks containers will launch in October 2027.
- In November 2024, we convened the Circular Economy Taskforce, an independent expert advisory group established to support the government in creating a Circular Economy Strategy for England. The Circular Economy Strategy for England will be published in Autumn 2025. The Strategy will be supported by a series of sector-based roadmaps detailing the interventions that the government will make on a sector-by-sector basis. Roadmaps for six initial sectors (Agrifood, Built Environment, Chemicals and Plastics, Electrical and Electronic Equipment, Textiles and Transport) will be published alongside the strategy in Autumn 2025. Further roadmaps will be published in 2026.
- We have made legislation banning the supply and sale of disposable vapes in England. By reducing the number of vapes in residual waste streams and being littered, this legislation will rapidly reduce environmental harm caused by incorrect disposal of disposable vapes.
- Having supported councils in England with £261.66 million in capital funding in early 2024, we followed that with resource funding of up to £56.2 million to introduce weekly food waste collections by 31 March 2026.
- We announced figures which show that by 2024 plastic bag use has fallen by more than 98% in the main 7 retailers (Asda, Marks and Spencer, Morrisons, Sainsbury’s, Tesco, The Co-operative Group and Waitrose) since the single use carrier bag charge was introduced in 2015.
- In April 2024, we announced a UK-wide ban on the supply and sale of wet wipes containing plastic. This will be enforced after an 18-month transition period to allow businesses time to adapt.

Goal 6: Using resources from nature sustainably

Key activities over the past year

Since the period covered by APR24, the following additional progress has been delivered.

- New Sustainable Farming Incentive actions for soils (no-till farming and multi-species spring-sown cover crops) were announced. These focus on improving soil health, structure, organic matter and biology.
- Since April 2024, 82 research projects, involving 203 organisations, have begun within the Farming Innovation Programme. These projects are developing new technologies and practices to improve long-term productivity and sustainability for English farmers. Defra has committed £43.7 million towards total project costs of £60.2 million.
- Launched a themed competition under the Farming Innovation Programme, with £15 million of funding available, for businesses and researchers to work on longer-term innovation in nutrient management.
- In April 2024, the Forestry Commission published the annual 'Tree Supply Report' which showed that during the 2023 to 2024 season the overall production of saplings for woodland and forestry planting were 160.1 million saplings, around 8 million higher than for the 2022 to 2023 season, largely reflecting the added capacity of new entrant nurseries.
- In July 2024, a third funding round of the Forestry and Arboriculture Training Fund (FATF) was launched, enabling individuals to diversify their forestry skills. The fund was also expanded to include silviculture training.
- In September 2024, the Forestry Commission published new online resources to showcase forestry careers and provide guidance on forestry career paths as part of the launch of the 'Your Career in Forestry' campaign.
- In February 2025, the Timber in Construction roadmap 2025 was launched as part of government plans to boost the domestic timber industry, economic growth, rural jobs and housebuilding targets. In February 2025, the Professional Forester Apprenticeship programme re-opened to support the government's objective of boosting forestry careers.
- In March 2025, the Forestry Commission launched the 'Trees to Timber' campaign, focusing on the benefits of planting and managing woodlands for timber production for carbon sequestration, increased biodiversity and income generation.

Improving our mitigation of and adaptation to climate change

The 'improving our mitigation of and adaptation to climate change' theme includes:

- **Goal 7: Mitigating and adapting to climate change**
- **Goal 8: Reduced risk of harm from environmental hazards**

The goal to mitigate and adapt to climate change includes the following commitments:

- Under the Climate Change Act, a UK-wide legally binding target of net zero emissions by 2050, including carbon budgets 4, 5, and 6 from 2023 to 2037; and the 2030 Nationally Determined Contribution
- to produce a UK Climate Change Risk Assessment to identify climate risks, followed by a National Adaptation Programme to address those risks every 5 years. The next Climate Change Risk Assessment will be published in 2027, and the next National Adaptation Programme in 2028.
- in accordance with the Montreal Protocol, the UK has phased out the production and consumption of ozone-depleting substances, except for very minor exempted uses
- under the Kigali amendment to the Montreal protocol, the UK has an obligation to phasing down hydrofluorocarbon (HFC) production and consumption by 85% by 2036
- under the Paris Agreement, the UK is committed to pursuing efforts to limit the global average temperature increase to 1.5°C above pre-industrial levels.

The goal to reduce risk of harm from environmental hazards includes the following commitments:

- to invest in flood and coastal defence projects to better protect more properties
- by the end of 2025 we will publish an updated approach to flood and coastal erosion risk management partnership funding which will strengthen the delivery of nature-based solutions
- to maintain at least 94% of major flood and coastal erosion risk management assets fit for their designed purpose, through to March 2025. The long-term aim is for this to reach 98%

Goal 7: Mitigating and adapting to climate change

The aim of this goal is to mitigate and adapt to the impacts of climate change to ensure a climate resilient nation.

Actions under this goal support:

- transitioning to net zero
- balancing demands on our land
- designing policies to be prepared for a changing climate
- delivering and improving on commitments in the 3rd National Adaptation Programme (NAP3)
- using nature-based solutions to mitigate and adapt to climate change.

The Department for Energy Security and Net Zero (DESNZ) is the lead department for net zero, with Defra sectors playing an important role in emissions reductions. Defra is the lead department for domestic climate adaptation. Responsible for coordinating action by across multiple government departments to address a wide range of climate risks as well as leading adaptation and management of climate risks owned within Defra.

Key activities over the past year

Since the period covered by APR24, the following additional progress has been delivered.

Mitigation

- Climate mitigation has been put at the heart of the government agenda. ‘Accelerating to net zero across the economy’ is one of the 2 central pillars of the ‘Make Britain a Clean Energy Superpower’ Misson. Net zero is also one the 7 pillars of the government’s Growth Mission.
- We continue to work towards the delivery of Defra's contribution to carbon budgets and net zero.
- From May to August 2024, DESNZ launched a consultation regarding Integrating Greenhouse Gas Removals into the UK Emissions Trading Scheme. This consultation considered inclusion of the Woodland Carbon Code as a nature-based greenhouse gas removal. The government response to the consultation will be published in due course.
- Through the Nature for Climate Peatland Grant Scheme (NCPGS), active restoration management began on 7,032 hectares of peatlands in England in 2024 to 2025, with works ongoing on a further 9,088 hectares, where these began in a previous year. Therefore the NCPGS was active on 16,120 hectares of peatlands in England during 2024 to 2025, and currently provides the primary funding vehicle for peatland restoration in England.
- To address the degradation of lowland peat, between 2024 and 2025 Defra funded 45 projects across pilot schemes delivering water infrastructure, paludiculture trials, and future water management plans. It has also continued to deliver the lowland peat research and development programme.

- Defra launched a public consultation in March 2025 to seek views on proposed changes to the Heather and Grass etc. Burning (England) Regulations 2021, which prohibit burning of vegetation on deep peat on our most protected sites in England, unless licensed.

Adaptation

- Defra has commissioned UK government departments to provide 6-monthly updates on progress towards delivering the actions they committed to in the third National Adaptation Programme, as part of our commitment to make it an actively managed and monitored programme.
- Defra and Met Office, working together, launched the Local Authority Climate Service (LACS) pilot on 9 October 2024. The LACS will provide local authorities with data about climate change in their area, to support decision-making and climate adaptation planning.
- Defra and UK Research and Innovation (UKRI) have co-funded and launched the Maximising UK Adaptation to Climate Change (MACC) programme, to accelerate adaptation action research. The programme has now been let as a £15 million climate change adaptation hub and 6 novel research projects.
- The 4th round of reporting under the Adaptation Reporting Power[1] concluded on 31 December with 101 reports submitted to government from 14 sectors, including a pilot of reporting by 18 local authorities. Reports set out the risks that climate change poses to the delivery of reporting organisations' functions and their plans and progress on adaptation.

Goal 8: Reduced risk of harm from environmental hazards

Key activities over the past year

Since the period covered by APR24, the following additional progress has been delivered.

- In 2024 to 2025, the Flood and Coastal Investment Programme better protected over 27,000 properties from flooding.
- In February 2025 it was announced, as part of the government's Plan for Change, a record £2.65 billion is being invested over 2 years (2024 to 2025 and 2025 to 2026) for the construction of new flood schemes, and the maintenance and repair of existing ones.

[1] Under Section 62 Climate Change Act 2008

- This includes an additional £108 million that the government is re-prioritising into asset maintenance, ensuring an additional 14,500 properties will have their expected level of protection maintained or restored.
- With this funding, 1,000 flood schemes are being supported, better protecting 52,000 properties by March 2026.
- In March 2025, the government announced an additional £16 million boost to the Internal Drainage Board (IDB) Fund to support greater flood resilience for farmers and rural communities. We have increased funding from £75 million to £91 million to provide opportunities to modernise and upgrade assets. More than 400,000 hectares of agricultural land and around 91,000 homes and businesses across England are expected to benefit.
- The government established a new Floods Resilience Taskforce in September 2024. This focuses on building national resilience to flooding, including assessments of readiness and capabilities to prepare, respond and recover from flooding. Members include government organisations, industry, businesses and environmental charities.
- In July 2024, Defra Marine Natural Capital and Ecosystem Assessment (mNCEA) and UK Research and Innovation (UKRI) launched the £14.8 million Resilient UK Coastal Communities and Seas. This provides grant funding to improve understanding of the resilience of UK coastal seas, coastal communities, and the natural capital these areas support.
- On 1 September 2024 Section 79 of the Environment Act 2021 came into force; it is now a statutory obligation for water and sewerage companies in England to prepare, publish and maintain a Drainage and Wastewater Management Plan.

Improving our biosecurity

Goal 9: Enhancing biosecurity

Delivering the targets and commitments for the biosecurity goal will require a range of actions that improve safeguarding and response measures. This includes to:

- reduce the number of establishments of invasive non-native species by at least 50% by 2030, compared to levels seen in 2000, supporting delivery of the convention on biological diversity global target on invasive species
- ensure at least 97% of export health certificates (EHCs) and licences are issued correctly within agreed timeframes to support safe and secure trade
- invest in the Science Capability in Animal Health Programme at Weybridge
- achieve official bovine tuberculosis free status for England by 2038

Key activities over the past year

Since the period covered by APR24, the following additional progress has been delivered.

- Control, containment or eradications of invasive non-native plants and animal pests continued, including the yellow-legged hornet. Spring trapping and contingency action by the Animal and Plant Health Agency's National Bee Unit has captured 19 individual hornets and destroyed 24 nests.
- In August 2024, Defra Ministers committed to refreshing the bovine Tuberculosis (bTB) strategy for England. The measures to be introduced under the strategy include a survey of the badger population for the first time in a decade, a wildlife surveillance programme, the launch of a Badger Vaccinator Field Force and a badger vaccination study to end the cull by the end of this parliament.
- Between March 2024 and April 2025, Great Britain has regularly taken action to implement emergency import restrictions to protect domestic biosecurity in response to emerging disease outbreaks in approved trading partners. This includes action to mitigate the risk of Highly Pathogenic Avian Influenza, Peste des Petits Ruminants, Sheep Pox and Goat Pox, Lumpy Skin Disease, African Swine Fever and Foot and Mouth Disease. This has been completed through amendments to our lists of countries approved to export to Great Britain, as well as through the laying of emergency safeguard declarations.
- In September 2024, a new phase of the Tree Health Pilot (THP) was launched, which is evaluating and testing different ways of slowing the spread of pests and diseases affecting trees in England.
- In January 2025, we introduced further measures against *Popillia japonica* (known as the Japanese beetle) and the fungal pathogen *Heterobasidion irregulare* to continue to protect Great Britain from incursions of non-native plant pests.
- In Summer 2024, extensive surveillance was conducted in the Colorado beetle demarcated area in Kent. No beetles were detected and if there are no new findings eradication is likely to be declared in 2025.

- Action has been taken to prevent the spread and eradicate an outbreak of Columbia root-knot nematode, *Meloidogyne chitwoodi* from a farm in East Anglia. Tracing activities have been conducted to identify possible sources of introduction and possible spread.
- Between October 2024 and March 2025, 5 Pest Risk Assessments have been fully completed, and made available for stakeholder engagement, including a detailed analysis of the plant hopper *Pochazia shantungensis*, which was intercepted on numerous occasions in 2024 on plants for planting.
- The Plant Health Information Service went live on the 22 October 2024 and aims to support Great Britain's plant biosecurity by "Providing the correct information, in the right place, at the right time and the right format."
- Over 27 outbreaks of eight-toothed spruce bark beetle (*Ips typographus*) were identified in the 2024 to 2025 season. The beetle could have a significant impact to the forestry industry if it became established so we maintain a robust eradication programme to eliminate these outbreaks. Outbreaks undergo 3 years of monitoring before eradication can be declared, we have now successfully declared eradication at all 13, sites that had outbreaks in 2021.
- In April 2025, Defra, the Food Standards Agency and Home Office awarded the Specialist Science and Contingency Services (SSCS) contract to Fera Science Limited. Building upon a decade of support to the government under a Long-Term Services Agreement (LTSA) since 2015.
- This new contract ensures the continuation and expansion of critical and expert scientific work Strategic scientific services provided include strengthening border security, protecting the natural environment, helping to ensuring food safety, public and animal health – in addition to providing critical support for significant contingent events.
- Defra awarded 12 Local Action Groups (LAGs) in England £300,000 over 2 years to tackle invasive, non-native species under the Local Invasive Species Management Fund, which ended in March 2025. In the second year of the fund over 234,000 meters of riverbank were managed and over 68,000 meters of watercourse surveyed for INNS.
- Defra continued to fund the Great Britain Non-Native Species Information Portal (GB NNSIP), a notification, monitoring and data repository for over 3,000 non-native species. As part of the Great Britain NNSIP, a horizon scanning exercise was carried out in March 2025 to identify the non-native species that are most likely to establish and become invasive in GB. Horizon scanning is vital in the prevention of establishment of new invasive non-native species (INNS), and is important for guiding efforts on risk analysis, pathway management and contingency planning.
- Defra continued to fund research into the biological control ('biocontrol') of invasive, non-native riparian weeds and plants, including floating pennywort, Himalayan balsam, Japanese knotweed and Australian swamp stonecrop. Notable progress has been made, for example in 2024, bio control agents have been found persisting on floating pennywort populations at 12 sites.
- Defra has continued work to develop metrics for monitoring progress towards targets and commitments for invasive non-native species.

- Defra developed a Pets Pathway Action Plan (PAP), laying out best practice guidance to reduce the risk posed by pathways of introduction and spread, which is a key way of tackling the threat posed by INNS. Please follow this link to the draft PAP.
- The Non-Native Species Inspectorate (NNSI) has continued to undertake inspections and enforcement action. In the financial year April 2024 to March 2025, it undertook 876 inspections and non-compliance rates among premises appear to have dropped to 9% in 2025 from 16% in 2022 when the NNSI was established.

Enhancing beauty, heritage, and our engagement with the natural environment

Delivering the goal outcomes will require meeting a range of targets and commitments including the following key commitments:

- everyone should live within 15 minutes' walk of a green or blue space
- make the England Coast path fully walkable by the end of 2024
- deliver a new National Trail along the route of the Coast-to-Coast path by 2025

Goal 10: Enhancing beauty and our engagement with the natural environment

Key activities over the past year

Since the period covered by APR24, the following additional progress has been delivered.

- Natural England's 12 Nature Recovery Projects have engaged partners in the natural environment. These projects which cover 319,480 hectares, have grown collaborative partnerships, and demonstrated how blended public and private finance can support delivery of a national network for nature recovery.
- Over 1,469 miles of the King Charles III England Coast Path has been completed and open to the public, with establishment works underway on another 941 miles. Full completion of the path is targeted for Spring 2026.
- In October 2024, the Nature Towns and Cities programme launched a £15 million grant programme to build capacity and capability, enabling 10 million people to benefit from their local green and blue spaces being improved for nature, heritage and community by 2035.
- In August 2024, an official statistic in development on access to greenspace in England was published. In May 2025, an official statistic in development on access to blue space in England was published. These will enable identification of areas with greatest paucity of provision and where interventions to drive improvements should be targeted.
- In September 2024, an evaluation of the green social prescribing project was published which showed that green social prescribing is both cost effective and markedly improved people's reported well-being. Over 8,500 people participated in the green social prescribing project.
- A second phase of the green social prescribing programme was launched in April 2024 and ran until March 2025. This phase was used to produce additional data and evidence needed based on learning from the first phase (for example, on value for money) to support national roll-out, ensuring that anyone, anywhere in the

country, can receive a green social prescribing prescription and benefit from these valuable nature-based interventions.

- Funding has been provided from April 2024 to deliver a second phase of the Generation Green programme, helping over 25,000 disadvantaged children and young people experience the benefits of the great outdoors, including improvement in physical and mental health, and a greater sense of connection to the natural world. The funding is providing both day and residential experiences in Protected Landscapes. The funding is providing both day and residential experiences in Protected Landscapes.
- In December 2024, marking the 75th anniversary of the 1949 National Parks and Access to the Countryside Act, a commitment was made to work with partners to develop new legislation to empower our National Parks and National Landscapes. This legislative reform will strengthen Protected Landscape's mandate to recover nature.
- In December 2024 guidance for relevant authorities on seeking to further the purposes of Protected Landscapes was published for relevant authorities on the Protected Landscapes duty, The guidance will support public bodies operating in these areas, including water companies, deliver better environmental outcomes working together with Protected Landscape organisations.
- Defra has worked with National Parks England, the National Landscapes Association, National Trails, and Natural England through the Protected Landscapes Partnership (PLP), to contribute to EIP targets through delivering on the Protected Landscapes Targets and Outcomes Framework.
- The PLP have supported National Parks and National Landscapes to interpret and mobilise evidence on the state of the natural environment in Protected Landscapes. That is delivering workshops, providing guidance, supplying additional data and agreeing best-practice consistent methodologies to support Protected Landscapes to contribute more to EIP targets.
- The PLP have also facilitated events and provided training and resources to diversify the sector and remove barriers to access and are building on the work in the coming year.

How data are used in this annual progress report

Commenting on environmental improvement

Section 9 of the Environment Act 2021 requires that annual progress reports:

- describe what has been done, in the period to which the report relates, to implement the Environmental Improvement Plan
- consider, having regard to any data obtained, whether the natural environment has, or particular aspects of it have, improved during that period
- consider the progress that has been made towards achieving any legally binding targets or interim targets set under the Environment Act

Scope of the data

Different data sets are provided in this annual progress report to understand if the environment is improving and to report on individual goals or targets. The main data sources are the Outcome Indicator Framework (OIF) and data from additional monitoring activities against the individual Environment Act 2021 targets. The OIF is a set of indicators describing environmental change relating to EIP23. Its 66 indicators were custom-designed to describe those key facets of environmental change that were deemed most relevant to understanding progress towards achieving the overarching ten goals of the EIP

Updates and information on monitoring progress for the legally binding Environment Act targets and the interim targets are provided in the accompanying monitoring annex.

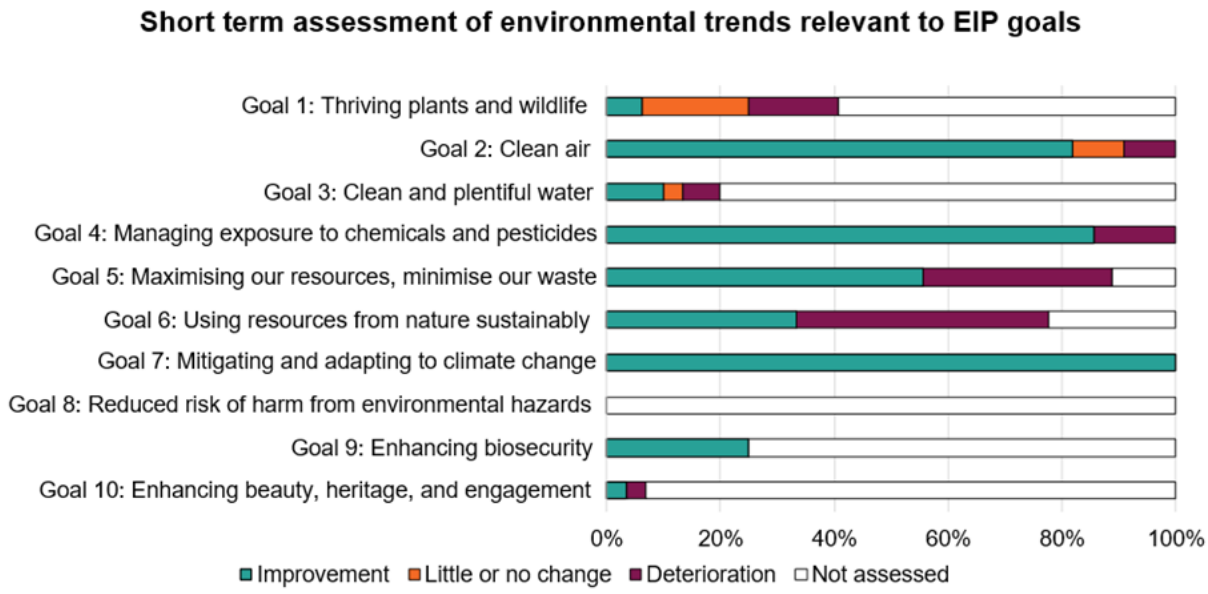
Commentary on environmental improvement relating to individual EIP goals is supported by the OIF and additional evidence around supporting implementation of specific policies.

Reporting on progress towards Environment Act targets: availability of data

Reporting on the natural environment: data on EIP23 goals

Figure 1 summarises the short-term (5 year) assessment of the 66 indicators in the OIF. Each of the 66 indicators measure a different aspect of the environment that together provide a wider assessment of the state of the environment. The individual indicators are assessed on progress over the short term and grouped into the EIP23 goal that they primarily measure progress against. So, whilst within a set of indicators that report against a goal some may show improvement, others may show deterioration.

Figure 1: Short-term progress towards the 10 goals, based on OIF indicators



This stacked bar chart shows the percentage of indicator components within each goal area that have been assessed as improving, showing little or no change, deteriorating or have not yet been assessed against the stated goal. For example, all of the indicators for Goal 7 have shown an improvement in short-term assessments

Overall, there have been improvements in aspects of the natural environment in 9 of the goals. There has been deterioration in other aspects of the environment in 7 of the goals.

There are a number of indicators for which there is not yet a long enough time series to make an assessment. These are categorised as ‘not assessed’. For example, there are 3 indicators published against goal 8, all of which cannot yet allow for a robust assessment of overall trends.

The methodology for these assessments is detailed on the OIF dashboard. Not all 5-year periods cover the same years as data become available at different times for different indicators. For example, the D4i indicator on relative abundance of species in England spans from 1970 to 2023, whereas D2a on the extent of protected sites in England covers 2005 to 2024. The most recent data have been used for each individual indicator. All assessments are refreshed annually to ensure the latest available data are captured.

Monitoring, evaluation and learning

Next year's annual progress report will be reporting on the revised Environmental Improvement Plan (EIP25). As part of the EIP review we are developing a new approach to monitoring and evaluation. This approach uses theories of change and systems thinking to better coordinate evidence and to better understand where action is needed or can be better focused. We are developing a systematic approach to understanding and monitoring contributions across EIP goals and targets. This will be complemented by specific policy and EIP wide evaluations to understand the process and impact of our activities better. We will share what we learn from monitoring and evaluation evidence in the annual progress report demonstrating how this is shaping the ongoing development of the EIP.

Our updated approach will enable us to conduct more comprehensive reporting on Defra's progress towards our environmental goals.

Department
for Environment,
Food & Rural Affairs

Environmental Improvement Plan annual progress report: Technical Annex Monitoring statutory Environment Act targets 2024 to 2025

April 2024 to March 2025

July 2025

Contents

Foreword

This annex forms part of the annual progress report 2025. It provides more information on the challenges and processes involved in monitoring legally binding Environment Act targets and interim targets, and the progress made towards meeting each of them.

This document mirrors the main report for ease. Each chapter reflects a grouping of goals as set out by the Environment Improvement Plan 2023 (EIP23).

Data on environmental targets

This annex provides a summary of the data available for each target. As part of this, the data are classified into the following types:

- **direct** – data that represent progress against the target directly
- **related** – where direct data are not available, due to lengthy reporting cycles from reporting or environmental factors, proxy data have been provided as a substitute to report against the target
- **unavailable** – monitoring methods are currently being established, and data are not yet available against the target

Each chapter will also discuss the targets associated with those goals, including:

- **2024 to 2025 monitoring progress update:** more detailed information on monitoring evidence linked to that target
- **what the data show:** the latest available data and a brief description of what this tells us about progress towards achieving the target
- **understanding this metric:** more context around how that target is monitored, describing any reporting challenges and explaining why data may not be available annually or there is apparent reporting delay

Apex goal: Thriving plants and wildlife

Goal 1: Thriving plants and wildlife

Legally binding Environment Act targets:

1. Halt the decline in species abundance by 2030.
2. Increase species abundance so that by 2042 it is greater than in 2022 and at least 10% greater than in 2030.
3. Improve the Red List Index for England for species extinction by 2042 compared to 2022 levels.
4. Restore or create in excess of 500,000 hectares of a range of wildlife-rich habitats outside protected sites by 2042.
5. Increase tree canopy and woodland cover to at least 16.5% of total land area by 2050.
6. Ensure that at least 70% of designated features in Marine Protected Areas (MPAs) are in favourable condition by 2042, with the remainder in recovering condition.

Interim targets:

1. Restore or create 140,000 hectares of a range of wildlife-rich habitats outside protected sites by 31 January 2028.
2. All sites of special scientific interest (SSSI) features to have an up-to-date condition assessment by 2028.
3. 50% of SSSI features to have actions on-track to achieve favourable condition by 2028.
4. Increase tree canopy and woodland cover by 0.26% of land area (equivalent to 34,000 hectares) by 31 January 2028.
5. 48% of designated features in MPAs to be in favourable condition by 31 January 2028, with the remainder in recovering condition.

How legally binding Environment Act targets and interim targets are monitored

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
Halt the decline in species abundance by 2030 and then increase species abundance so that by 2042 it is greater than in 2022 and at least 10% greater than in 2030.	Direct	Data now provided in composite metric covering 1,176 species and published as an official statistic in development. As this statistic is in development it cannot currently be used to assess whether we are on track to meet our target. The metric will become an official statistic before the reporting deadline in 2032.	Data are provided annually, with a 2-year lag. Historic data are available for context.

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
By the end of 2042, we will improve the Red List Index for England for species extinction compared to 2022 levels.	Direct	Monitoring activities concentrated on exploring additional reporting routes for more frequent, related proxy data. Current focus of monitoring work is looking at how programmes delivering species specific actions can best report to enable collation of monitoring data across programmes. There is also an ongoing commission looking to identify data that can be used for short term recovery indicators so that progress can be followed with the 5-year reporting cycles.	Ecological lag means there is a 5-year reporting cycle for this target. Baseline 2022 data provided.

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
To restore or create more than 500,000 hectares of wildlife-rich habitat by 2042. **Interim target: Restore or create 140,000 hectares of wildlife-rich habitats outside protected sites by 2028.**	Direct	Defra and Natural England published an evidence report in May 2025 setting out analysis undertaken in March 2025 to produce a metric to inform reporting of progress towards the Environment Act Habitat Target.	Analysis includes data from 4 key delivery areas: the Farming and Countryside Programme, the Environment Agency, the Nature for Climate Peatland Grant Scheme, and Woodland creation and restoration data compiled by the Forestry Commission and Forestry England. As the provision of data from each delivery mechanism involves several steps and different partners, there is an expected average reporting lag of 2 years between when an action is taken and when it can be reported.

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
Interim targets: For all sites of special scientific interest (SSSIs) to have an up-to date condition assessment; and for 50% of SSSIs to have actions on track to achieve favourable condition by 31 January 2028.	Direct	Natural England is collecting data for these targets, which is updated daily, and runs monthly reports.	Direct data showing up-to-date information on the progress of these targets is available on Designated Sites View.
Increase tree canopy and woodland cover to 16.5% of total land area in England by 2050. **Interim target: to increase this by 0.26% (equivalent to 34,000 hectares) by 31 January 2028.**	Related	A revised baseline has been established for this new target (which was based on a provisional baseline when created). In addition, ongoing reporting has taken place.	Data directly related to target but are reported separately by gain and loss annually and reported as a combined total figure once every 5 years.

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
For at least 70% of designated features in Marine Protected Areas (MPAs) to be in favourable condition by 2042 with the remainder in recovering condition. **Interim target: 48% of designated features to be in favourable condition, with the remainder in recovering condition, by 31 January 2028.**	Direct	A MPA monitoring strategy is being developed to assess progress and whether necessary management measures are in place.	Direct data are reported, but noting ecological lag means there is a 5-year reporting cycle for this target. Baseline 2022 data provided.

Legally binding Environment Act targets: Halt the decline in species abundance by 2030 and increase species abundance so that by 2042 it is greater than in 2022 and at least 10% greater than in 2030.

2024 to 2025 monitoring progress update

An update to the all-species abundance indicator was published in April 2025 with new data up to 2023. Once fully developed (before the reporting deadline in 2032), this indicator will be used to assess progress with our species abundance targets. This is a composite indicator of the species listed in Schedule 2 of the Environmental Targets (Biodiversity) (England) Regulations 2023. To note, as the first target to halt decline in species abundance by 2030 is relative to 2029, we will not be able to say whether we have met the target until 2032 due to data lags. For the second target, data for 2022 are not completely available but much is now represented within the indicator, and the 2030 data will be available in 2032.

As the all-species abundance indicator is still in development it cannot currently be used to assess whether we are on track to meet our targets. Future updates could include improvements to the methodology, or the inclusion of new datasets that may result in further revisions in future releases and lead to changes in the current trends.

Currently, this indicator has been produced from 1970 up to 2023.

Providing data from as far back as 1970, where possible, allows for long term trends to be identified. This metric will be reported annually, noting that data are expected to be reported with a 2-year lag which is discussed below.

There are currently 2 versions of the indicator, one with a greater degree of smoothing applied and one with a lesser degree. More smoothing may provide a clearer view of the underlying long-term trend, while a lesser degree preserves the shorter-term patterns in the data as displayed in Figure 2. When the indicator is fully developed, one version with the most appropriate smoothing option will be published.

Pre-existing Defra indicators of species abundance are published separately (covering birds, butterflies, bats and plants).

What the data show

Figure 2: Change in relative abundance of species in England from 1970 to 2023, using 2 smoothing options

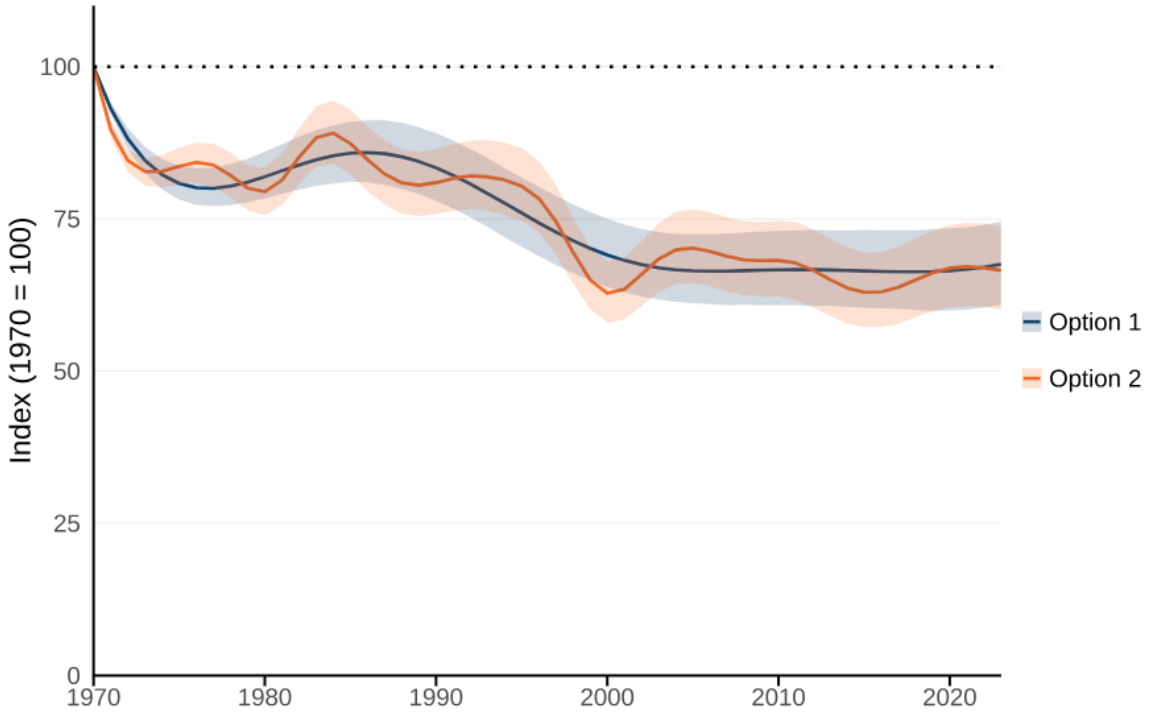


Figure 2 shows the smoothed trends for the relative abundance of 1,176 species under 2 different smoothing scenarios. Option 1 (blue) is smoothed on a 10-year timescale (more smoothed) and option 2 (orange) is smoothed on a 3-year timescale (less smoothed). The shaded areas represent the 95% credible intervals (measures of uncertainty) for the 2 smoothed trends.

The index values represent change from the baseline value in 1970; therefore, the credible intervals widen over time as confidence in the estimates of change relative to the baseline.

As shown in Figure 2, since 1970, the all-species indicator has shown an overall decline to around 67% of its starting value. In the medium term (2013 to 2023) and short term (2018 to 2023) the indicator currently shows little or no overall change.

Understanding this metric

The provision of each data stream involves several steps and different external partners, which results in an inevitable reporting lag. This metric highlights the reporting complexity behind generating data for some of our targets, but also the generosity of skilled UK volunteers in giving their time to citizen science, which ensures the condition of the natural environment can be reported.

All the 1,176 species that are included in this metric are presented in the indicators of species abundance in England (1970 to 2022).

Given the complex nature of measuring species abundance, independent expert input was sought at several stages of developing this metric. The methodology was developed with input from members of Defra's Biodiversity Targets Advisory Group (2020 to 2022) and Biodiversity Expert Committee (since 2023). In addition, Defra commissioned an independent external review of the methodology by 3 academic experts, ahead of the first publication of the indicator in development in 2024.

Legally binding Environment Act target: Improve the Red List Index for England for species extinction by 2042 compared to 2022 levels

2024 to 2025 monitoring progress update

Data from long term population trends, rather than annual assessments, provide more reliable data to understand the impact of conservation interventions on the recovery and conservation of species. There is a high level of unreliability in annual datasets due to population fluctuations caused by weather conditions for example. Additionally, the impact of recovery actions is not immediate, and species require multiple breeding cycles for populations to increase.

Consequently, there is no update for 2024 to 2025. It is anticipated that the indicator will operate over at least a 20-year period (2022 to 2042) with a full update of the Red List in 2032 and 2042. A partial set of reassessments will be available in 2027 and 2037, but the aggregate index will be less precise.

The index will be most effective as a long-term indicator due to time lags due to the time taken for species populations to react to delivery actions, availability of data and the frequency of Red List assessment. Due to these extended periods between reporting on the index, existing work is looking at how in the first instance species specific action data from across relevant programmes can be used to track progress.

Alongside the actions data there is also work looking at how short-term recovery indicators can be implemented using existing data. These indicators would look to highlight when relevant environmental changes are or are not happening at the expected timescales. This is all part of a wider Monitoring and Evaluation programme across the Biodiversity Targets.

What the data show

Figure 3: Red List Index for 2022 (baseline figures)

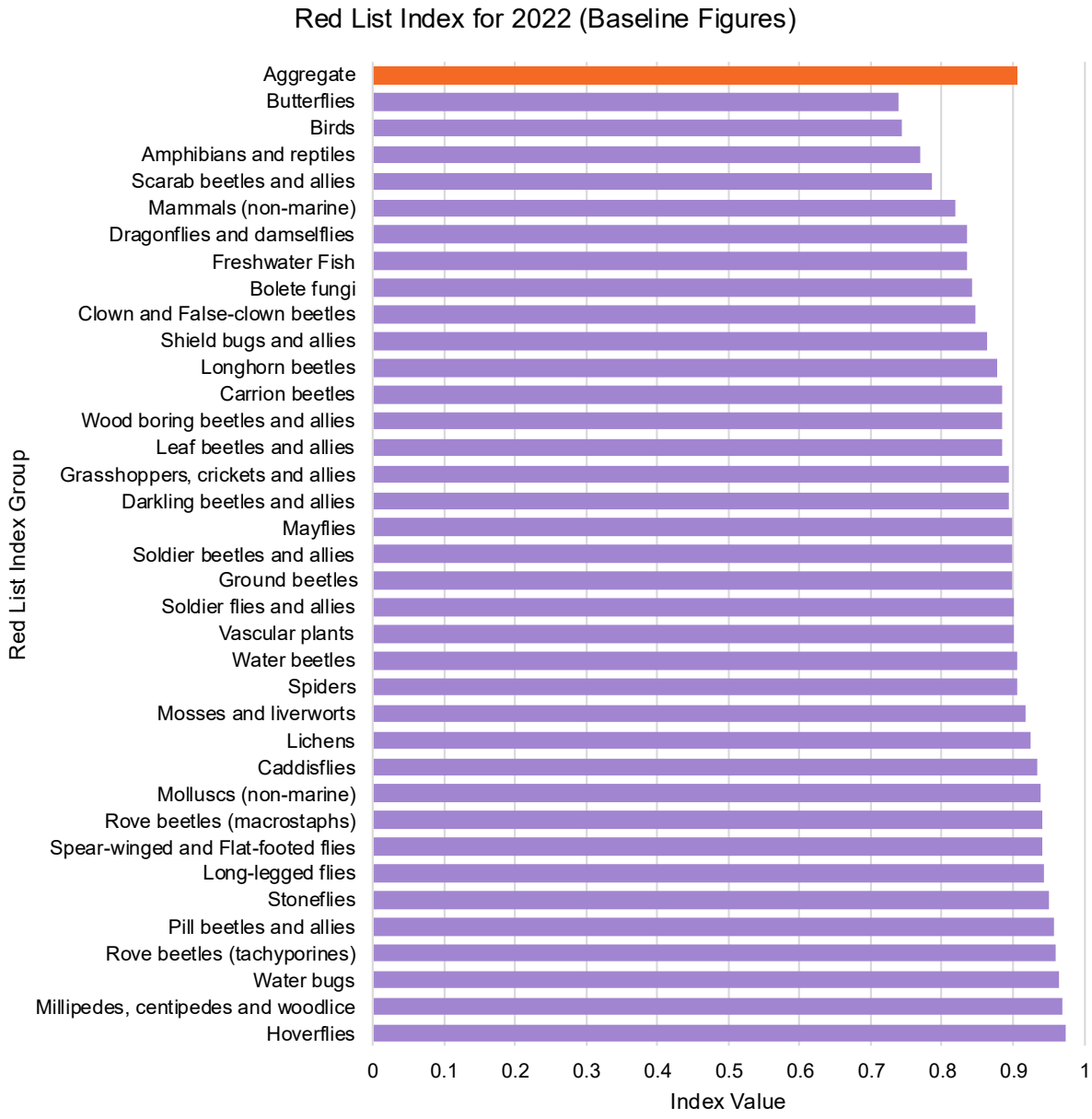


Figure 3 shows the Red List Index (RLI) baseline data in 2022 for 36 individual taxonomic groups, comprising: invertebrates, vascular plants, mosses and liverworts; fungi and lichens; and vertebrates. The index value of 1 equates to species of Least Concern, and 0 indicates that all species have gone extinct within the geographical area considered. The overall aggregate value (0.9070) is represented by the orange bar.

Understanding this metric

Progress in delivery of the species extinction target is measured using the RLI for England (the D5 Outcome Indicator Framework (OIF) metric). The RLI is based on the numbers of species in each International Union for Conservation of Nature (IUCN) category (Extinct,

Extinct in the Wild, Regionally Extinct, Critically Endangered, Endangered, Vulnerable, Near Threatened, Least Concern) and how these change as species improve or deteriorate in status.

It should also be noted that, in the 2022 baseline year, 1.8% of species native to England were either Extinct (in Great Britain), Regionally Extinct, Extinct in the Wild or Critically Endangered (Possibly Extinct), 12% were considered to be in one of the 3 threatened categories (1.9% Critically Endangered, 3.7% Endangered and 6.4% Vulnerable) and a further 6% were considered to be Near Threatened.

Legally binding Environment Act target: Restore or create in excess of 500,000 hectares of a range of wildlife-rich habitats outside protected sites by 2042

Interim target: Restore or create 140,000 hectares of wildlife-rich habitats outside protected sites by 2028.

This target and interim target are discussed together as they use the same monitoring mechanism.

The first report on the delivery of this target has been published covering available data from 2023 until the point of analysis in March 2025. Further data will be added to future reporting from this time period as it becomes available, along with data from future years. Processes for collating data from multiple contributing delivery mechanisms continues to be developed and improved.

2024 to 2025 monitoring progress update

Defra and Natural England have published a data model and standard which sets out the data required to robustly report progress towards the habitat target.

Defra and Natural England published an evidence report in May 2025 setting out analysis undertaken in March 2025 to produce a metric to inform reporting of progress towards the Environment Act Habitat Target. This involved bringing together data from multiple contributing delivery mechanisms for analysis to avoid double counting of areas where multiple delivery mechanisms may have been used.

Analysis includes data from 4 delivery areas: the Farming and Countryside Programme, the Environment Agency, the Nature for Climate Peatland Grant Scheme, and Woodland creation and restoration data compiled by the Forestry Commission and Forestry England. These delivery areas were prioritised for inclusion in analysis due to their relative expected contributions to the target, and the compatibility of associated data with that required in the data model for reporting.

In future reporting, delivery from wider mechanisms and partners will be included where there are suitable spatial data to allow robust reporting.

What the data show

38,877 hectares of wildlife-rich habitats outside protected sites have been delivered since January 2023.

This figure is lower than the required delivery after 2 years to be 'on track' for the statutory and interim target (56kha), but it is important to note that the reported metric is not fully comprehensive. The reported figure does not represent all action taken to create and restore habitat since the habitat target came into effect, as robust delivery data are not yet available from all delivery mechanisms, and some delivery areas have provided data from 1 year only due to unavoidable data lags.

Other habitat creation and restoration actions have been undertaken in 2023 to 2025, and as these data become available, they will be added to the current total. Therefore, it is too soon to conclude whether progress is on track to meet the target or not.

Alongside the headline figure, the published report sets out which types of habitat have so far had the most action to create and restore (arable field margins) and the least (coastal and aquatic habitats). As expected, the report shows agri-environment schemes have delivered most of this target so far. The data also show that some delivery has increased the number of large patches of habitat in England, but many small patches have continued to be delivered too.

Understanding this metric

The reported metric shows the number of hectares where action has been or is being taken which is expected to create or restore wildlife-rich habitat, outside of protected sites, since January 2023.

The metric is a cumulative total rather than reporting an amount for each year, as the amount from a given year may be subject to change (either upward or downwards) based on new information, so the amount reported in 2042 might not be a sum of the amounts reported in every previous year.

Natural England provides further information about what counts towards the habitat target and the list of wildlife-rich habitats.

As the provision of data from each delivery mechanism involves several steps and different partners, there will be an expected average reporting lag of 2 years between when an action is taken and when it can be reported.

Interim targets: By January 2028 50% of SSSI to have actions on track to achieve favourable condition, and all SSSI features to have an up-to-date condition assessment

These 2 interim targets are being presented together as they are linked, and work together towards improving the condition of SSSIs, which supports the species extinction risk target and the species abundance target.

2024 to 2025 monitoring progress update

Natural England have undertaken actions towards achieving the EIP23 interim targets by 31 January 2028. They have also developed 2 metrics that will measure progress towards achieving these interim targets. These are reported with daily updates on Designated Sites View.

What the data show

The data show the percentage of sites of special scientific interest (SSSIs) with an up-to-date condition assessment and with actions on track to achieve favourable condition.

For up-to-date condition assessments, performance is behind planned projections to meet the 2028 target. As of the end of January 2025, 28% of features have up-to-date condition assessment, with recent data from the end of March showing that over 31% of sites have assessments up to date.

For the actions on track target, performance to date has been on-track for the 2028 target. At the end of January 2025, around 20% of features have actions on-track, with the most recent data at just over 23% at the end of March 2025.

Figure 4: Percentage of sites of special scientific interest (SSSIs) with an up-to-date condition assessment

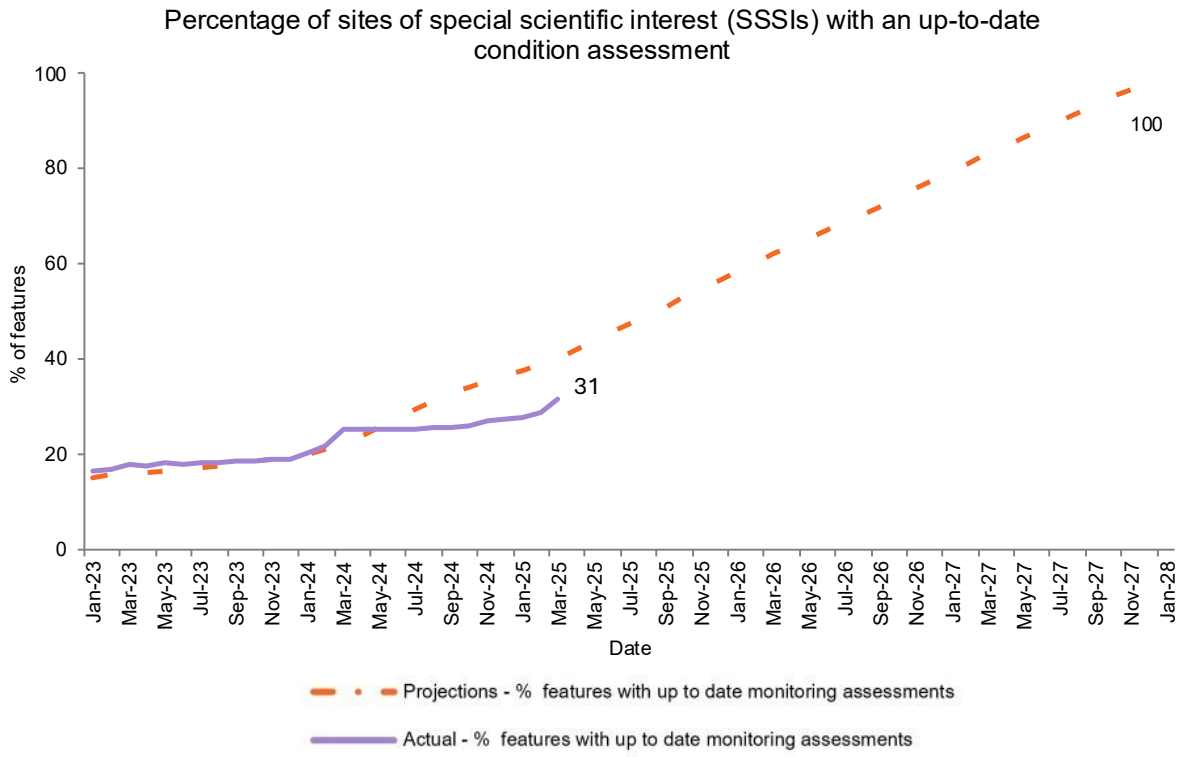


Figure 4 shows the percentage of SSSIs features with an up-to-date condition assessment. The purple solid line shows the actual monitoring assessments implemented, reflecting data collected over time. The orange dashed line represents projected progress, illustrating the anticipated trajectory needed to achieve the target of 100% of up-to-date assessments by January 2028.

Figure 5: Percentage of sites of special scientific interest (SSSIs) with actions on track to achieve favourable condition

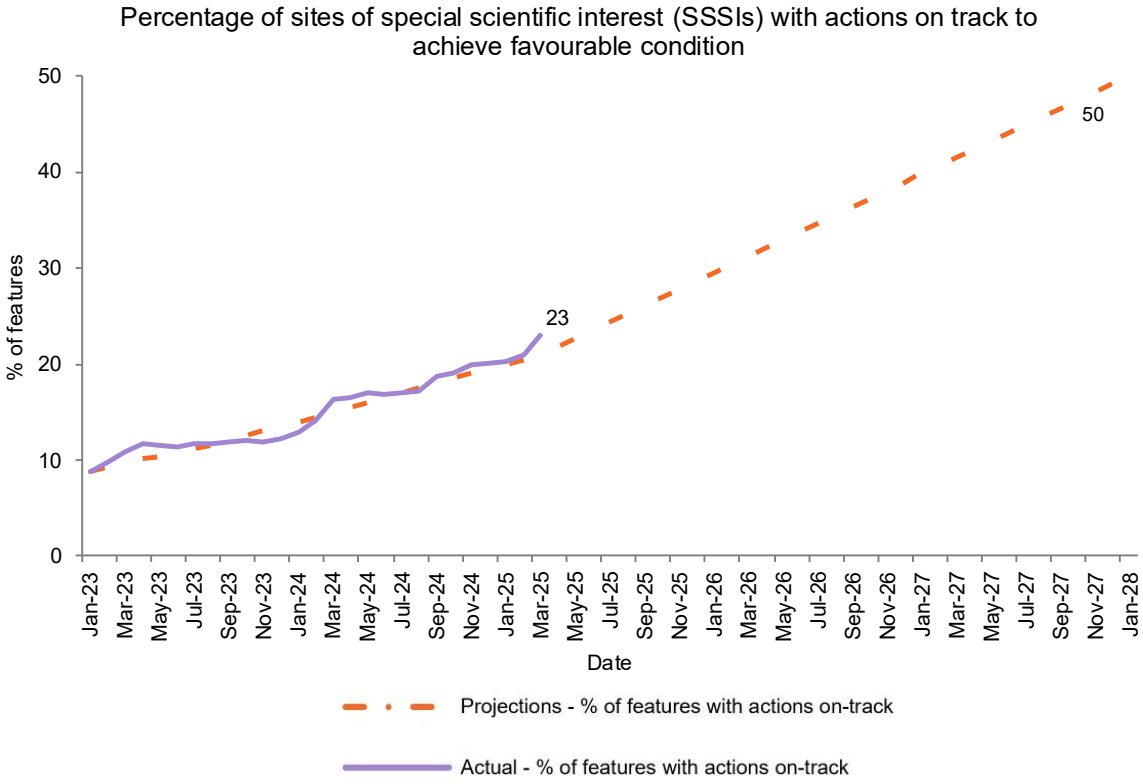


Figure 5 shows the percentage of SSSIs features with actions on-track to achieve favourable condition. The purple solid line shows the actual monitoring assessments implemented, reflecting data collected over time. The orange dashed line represents projected progress, illustrating the anticipated trajectory needed to achieve the target of 50% of actions on-track by the 31 of January 2028.

Understanding this metric

To assess the level of the up-to-date condition assessments and actions on track, Natural England has developed a methodology set out in the Environment Act Interim Target for protected sites - technical background.

For the up-to-date assessments, the report explains how the baseline feature condition information has been used to create confidence categories and describes which categories Natural England considers to be up to date in the context of this metric. The document goes on to set out the criteria actions have to meet to qualify as being on track and how the figure for actions on track is calculated.

Legally binding Environment Act target: Increase tree canopy and woodland cover to at least 16.5% of total land area by 2050

Interim target: To increase tree canopy and woodland cover by 0.26% (equivalent to 34,000 hectares) by 31 January 2028.

This target was set in the context of a provisional baseline. Further forestry statistics data became available in 2023 which confirmed an updated 2022 reference baseline of 14.9% of total land area (1.94 million hectares).

2024 to 2025 monitoring progress update

The target metric is a composite indicator based on administrative data and remote sensing to measure new planting and natural establishment of trees as well as losses of trees to development, open habitat restoration, pests, diseases and natural mortality. The next full update on target progress will be published following the next complete set of target monitoring data becoming available. However, updates on individual components provide a picture of progress in the interim.

In 2024 to 2025, 5,765 hectares of new woodland was planted in England, of which 5,450 hectares received government funding, mostly through the Nature for Climate Fund. In addition, 888,000 trees were planted outside woodland, equivalent to 1,399 hectares of new canopy, bringing the total area of tree canopy established and numbers of trees planted to 7,164 hectares and 10.4 million trees, respectively.

Woodland planting rates in the year 2024 to 2025 were 27% higher than in 2023 to 2024 and 156% higher than those achieved in 2021 to 2022. 88% of the woodland created in 2024 to 2025 was broadleaf woodland, with the remaining 12% conifer.

Further information on woodland that establishes naturally over the period of the interim target is not available but will be identified through remote sensing at the next point that a full progress report reconciling the component data-sets is published.

A partial picture of woodland loss in 2024 to 2025 is available for open habitat restoration in private woodlands, which reveals that 61 hectares of woodland was restored to non-woodland priority habitat. No update is available for woodland loss to development for 2024 to 2025, but an update is available for 2022 to 2023 when a loss of 125 hectares of woodland was reported.

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What the data show

Figure 6: Total net change in woodland area in hectares

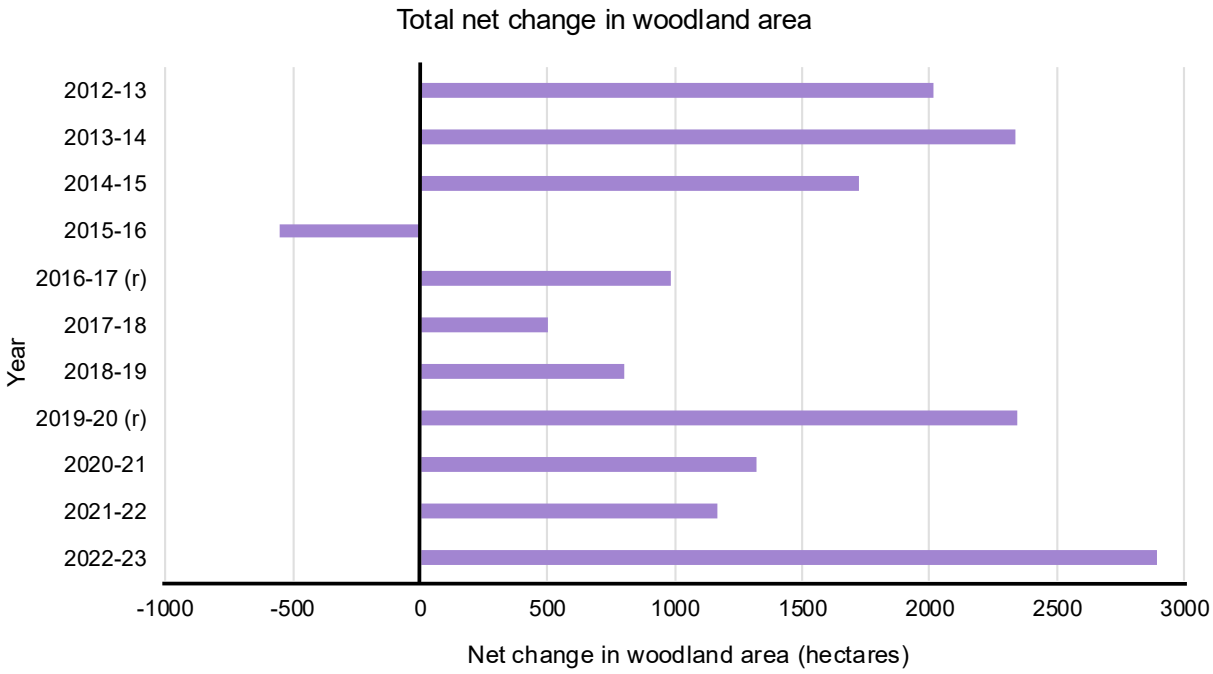

Figure 6 shows the total net change in woodland area in hectares (woodland creation minus woodland removal) based on most recent data collection years where woodland creation and woodland removal are both available. This is found on page 33 of the 2024 to 2025 Forestry Commission Key Performance Indicator report. The (r) for data in 2016-17 and 2019-20 refers to revised data.

No update on tree canopy cover outside woodland is available, but an updated Trees Outside Woodland map will be published in 2026.

Overall, the provisional data show signs of progress towards the target, but further acceleration in woodland establishment and tree planting will be necessary if the interim target is to be met.

Understanding this metric

As a composite indicator based on administrative data and remote sensing, each with their own time-lags, real–time reporting of progress is not possible. The progress indicators reported here give an indication of each of the activities that contribute to net change in tree canopy and woodland cover, both loss and gain.

However, the full picture will only become clear when analysis of remote sensing data confirms losses and gains that have not been accounted for; for example, small-scale woodland creation that has not been grant-funded and is below the threshold requiring regulatory screening and the loss of trees outside woodland through natural mortality or land management operations.

Legally binding Environment Act target: Ensure that at least 70% of designated features in Marine Protected Areas (MPAs) are in favourable condition by 2042, with the remainder in recovering condition

Interim target: For 48% of designated features in Marine Protected Areas (MPAs) to be in a favourable condition, with the remainder in recovering condition, by January 2028.

Progress towards the target is reviewed every 5 years to align with the interim target, which both use the same reporting mechanism and are therefore discussed together here.

2024 to 2025 monitoring progress update

Scientific advisors Natural England and the Joint Nature Conservation Committee (JNCC) are developing an MPA monitoring strategy to assess progress towards meeting the legally binding MPA target, including whether the necessary management measures are in place. Since April 2024, Natural England have published 99 feature assessments from 15 MPAs. The MPA monitoring and assessment strategy will be completed by 2028.

In addition to the target assessments of percentage of features in favourable condition and percentage in recovering condition, Defra can provide the progress made towards implementing effective management measures within MPAs, particularly progress implementing byelaws to manage damaging fishing in MPAs. Currently, 60% of 181 MPA have some management in place to protect features against damaging fishing activity.

What the data show

Figure 7: Percentage of designated features in marine protected areas in favourable condition

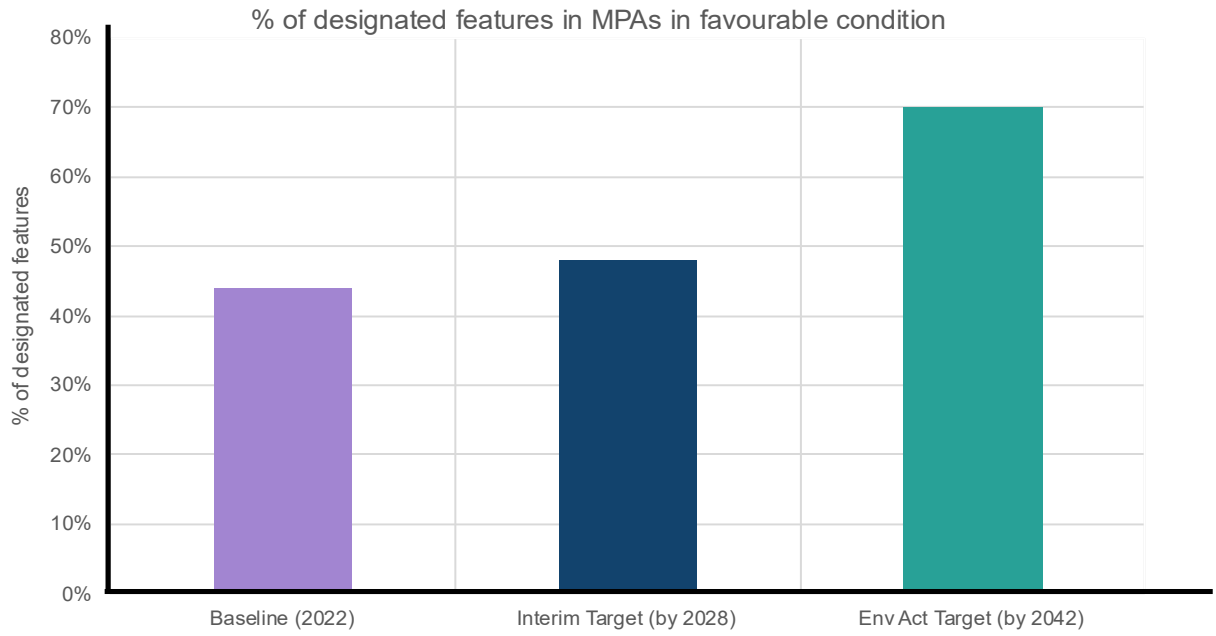

Figure 7 shows the current baseline in purple of the % of designated features in MPAs in favourable condition (44%), with dark blue and turquoise bars representing the interim target (48% by 2028) and long-term Environment Act target (70% by 2042) respectively.

The 44% figure provides a baseline of the condition of features within English MPAs. There will be no update on whether the percentage of features within favourable condition are increasing or decreasing until the next assessment takes place in 2028. However, Defra are focused on making sure MPAs are properly protected by removing most of the damaging human activities within or near MPAs, which should bolster feature condition to favourable condition

Understanding this metric

Assessing the condition of features designated within MPAs is undertaken by Statutory Nature Conservation Bodies (NE and the JNCC) using survey data. In the absence of survey data, a vulnerability assessment is performed, which estimates the sensitivity of protected features to human activity occurring within their vicinity. The results will give the likely condition of the feature at the site. The assessments will be used to determine if the English target, of at least 70% of MPA features are in a favourable condition and the remaining features are in a recovering condition by 2042.

Defra can provide an assessment ready for the interim target in 2028 and every 5 years after for subsequent targets. A comprehensive assessment of English MPAs consists of 181 sites and over 1,000 designated features. The process places significant demands on resources, particularly in terms of vessels and expert availability for data collection, analysis, and funding. Marine species and habitats can have extremely slow recovery rates and reporting more frequently may result in updated figures which have not changed, so doing assessments at a high frequency may not be the best use of limited resources.

Improving environmental quality

Goal 2: Clean air

Legally binding Environment Act targets:

1. Reduce population exposure to $PM_{2.5}$ by 35% in 2040 compared to 2018 levels.
2. The maximum annual mean concentration of $PM_{2.5}$ in 2040 must be equal to or less than 10 µg per m^3.

Interim targets:

1. By 31 January 2028, the reduction in population exposure to $PM_{2.5}$ in the most recent full calendar year (compared to 2018) must be 22% or greater.
2. By 31 January 2028, the highest annual mean concentration of $PM_{2.5}$ in the most recent full calendar year must not exceed 12 µg per m^3.

How legally binding Environment Act targets and interim targets are monitored

Target	Type of data (direct, related or unavailable)	What data are available
Reduce population exposure to $PM_{2.5}$ by 35% in 2040 compared to 2018 levels. **Interim Target: Includes interim target to reduce by 22% by the end of January 2028.**	Direct	Data measuring percentage change in population exposure to $PM_{2.5}$ will be provided for 2018 to 2024. Updates are expected annually.

Target	Type of data (direct, related or unavailable)	What data are available
The maximum annual mean concentration of $PM_{2.5}$ in 2040 must be equal to 10 micrograms per cubic metre (µg per m^3). **Interim Target: 12 µg per m^3 by the end of January 2028.**	Direct	Data measuring the annual mean concentration of $PM_{2.5}$ at individual monitoring sites will be provided for 2018 to 2024. Updates are expected annually.

Legally binding Environment Act target: Reduce population exposure to $PM_{2.5}$ by 35% in 2040 compared to 2018 levels

Interim target: By 31 January 2028, the reduction in population exposure to $PM_{2.5}$ in the most recent full calendar year (compared to 2018) must be 22% or greater.

This target and interim target are discussed together as they use the same monitoring mechanism.

Overall, reduction in population exposure to $PM_{2.5}$ of 25% compared to 2018 has been observed for 2024.

2024 to 2025 monitoring progress update

To support the measurement of the Population Exposure Reduction Target (PERT), an expansion of the monitoring network is underway. Over the past year (April 2024 to March 2025), 35 new monitors have been added to the network, 9 of which are PERT sites. The PERT is assessed by using monitoring sites that are located in urban background and suburban background locations across England.

The expansion is set to continue over the next 2 to 3 years to ensure the minimum sampling requirements specified in the legislation are met.

Updates to the Outcomes Indicator Framework (OIF) during 24/25 have brought greater alignment between the Environment Act target metrics and the OIF indicator for $PM_{2.5}$ concentration. The OIF indicator for $PM_{2.5}$ exposure (which has historically been based on modelled data) is now based on the same monitoring data used to assess progress against the PERT and an indicator that aligns with the AMCT was added.

What the data show

The figure below shows that population exposure has reduced over time, with large improvements since 2020. The substantial progress made towards the PERT means the interim target was met in 2023 and surpassed in 2024. However, whilst good progress has been made, it does not necessarily mean the target will be met in 2028 as concentrations may go up as well as down. In addition, localised factors can have significant effects on individual site concentrations, meaning that until the final monitoring network is in place in 2027 it is not possible to fully assert that the interim target has been met. However, the current trend suggests efforts are on track to meet the interim target in 2028.

Figure 8: Change in $PM_{2.5}$ population exposure

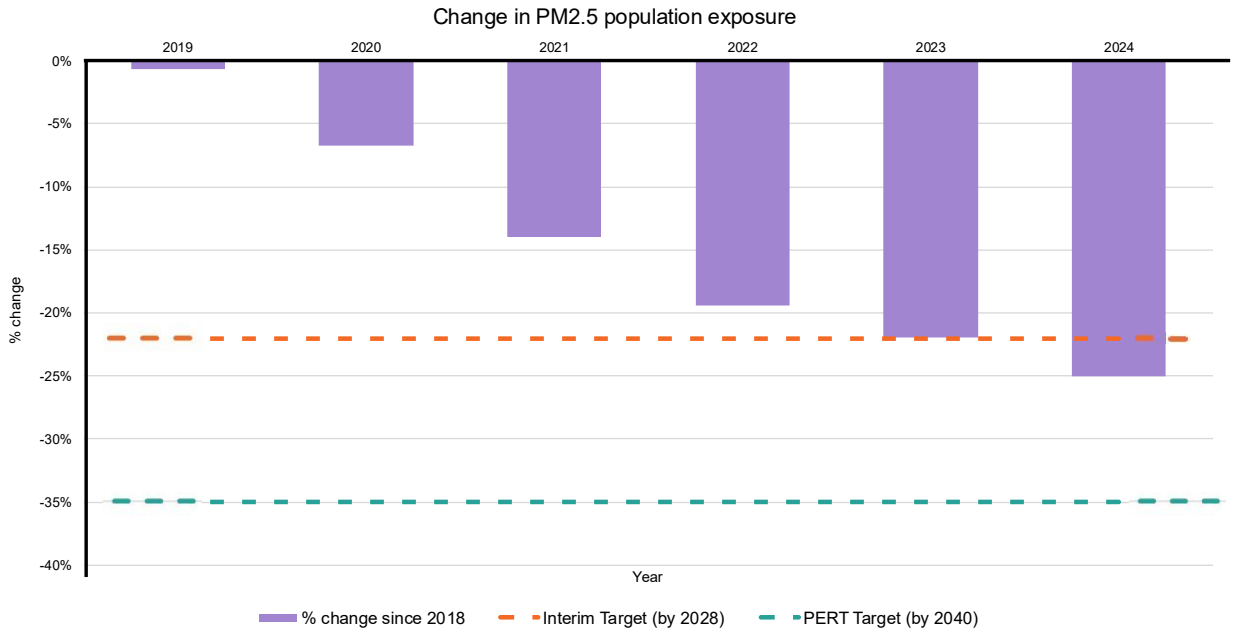

Figure 8 shows the trends of PERT data from 2018 to 2024 in light purple, the interim target of a 22% reduction by in dark blue and the long-term Environment Act target of a 35% reduction in turquoise.

Understanding this metric

Assessment of the fine particulate matter ($PM_{2.5}$) PERT is based on measurements of $PM_{2.5}$ concentration from the Automatic Urban and Rural Network (AURN). This is an established network of fixed monitors located across the UK which is used for assessing compliance with air quality standards. The measurements within England are used to calculate the PERT using the method set out in the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023.

Annual average concentrations are calculated from hourly (or for a small number of instruments daily) measurements for each urban and suburban monitoring site, and a country average is produced from these sites to calculate the average population exposure for England. A rolling three-yearly average is used to reduce the impact of variations in weather conditions and other short-term influences to provide an indicator of the long-term trend. A statistical method is employed to take account of the expansion of the monitoring network in calculating the PERT metric and this is described in the target regulations.

Real-time fixed monitoring undergoes a high level of quality assurance and calibration. It also follows international standards and guidelines as set out in the legislation. This includes calibration visits to sites and audits every 6 months.

Following data collection, the annual mean concentrations are subject to an external ratification process and are published in June to July of the following year. A minimum data capture threshold is also required to be met for a measurement to be included in the calculation. Further information on how the PERT is measured is available on Defra's UKAIR website.

Legally binding Environment Act target: The maximum annual mean concentration of $PM_{2.5}$ in 2040 must be equal to or less than 10 µg per m^3

Interim target: By 31 January 2028, the highest annual mean concentration of $PM_{2.5}$ in the most recent full calendar year must not exceed 12 µg per m^3.

This target and interim target are discussed together as they use the same monitoring mechanism.

A reduction in the maximum $PM_{2.5}$ annual mean concentration measured to 11 µg per m^3 compared to 16 µg per m^3 in 2018 has been observed in 2024.

2024 to 2025 monitoring progress update

As with the PERT, to support the measurement of the Annual Mean Concentration Target (AMCT), the monitoring network is being expanded. Over the past year (April 2023 to March 2024) 35 new monitors have been added to the network, all of which will report against the AMCT. The AMCT is assessed by using monitoring sites that have been located in all site locations across England. This will include sites in both rural and urban areas and those likely to have the highest concentrations.

What the data show

The figure below shows a decrease in the $PM_{2.5}$ concentrations measured at individual monitoring sites over time. The majority of monitoring sites now measure below 10 µg per m^3 and the maximum measured concentration in 2024 was 11 µg per m^3, meeting the interim target. However, as with the PERT, this does not necessarily mean the target will be met in 2028. In addition, until the final monitoring network is in place in late 2027 it is not possible to fully assert the interim target has been met. However, the current trend suggests efforts are on track to meet the interim target in 2028.

Figure 9: Progress towards $PM_{2.5}$ annual mean concentration target

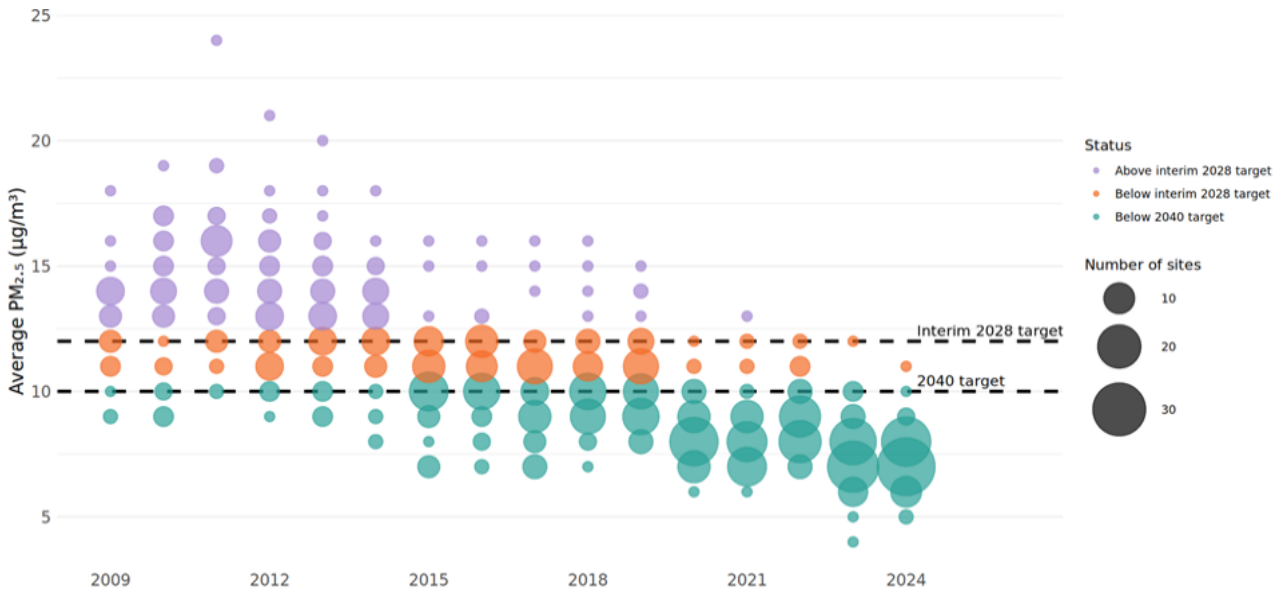

Figure 9 shows the AMCT data with proportional size of circles showing the number of sites with corresponding AMCT values. The larger the circle, the greater the number of monitoring sites at that value for that year. Purple circles represent data where the sites have not yet achieved targets. The orange and green circles represent sites that have data collected which have achieved the interim and long-term Environment Act targets respectively. The two target levels (interim by 2028 and Environment Act by 2040) are represented by dashed horizontal lines.

Understanding this metric

As with PERT described above, assessment of the fine particulate matter ($PM_{2.5}$) AMCT is based on measurements of $PM_{2.5}$ concentration from the AURN. The measurements within England are used to calculate the AMCT using the method set out in the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023.

Annual average concentrations are calculated from hourly (or for a small number of instruments daily) measurements for each monitoring site, including near-source roadside, rural and industrial sites. The highest measured concentration needs to be a maximum of 12 µg per m^3 in 2027 for the interim target to be met. As the target metric is based on one-year mean concentrations rather than three-year averages like the PERT, there is potential for a greater fluctuation in the target metric from year to year.

As with the PERT, real-time fixed monitoring undergoes a high level of quality assurance and calibration. It also follows international standards and guidelines as set out in the legislation. This includes calibration visits to sites and audits every 6 months.

Following data collection, the annual mean concentration measurements are subject to an external ratification process and are published in June or July of the following year. In

addition, a minimum data capture threshold needs to be met for a measurement to be included in the calculation. Further information on how the AMCT is measured is available on Defra’s UKAIR website.

Clean Air: Monitoring other statutory targets

National Emissions Ceiling Regulations (2018)

The clean air goal acknowledges 5 emission reduction targets, set in the National Emissions Ceilings Regulations (2018) which are UK wide. The legal emission reduction targets for damaging pollutants by 2030 (relative to 2005 levels) are to reduce emissions of:

- nitrogen oxides by 73%
- sulphur dioxide by 88%
- $PM_{2.5}$ by 46%
- ammonia by 16%
- non-methane volatile organic compounds by 39%

The EIP considers the relevance of these targets to England.

The A1 (emissions for five key air pollutants) OIF indicator provides an assessment of pressures on the atmosphere caused by the emissions of the 5 key air pollutants, which, when concentrated in the air or later deposited into soil or water, have negative impacts on human health and ecosystems.

Assessments for all 5 of the air pollutants measured by the A1 indicator (Ammonia, $PM_{2.5}$, NO_x, NMVOCs and SO_2) have shown an improvement in the most recent short, medium and long-term time periods. This assessment does not consider whether any improvement is on a sufficient scale for meeting targets.

Air Quality Standards Regulations (2010)

Concentrations of pollutants in ambient air are also regulated by the Air Quality Standards Regulations (2010).

The general trend in measured NO_2 concentrations across England is decreasing and the average value falls below the NO_2 limit of 40 µg per m3 in recent years (see OIF indicator A5: Roadside nitrogen dioxide (NO2) concentrations). However, there was a slight increase in 2021 following the lifting of COVID-19 lockdown restrictions as the time series reached its lowest point in 2020 because of an unusually low level of road traffic. There are also hotspots of NO_2 exceedances across England, which are being addressed through the NO_2 programme.

Goal 3: Clean and plentiful water

Legally binding Environment Act targets:

1. Reduce nitrogen, phosphorus, and sediment pollution from agriculture into the water environment by 40% by 31 December 2038, compared to a 2018 baseline.
2. Reduce phosphorus loadings from treated wastewater by 80% by 31 December 2038, against a 2020 baseline.
3. Halve the length of rivers polluted by harmful metals from abandoned metal mines by 31 December 2038, against a baseline of 1,491kms.
4. Reduce the use of public water supply in England per head of population by 20% from the 2019 to 2020 baseline reporting year figures, by 31 March 2038.

Interim targets:

1. Reduce nitrogen, phosphorus and sediment pollution from agriculture to the water environment by 10% by 31 January 2028.
2. Reduce nitrogen, phosphorus and sediment pollution from agriculture to the water environment by 15% in catchments containing protected sites in unfavourable condition due to nutrient pollution by 31 January 2028.
3. Reduce phosphorus loadings from treated wastewater by 50% by 31 January 2028, against a 2020 baseline.
4. Construct 8 mine water treatment schemes and 20 diffuse interventions to control inputs of target substances to rivers by 31 January 2028.
5. Reduce the use of public water supply in England per head of population by 9% by 31 March 2027 and 14% by 31 March 2032, from a 2019 to 2020 baseline.
6. Reduce leakage by 20% by 31 March 2027 and by 30% by 31 March 2032, from a 2017 to 2018 baseline.

How legally binding Environment Act targets and interim targets are monitored

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
Reduce nitrogen, phosphorus and sediment pollution from agriculture into the water environment by at least 40% by 2038, compared to a 2018 baseline. **Interim target of 10% reduction by 31 January 2028, and 15% in catchments containing protected sites in unfavourable condition due to nutrient pollution by 31 January 2028.**	Related	Our modelling suite is due to be updated. Updating the modelling is expected to take place in four stages, spanning 3.5 years. Work on the first component is expected to start in 2025, and thus the full update is expected to be completed by 2029. Importantly, this means it is not possible to measure progress against the interim targets before they arise in 2028.	In the period to 2028, we will report progress using proxy indicators, for example the numbers of ameliorative actions undertaken following an Environment Agency farm regulatory inspections or Catchment Sensitive Farming advice visit. We will also use annual Soil Nutrient Balance data provided with historic data for comparison. Long-term aims are to provide available modelling data.

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
Reduce phosphorus loadings from treated wastewater by 80% by 2038, against a 2020 baseline. **Includes interim target of 50% by 31 January 2028.**	Related	The number of completed phosphorus improvement schemes has been identified as a proxy for this metric.	Number of phosphorus improvement schemes completed during the period 2020 to 2024.
Halve the length of rivers and estuaries polluted by harmful metals from abandoned metal mines by 2038, against the 2022 baseline of 1,491km (approx. 926m).	Unavailable	An Environment Agency (EA) report on the baseline length of polluted rivers and estuaries was published in March 2025. This report confirmed the total length of polluted rivers and estuaries that needs to be decreased by 50% by 2038 as 1,491kms. Reporting on the interim target below instead.	Data unavailable for annual progress report 2024, but are expected to be concentrations of metals monitored in all rivers impacted by abandoned metal mines (data on baseline report are publicly available at: Abandoned metal mines in England: baseline length of rivers and estuaries polluted by harmful metals)

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
Interim target: to construct eight mine water treatment schemes and 20 diffuse interventions to control inputs of target substances by 31 January 2028.	Direct	Reporting mechanisms agreed and have begun. Construction target, so number of schemes are signed off at quarterly WAMM Boards.	Number of mine water treatment schemes, and diffuse interventions constructed between 31 January 2023 and 31 January 2024. Updates expected quarterly.
Reduce the use of public water supply in England per head of population by 20% from the 2019 to 2020 baseline reporting figures, by 31 March 2038. **Interim target: Reduce the use of public water supply in England per head of population by 9% by 31 March 2027 and 14% by 31 March 2032.**	Direct	Change in water supply data provided between 2019 and 2023, with reporting mechanisms established. Expected annual reporting.	Change in water supply data provided annually between 2019 to 2020 and 2023 to 2024. Expected annual reporting.

Target	Type of data (direct, related or unavailable)	Monitoring update	What data are available
Interim target: To reduce leakage by 20% by 31 March 2027 and 30% by 31 March 2032, from a 2017 to 2018 baseline.	Direct	Reporting mechanism established.	Change in water leakage data provided annually between 2019 to 2020 and 2023 to 2024. Expected annual reporting.

Target: Reduce nitrogen, phosphorus, and sediment pollution from agriculture into the water environment by 40% by 31 December 2038, compared to a 2018 baseline

Progress towards this target is tracked through collection of data on agricultural practices, on farm mitigation measures and compliance with regulations, and subsequent modelling of the impacts. Defra is currently in the process of updating and improving data collection and modelling tools for this target.

As this target uses the same monitoring mechanisms as the interim targets, they are discussed together here.

2024 to 2025 monitoring progress update

One model is relied upon to estimate national pollutant loadings from agriculture, but following advice from the Water Expert Advisory Group, modelling capability is being updated and expanded. By comparing results from several models, there should be a more robust assessment of the impact of agriculture on the water environment.

Defra is currently in the process of incorporating feedback from external experts to improve our approach. Refinements include updates to the list of mitigation measures and incorporation of the latest developments in the science of modelling total nitrogen, phosphorus, and sediment loads (particularly in terms of accounting for ecological contextual factors).

Data are currently being collected. The main sources of data are:

- the Environment Agency's (EA) records on regulatory compliance, and the activities being implemented by farmers in response to EA inspections and advice
- the Farming and Countryside Programme (FCP) data on farmers' voluntary uptake of environmental land management schemes
- the Rural Payments Agency (RPA) data on grants provided to farmers

The modelling suite is highly complex, and while still in development, is likely to have input data which are collected at different frequencies (such as farm survey data on on-farm practices). Expert advice will be sought during model development on the most appropriate reporting frequency. Until new models are available, we have looked at best available proxy for tracking changes in nutrient loadings from agricultural soils into the water environment in England. This includes Soil Nutrient Balances (SNBs), which track changes in nutrient surpluses in agricultural soil. It shows the surplus of nitrogen and phosphorus entering soils caused by inputs of nutrients (such as manure, fertilisers) exceeding the offtake (for example, from crop production and grazing). However, whilst the measure aligns with most of our EIP target goals, updates being made to the model preclude it from being used as an interim proxy target.

What the data show

SNBs provide a method for estimating the annual nutrient loadings of nitrogen and phosphorus to agricultural soils. They give an indication of the potential losses of nutrients to the environment. These losses can impact on air and water quality and on climate change. The nutrient balances are used as a high-level indicator of farming's pressure on the environment and of how that pressure is changing over time. The balances do not estimate the actual losses of nutrients to the environment, but significant nutrient surpluses that are directly linked with losses to the environment.

The nitrogen surplus in England has fallen by around 30% since 2000. The main drivers have been reductions in the application of inorganic fertilisers (particularly to grass) and manure production (due to lower livestock numbers), partially offset by a reduction in the nitrogen offtake (particularly forage). Factors such as the balance of land used for growing crops and cropping patterns over a growing season can also affect nitrogen and phosphorus balances.

Furthermore, since the 1990s there has been a general trend for an increase in crop yield (in weight) for staple cereal crops for the weight of inorganic nitrogen fertiliser applied, eliciting an improvement in inorganic fertiliser use efficiency and associated crop productivity. From 2022 to 2023, the nitrogen surplus increased by 4.8% to 82.9 kilograms per hectare, while the phosphorus surplus increased by 0.1% to 2.9 kilograms per hectare. . The phosphorus surplus has fallen by around 70% since 2000, with reductions in nitrogen and phosphorus balances in 2023 influenced by lower applications of inorganic fertilisers relative to previous years.

The British Survey of Fertiliser Practice report illustrates how total use of nitrogen fertilisers in 2023 increased by 6 kilograms per hectare on both the cropping and grass categories, recovering somewhat from the low levels observed in 2022. These 2022 rates were thought to be attributable largely to price and the invasion of Ukraine by Russia. Average field rates for phosphate did not recover and changes to dressing cover percentages were small for all nutrients on both crops and grass.

Figure 10: Nitrogen soil nutrient balances

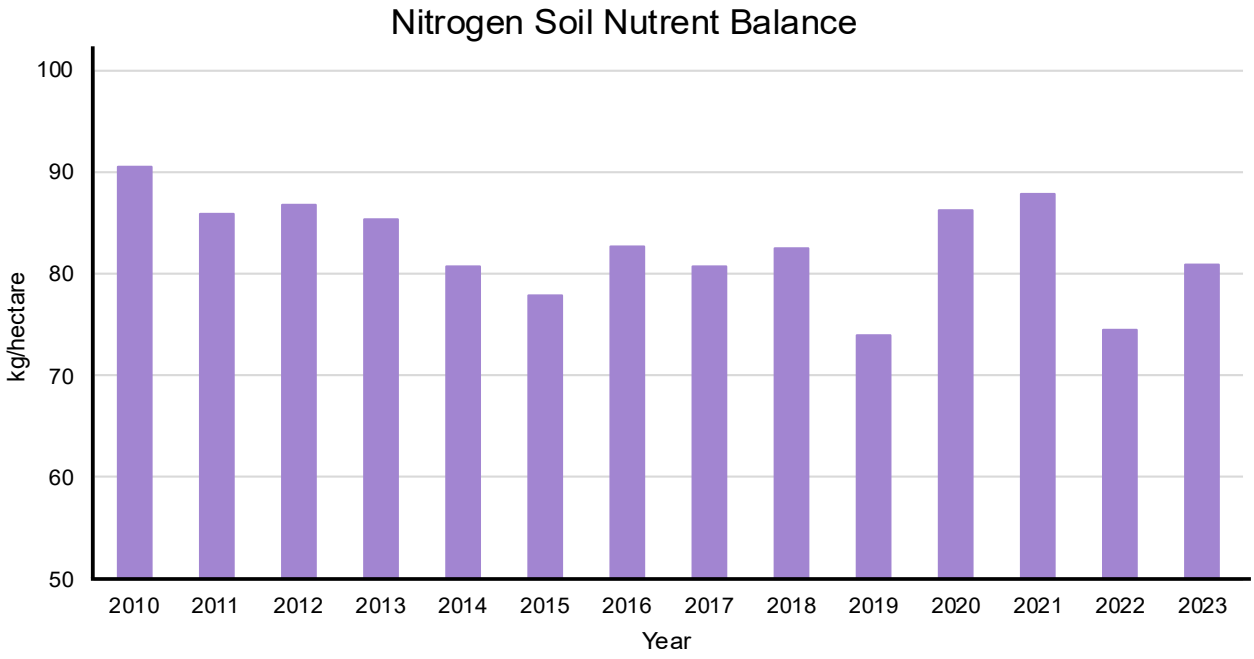

Figure 10 shows the overall balance of nitrogen in soils in England between 2010 and 2023. This is calculated by total inputs (such as manures and fertilisers) minus total offtakes (crop production and fodder for livestock, such as grazing).

Figure 11: Phosphorus soil nutrient balances

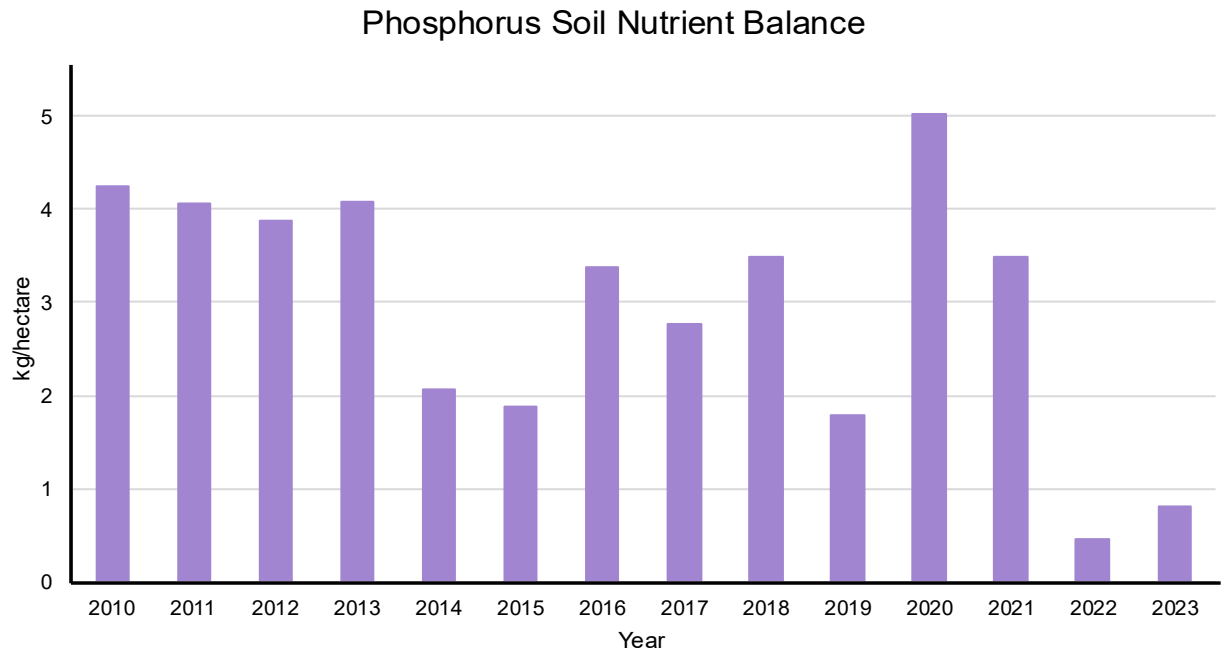

Figure 11 shows the overall balance of phosphorus in soils in England between 2010 and 2023. This is calculated by total inputs (such as manures, fertilisers) minus total offtakes (crop production and fodder for livestock, such as grazing).

Efficient nutrient application requires farm specific planning and data, to determine the requirements for each crop grown, whether arable, fodder, grass or horticultural goods. Defra survey data indicate that in recent years around 55% of farm businesses have a nutrient management plan, and that up to 70% routinely test soil nutrient content. Around 70% hold manure management plans.

Whilst national trends in SNB and nutrient management are valuable indications of agricultural sector performance and contribution to water pollution, these data are not a proxy for individual farm performance. The nutrient requirements of each farm business are spatially specific to each crop, field and soil type, potentially with variation in demand and application within each field, over each cropping season.

Understanding this metric

Nitrogen and phosphorus surpluses in agricultural soils have shown an overall downward trajectory since 2000. The most considerable drops took place in the 2000 to 2008 period. However, there has been a change in methodology from 2010 onwards to only include commercial farms and so only data from 2010 onwards have been included. Currently, it is not possible to reliably infer a future trend in nitrogen and phosphorus soil balance towards 2038. This is partly due to the relatively few data points at the time of publishing, but also because of the important impact of unexpectedly high inorganic fertiliser prices on nutrient application to soils in 2022. The balance also depends on overall crop yields. When weather and other conditions result in poor harvests, offtake is reduced and the soil nutrient surplus increases, as happened in 2020. Continued monitoring of SNBs in the coming years will provide a picture of nutrient surplus in agricultural soils, which in turn is a proxy for potential nutrient loadings into the water environment.

Legally binding Environment Act target: Reduce phosphorus loadings from treated wastewater by 80% by 31 December 2038, against a 2020 baseline

Interim target: Reduce phosphorus loadings from treated wastewater by 50% by 31 January 2028, against a 2020 baseline

The planned delivery mechanism for this target is well established. A proxy metric for monitoring progress – the percentage of planned phosphorus improvement schemes delivered on time by water companies – is included in this year's report. Work to establish a dedicated metric for quantifying reductions of phosphorus loads is at an advanced stage.

As progress towards the statutory target is measured using the same metrics as the interim target, they are discussed together here.

2024 to 2025 monitoring progress update

Progress towards the target is being reported by publishing the number of schemes (typically infrastructure upgrades) delivered or scheduled for delivery during one of a series of investment cycles, referred to as 5-yearly Asset Management Plans (AMPs). More information on this metric is provided below in 'understanding this metric'.

This is a proxy metric and provides a measure of the increasing capability for the water industry to reduce the load of total phosphorus from treated wastewater in England. A minority of planned AMP7 (2020 to 2025) phosphorus improvement schemes had their completion dates extended beyond 2025, so the published data cover the financial year 2020 to 2021 through to the final AMP7 completion dates in 2027 to 2028.

For future annual progress reports, a dedicated metric to model and quantify total phosphorus loadings in treated wastewater is currently at an advanced stage of development with the Environment Agency. This will provide more nuanced information on progress to meet the target. It will also ensure a more consistent approach to the modelling of expected phosphorus concentrations at all wastewater treatment works, enabling a like-for-like comparison across all years.

What the data show

The data show the number of phosphorus reduction schemes included in AMP7. These schemes involve upgrades or additions to wastewater treatment processes to reduce phosphorus levels in treated effluent before it is discharged into freshwater waterbodies.

The latest phosphorus reduction scheme delivery data show that, in the 2024 to 2025 financial year, 652 phosphorus schemes were completed. As such, 82% of all phosphorus schemes planned for AMP7 (2020-2025, with some schemes extended to 2027) were completed by April 2025 (770 of 936), against a planned delivery percentage of 92% by this stage of the AMP cycle. Phosphorus scheme delivery is therefore slightly behind schedule. A total of 88 schemes were not delivered as planned and 8 schemes are pending sign off from the 2024 to 2025 financial year. Despite some schemes not being

completed on time, the number of phosphorus improvement schemes delivered in 2024-25 has been substantial.

The successful delivery of planned schemes across AMP7 and AMP8 enables progress towards achieving both the interim wastewater target in 2030 and statutory wastewater target in 2038. The EA expects delivery of planned schemes to be back on track for AMP8 (2025 to 2030). We do not consider that the current level of non-delivery for AMP7 presents a substantial risk to the achievability of the targets, but we will continue to assess and explore whether it is possible to increase the percentage of schemes delivered on schedule.

Table 1: Number of phosphorus improvement schemes planned and completed during AMP7

Year	Schemes planned	Schemes completed
2020 to 2021	6	6
2021 to 2022	82	82
2022 to 2023	8	8
2023 to 2024	15	22
2024 to 2025	783	652
2025 to 2026	1	Not applicable
2026 to 2027	33	Not applicable
2027 to 2028	8	Not applicable
Total	936	770

This table shows the number of phosphorus improvement schemes delivered during the AMP7 period in comparison to planned schemes, to show the progress being made in delivery of schemes.

The number of schemes planned between the 2025 to 2026 financial year and the 2027 to 2028 financial year may change due to alterations across the Water Industry Environment Programme (WINEP).

Understanding this metric

The mechanism for delivering the target will be water companies completing planned phosphorus improvement schemes and the tightening of relevant wastewater discharge permit limits to meet statutory environmental obligations by the Environment Agency.

Tracking the number of phosphorus reduction schemes delivered or scheduled for delivery during AMP7 provides a quantitative measure of progress. However, this metric does not quantify the phosphorus load reduction, as each scheme varies in size and effect on total phosphorus removal. It does, however, provide good insight into progress made since 2020, as the successful delivery of planned phosphorus improvement schemes is the mechanism for achieving the statutory and interim targets.

Legally binding Environment Act target: Halve the length of rivers polluted by harmful metals from abandoned metal mines by 31 December 2038, against a baseline of 1,491kms.

Interim target: Construct 8 mine water treatment schemes and 20 diffuse interventions to control inputs of target substances to rivers by 31 January 2028

The long-term and interim targets are monitored using different mechanisms and so monitoring updates are split accordingly. Data are not currently available against the long-term target but are provided for the interim.

This target builds on previous activities being carried out through the Water and Abandoned Metal Mines (WAMM) Programme established in 2011. This is a partnership between Defra, the Environment Agency and the Mining Remediation Authority (MRA) with the objective to clean up rivers and estuaries that are polluted by metals being released from abandoned metal mines.

2024 to 2025 monitoring progress update

Legally binding Environment Act target:

As noted, the long-term target is to ‘halve the length of rivers polluted by harmful metals from abandoned metal mines by 31 December 2038, against a baseline of 1,491kms.’ This baseline length was confirmed by the Environment Agency in their Baseline Report published in March 2025. This baseline report is based on a robust dataset using monitoring data collected between 1 January 2022 and 31 March 2024 to measure the polluted length of rivers and estuaries that were considered polluted in 2022, taking account of natural variations. Although baseline monitoring was not completed until March 2024, it is representative of calendar year 2022 as no new interventions were installed in the rivers being monitored to establish the baseline length, and baseline calculations took account of interventions installed before 31st January 2023.

To measure the baseline length of polluted rivers and estuaries, the EA collected water quality samples at around 500 locations in English rivers known to be impacted by abandoned metal mines over the period from 1 January 2022 to 31 March 2024. Samples were analysed for various substances in the Environment Agency laboratories. The concentrations of metals in each sample were compared with the relevant Environmental Quality Standard (EQS) set by government. EQS concentrations are based on ecotoxicology data and set at a level that should prevent environmental impacts. When the concentration of a substance in a water sample is higher than the EQS, adverse impacts on aquatic wildlife can occur.

At most monitoring locations, at least 12 samples were collected to take account of the continual natural fluctuation in river water quality in response to rainfall over the course of 12 months. This enables calculation of the ‘annual average’ to reflect the overall range of higher and lower concentrations that occur within a year, and therefore the long-term environmental exposure of aquatic plants and wildlife to these fluctuations.

Sample locations were selected to delineate the upstream and downstream extent of pollution by metals in impacted rivers. The total length of polluted river is calculated by measuring the total distance (in kilometres) between sampling points, where the results showed that rivers are polluted by the target substances released from abandoned metal mines.

Interim target:

Monitoring of progress is reported quarterly to the WAMM Programme Board (comprising senior representatives from Defra, the Environment Agency and the Mining Remediation Authority). In the 2023 to 2024 financial year, the monitoring focused on agreeing reporting mechanisms and defining how progress towards the interim target will be reported.

Between 31 January 2024 and 31 January 2025, the following measures were constructed.

Mine water treatment schemes:

- A second mine water treatment scheme started operating in September 2024 - find more information about Haggs mine water treatment scheme Diffuse interventions:

- A further 3 diffuse intervention schemes were constructed during 2024.

What the data show

Figure 12: Interim target measures (mine water treatment schemes and diffuse interventions)

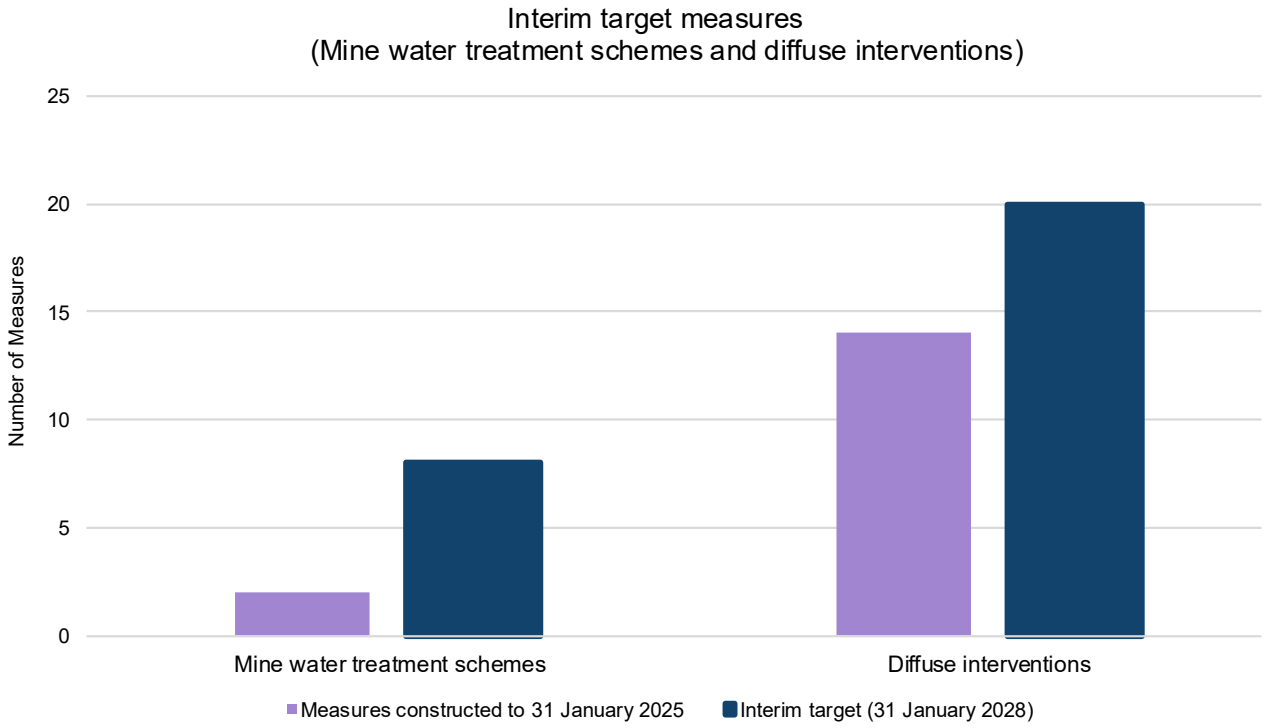

Figure 12 shows the current number of mine water treatment schemes and diffuse interventions constructed by 31 January 2025 (light purple) and the number required by 31 January 2028 to achieve the interim target (dark blue). The legend follows the same order as the bars.

It shows new activity (mine water schemes and diffuse interventions) constructed since 31 January 2023. Only measures constructed since the EIP was published count towards the interim target as these represent new interventions constructed between January 2023 and January 2025. As this interim target is in early stages, a trend cannot be identified.

Understanding this metric

Advancement towards the legally binding target is calculated by measuring metal concentrations in rivers that are polluted by abandoned metal mines and comparing the length of polluted rivers against the baseline value. The polluted river length will only decrease in rivers where new measures have been constructed. It has been proposed that every 5 years, the Environment Agency will monitor water quality in all the English rivers identified as being polluted in the Autumn 2024 baseline report – this schedule has yet to be confirmed, however.

To monitor the reduction in metal concentrations following the construction of new mine water treatment schemes and diffuse interventions, the Environment Agency will regularly monitor upstream and downstream of new measures for at least 12 months and measure any reduction in the length of polluted rivers.

Furthermore, the MRA will monitor the mass (in kilogrammes) of metals captured in each mine water treatment scheme, and the volume of water treated, as part of their performance assessment at each scheme.

Interim target: This is based on building new measures to limit the input of polluting substances to rivers (both mine water treatment schemes and diffuse interventions) to support progress towards the long-term target. This metric was adopted for the interim target because it takes several years to develop and build each mine water treatment scheme. Interim target progress will be reported quarterly at WAMM Boards.

Legally binding Environment Act target: Reduce the use of public water supply in England per head of population by 20% from the 2019 to 2020 baseline reporting year figures, by 31 March 2038

Interim target: Reduce the use of public water supply in England per head of population by 9% by 31 March 2027 and 14% by 31 March 2032, from a 2019 to 2020 baseline.

Monitoring of the water demand target is ongoing and forms part of the Environment Agency's Annual Review of Water Resource Management Plans (WRMPs). The monitoring of government interventions will take place following the policies coming into effect. Any future consultations will consider how a policy to reduce demand could be appropriately monitored and future impact assessments will provide details on evaluation metrics.

As the long-term target uses the same monitoring mechanisms as the interim targets, they are discussed together here.

2024 to 2025 monitoring progress update

The latest Environment Agency Annual Review of WRMPs for the financial year 2023 to 2024 shows that demand has been reduced by 3.6% from the 2019 to 2020 baseline. Government expects that the Environment Agency Annual Review of WRMPs for 2024 to 2025, expected in September 2025, will provide an updated figure as part of the business-as-usual reporting cycle.

What the data show

The Figure 14 shows the percentage demand reduction against the 2019 to 2020 baseline for all annual reviews of WRMPs post the target being set. The annual fluctuations can be linked to changes in water use patterns following the pandemic and variability in annual weather patterns.

Figure 13: Change in public water supply per person since 2019 to 2020

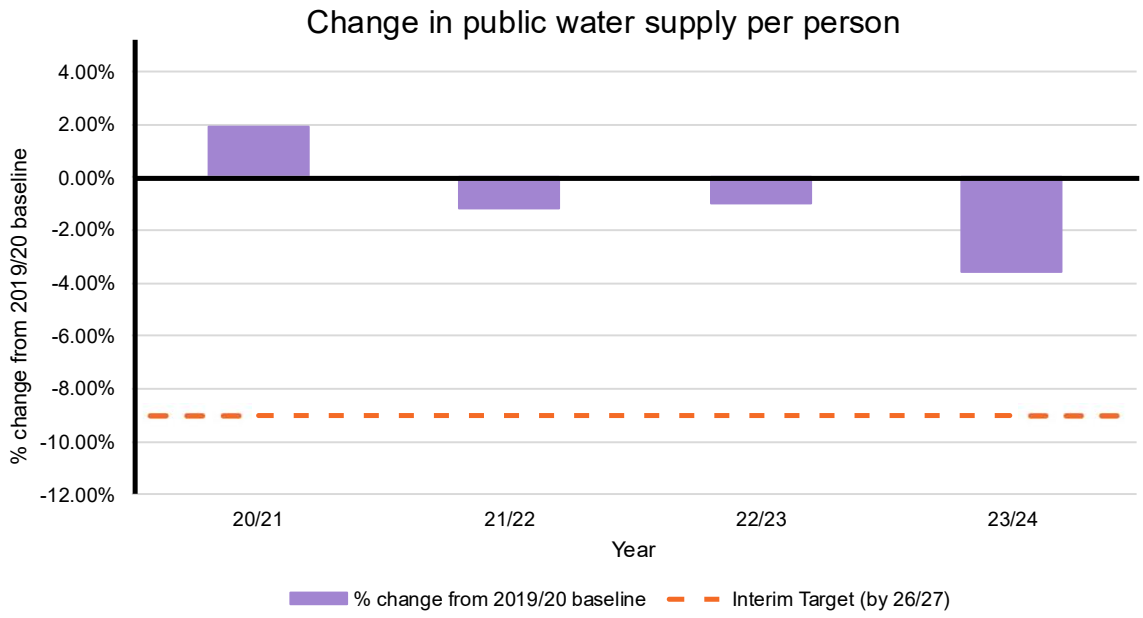

Figure 13 shows the change in public water supply based on a 2019 to 2020 baseline figure with light purple bars representing historical data. The dashed orange bar represents the interim target to be achieved by 2026 to 2027 financial year.

The Environment Agency's review of draft WRMPs showed that full delivery of water companies WRMPs would see the target exceeded by 2% with a 22% reduction from the baseline by 2038. The dependencies on delivery can be seen in further detail in the review.

Understanding this metric

The water demand target measures the distribution input of water (volume of water put into supply to meet demand, including leakage, household and non-household water consumption) divided by the number of people in the population – as set out in the Environmental Targets (Water) (England) Regulations 2023. Distribution input is already regularly reported by water companies to both the Environment Agency and Ofwat on an annual basis. These data can also be broken down further to their component uses, household consumption, leakage and non-household consumption.

Population data are also reported by water companies, based on an agreed methodology in the Environment Agency Water Resources Planning Guidelines. The level of demand reduction will develop over time as water companies deliver their Water Resources Management Plans and government interventions are implemented. Water companies and the wider sector will continue to need to work together to mitigate against increased water

demands from future extreme weather events (such as drought and freeze-thaw events that can cause leaks) and population growth.

Interim target: Reduce leakage by 20% by 31 March 2027 and by 30% by 31 March 2032, from a 2017 to 2018 baseline.

The above leakage target is an interim target to set government on the trajectory to meet the legally binding water demand target. It measures the reduction of leakage against 2017 to 2018 baseline. Water companies previously made a public interest commitment to halve leakage by 2050; both the water demand target and the interim target were created in alignment with this.

Water companies set out how they will reduce leakage in their 5 yearly WRMPs. Progress on their projected leakage reduction is then monitored as part of the Environment Agency's Annual Review process.

2024 to 2025 monitoring progress update

This target will continue to be monitored through the Environment Agency's Annual Reviews of WRMPs reported by water companies. Government will also work with Ofwat to manage companies who fail to meet their leakage targets.

What the data show

When measuring progress in leakage reduction against the Water Demand Target baseline, the latest Environment Agency annual review shows that total leakage in the UK was 2,690 Ml/d, meaning it has decreased by 13.6% from the 2017 to 2018 baseline to date. Water companies are projecting to exceed both the interim targets and the longer term 2050 projection reaching 26% reduction by 2027, 34% by 2032 and 63% reduction by 2050.

Figure 14: Change in water leakage levels since 2019 to 2020, based on a 2017 to 2018 baseline

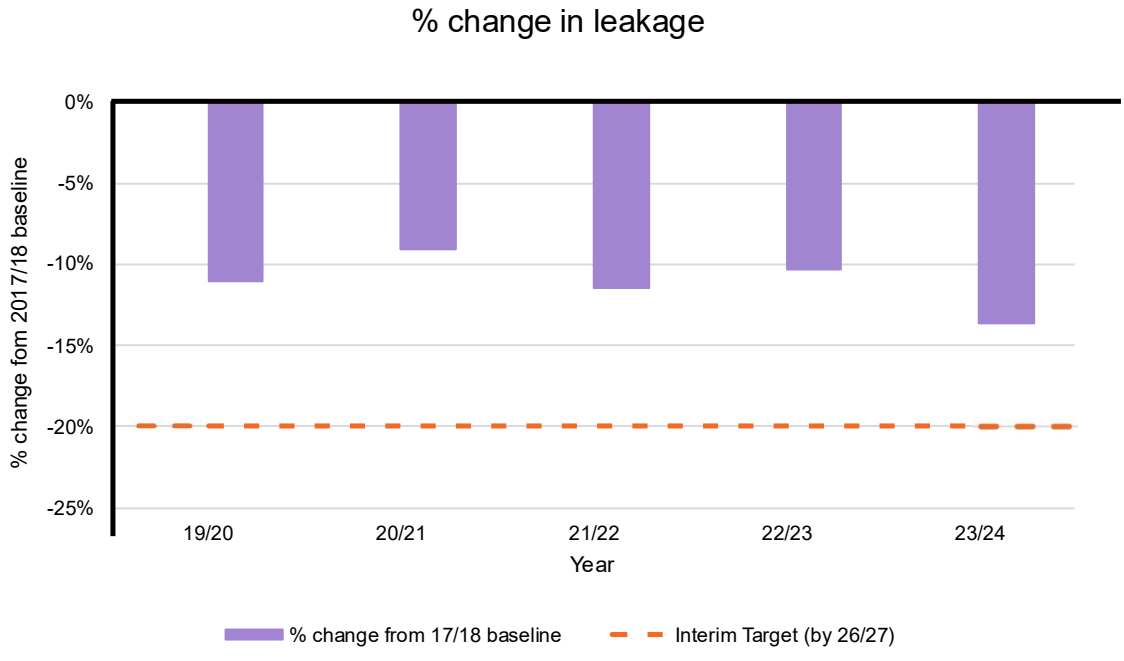

Figure 14 shows the change in water leakage levels, based on a 2017 to 2018 baseline figure (used to determine progress against the statutory Water Demand Target) with light purple bars representing historical data. The dashed orange bar represents the interim target to be achieved by 2026 to 2027 financial year.

The above graph shows fluctuation in the percentage reduction against the leakage target. Although projections show that there will be a continued leakage reduction government will closely monitor water company performance alongside regulators to ensure leakage reduces as projected.

Understanding this metric

Leakage has fluctuated since the 1990s and remained almost the same for 8 years until 2019. Looking at progress against the Water Demand Target baseline, leakage across England decreased by 13.6% in 2023 to2024, which is the lowest leakage level reported over 2 decades. Further information on this metric and historical levels of leakage is provided in The EA's Annual Review of WRMPS Water UK's A Leakage Routemap to 2050.

Goal 4: Managing exposure to chemicals and pesticides

There are no legally binding Environment Act targets linked to this area.

Improving our use of natural resources

Goal 5: Maximising resources, minimising waste

Legally binding Environment Act targets:

1. By 31 December 2042, ensure that the total mass of residual waste excluding major mineral wastes in a calendar year does not exceed 287 kilograms per person.

Interim targets:

1. By 31 January 2028, the total mass of residual waste excluding major mineral wastes in the most recent full calendar year does not exceed 437 kilograms per person.
2. By31 January 2028, ensure that the total mass of residual waste excluding major mineral waste in the most recent full calendar year does not exceed 25.5 million tonnes.
3. By 31 January 2028, ensure that the total mass of residual municipal waste in the most recent full calendar year does not exceed 333 kilograms per person.
4. By 31 January 2028, ensure that the total mass of residual municipal food waste in the most recent full calendar year does not exceed 64 kilograms per person.
5. By 31 January 2028, ensure that the total mass of residual municipal plastic waste in the most recent full calendar year does not exceed 42 kilograms per person.
6. By 31 January 2028, ensure that the total mass of residual municipal paper/card waste in the most recent full calendar year does not exceed 74 kilograms per person.
7. By 31 January 2028, ensure that the total mass of residual municipal metal waste in the most recent full calendar year does not exceed 10 kilograms per person.
8. By 31 January 2028, ensure that the total mass of residual municipal glass waste in the most recent full calendar year does not exceed 7 kilograms per person.

How legally binding Environment Act targets and interim targets are monitored

Target	Type of data (direct, related or unavailable)	What data are available
By 31 December 2042, ensure that the total mass of residual waste excluding major mineral wastes in a calendar year does not exceed 287 kilograms per person. **Includes 8 interim targets set out above.**	Direct	Data for long-term and interim targets have been published for the calendar years 2019 to 2023. These will be updated annually with an approximately 15-month reporting lag.

Legally binding Environment Act target: By 31 December 2042, ensure that the total mass of residual waste excluding major mineral wastes in a calendar year does not exceed 287 kilograms per capita

Estimates of residual waste excluding major mineral wastes generated in England have been published by Defra for the 2019 to 2023 calendar years. As only 5 years of data are available, it is too early to identify trends. This metric will be reported annually, noting that progress towards the target is expected to be reported with a lag (approximately 15 months).

Figures reporting the 2024 calendar year are anticipated to be published in the next update to Estimates of Residual Waste and Municipal Residual Waste in England, provisionally scheduled for Spring 2026.

This metric also corresponds with interim targets to ensure that by 31 January 2028, the total mass of residual waste excluding major mineral wastes in the most recent full calendar year does not exceed:

a) 437 kilograms per person in England
b) 25.5 million tonnes

In addition to the published statistics under development, the Outcome Indicator Framework (OIF) J4 indicator reports residual waste excluding major mineral wastes for 2019 to 2022 using the same metric and method as used for reporting progress against the targets. For the purpose of showing historical trends, OIF J4 reports estimates of residual waste excluding major mineral waste for the 2010 to 2019 calendar years, which were calculated using a previous metric and method. Comparisons between 2010 to 2019 figures and 2019 to 2023 figures should be made with care.

2024 to 2025 monitoring progress update

Figures for the 2023 calendar year have been published for the first time in the Estimates of Residual Waste and Municipal Residual Waste in England statistical notice, directly reflecting and reporting progress against the target metrics. These figures are published as official statistics under development (formerly known as experimental statistics). The assumptions and limitations of the estimates are described in more detail in the methodology document published alongside the notice, and it is expected that in the future the data will be improved through the introduction of Digital Waste Tracking.

What the data show

In 2023, the estimated amount of residual waste excluding major mineral wastes was 558.2 kilograms per person, representing a decrease of 0.1% from 2022 (558.8 kilograms per person), and a decrease of 2.9% from 2019 (574.8 kilograms per person).

In tonnes, the amount of residual waste excluding major mineral waste in 2023 stood at 32.2 million tonnes. This represented an increase of 0.9% from 2022 (31.9 million tonnes), and a decrease of 0.4% from 2019 (32.3 million tonnes).

Figure 15: Residual waste excluding major mineral wastes, measured in kilograms per person

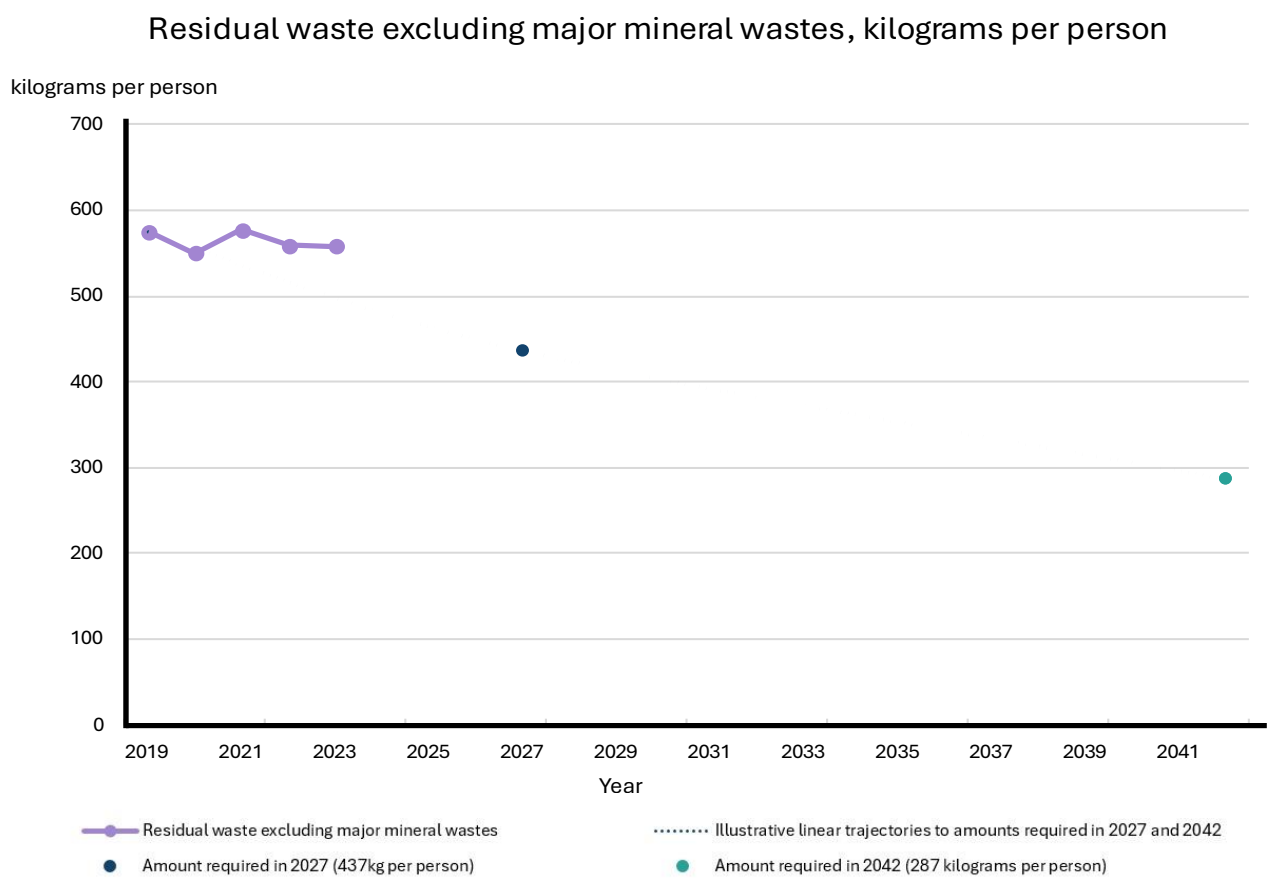

Figure 15 shows the historical data behind levels of residual waste excluding major mineral wastes per person (purple) relating to the residual waste reduction Environment Act target, with an illustrative linear trajectory depicting the progress required to reach the interim target of 437 kilograms per person (dark blue) in 2027, and the long-term Environment Act target of 287 kilograms per person (turquoise) in 2042.

It is too early to identify trends in the data. However, it is anticipated that residual waste excluding major mineral wastes both in tonnes and kilograms per person will remain at a similar level to that in 2019 until policies to reduce this waste are introduced. The packaging reforms are anticipated to achieve the majority of the reduction required to meet the interim targets, and additional policies to close any gaps will be identified through the Circular Economy Strategy for England and work carried out by the wider circular economy programme in Defra. The reported figures for 2019 to 2023 are consistent with this as the packaging reforms have not yet been introduced.

Understanding this metric

Residual waste is defined as waste that is not recycled or reused, including material that is too degraded or contaminated for these purposes. It can originate from households and commercial businesses, but also from sectors such as:

- construction and demolition
- agriculture, forestry, and fishing
- mining and quarrying
- industry

Residual waste, when collected from households or commercial businesses, is often termed ‘black bag’ or ‘black wheelie bin’ waste. It is typically treated by methods other than recycling or reuse.

For the purpose of reporting progress against the targets, a treatment-based definition of residual waste is used, where residual waste generated in England means any waste originating in England that is either:

- sent to landfill in the United Kingdom
- put through incineration in the United Kingdom
- used in energy recovery in the United Kingdom
- sent outside the United Kingdom for energy recovery

This means that only residual waste originating in England, regardless of where it is treated, is included in the estimates, whereas waste treated in England that originated elsewhere is excluded. Ferrous metals removed from incinerator bottom ash that are then sent for treatment other than further residual end-of-life treatment are also excluded from the estimates.

For the purpose of reporting progress against the targets, waste put through incineration includes Energy from Waste (incineration with energy generation in the form of electricity or heat). Waste used in energy recovery other than conventional Energy from Waste is also included in the definition of residual waste. This includes any waste treatment (including gasification and pyrolysis but excluding anaerobic digestion) that generates energy such as electricity or heat or converts the waste into other energy products such as fuels and substitute natural gas.

Table 2: Summary of the calculation method for the estimates of residual waste

These calculations are used to estimate:

- residual waste excluding major mineral wastes
- municipal residual waste

Treatment method	Data source	Add to estimate	Subtract from estimate
Sent to landfill	Waste Data Interrogator (waste received and removed; Environment Agency)	Waste sent to landfill in England Waste originating from England sent to landfill outside England	Waste sent to landfill in England originating from outside England
Put through incineration (including Energy from Waste)	Waste Data Interrogator (waste received and removed), incinerator monitoring reports (Environment Agency)	Waste put through incineration in England Waste originating from England put through incineration outside England	Waste put through incineration in England that likely originated from outside England Ferrous metals removed from bottom ash sent for recycling or recovery.
Sent outside the UK for energy recovery	International Waste Shipments exported from England (Environment Agency)	Waste sent outside the UK for energy recovery	Nothing to subtract in this calculation

Where estimates are reported in kilograms per person, this is calculated by converting tonnages to kilograms and dividing by mid-year population estimates for England (Office for National Statistics).

The metric excludes major mineral wastes. These are the predominant and largely inert wastes typically arising from the construction and demolition sector, such as concrete, bricks and sand, as well as soils and other mineral wastes from excavation and mining activities. Tonnages of waste classed as major mineral wastes are identified in the data through a set of List of Waste (LoW) codes.

The metric uses Environment Agency data of tonnages sent to landfill, put through incineration, and sent overseas for energy recovery. These datasets rely on data returns from waste companies and/or exporters and are produced with a lag. This is due to the time needed to cleanse the data and carry out quality assurance, as well as the administrative time taken to follow-up and chase late or non-compliant respondents. For these reasons, data for the 2024 calendar year are not yet available.

Further detail on the methodology underlying the figures has been published alongside Defra's Estimates of Residual Waste and Municipal Residual Waste in England statistics release. This includes further information on which LoW codes are considered major mineral wastes.

Interim target: By 31 January 2028, ensure that the total mass of residual municipal waste in the most recent full calendar year does not exceed 333kg per head of population in England

Estimates of residual municipal waste generated in England have been published by Defra for the 2019 to 2023 calendar years. As only 5 years of data are available, it is too early to identify trends. This metric will be reported annually, noting that progress towards the target is expected to be reported with a lag (approximately 15 months) for the same reasons as those given for the long-term target. Figures reporting the 2024 calendar year are anticipated to be published in the next update to Estimates of Residual Waste and Municipal Residual Waste in England, provisionally scheduled for Spring 2026.

2024 to 2025 monitoring progress update

In addition to the monitoring progress updates outlined for the long-term target, there is ongoing commissioned research into the origin of several chapter 19 waste codes. This research will improve the accuracy of the reporting metric for this target, which defines municipal waste by a list of waste codes.

The commissioned research aims to update these assumptions and provide new evidence for what proportion of chapter 19 codes may have originated from municipal sources. Applying these proportions will help to remove any non-municipal residual waste from the municipal residual waste metric. This aims to improve the accuracy of the reporting metric and help ensure that progress towards this target means a reduction in municipal residual waste as opposed to material from other waste streams.

What the data show

In 2023, the estimated amount of municipal residual waste was 452.4 kilograms per person, representing a decrease of 2.7% from 2022 (464.8 kilograms per person), and a decrease of 3.5% from 2019 (468.8 kilograms per person). Figure 16 shows the amount of municipal residual waste in England for 2019 to 2023 in kilograms per person.

Figure 16: Municipal residual waste, measured in kilograms per person

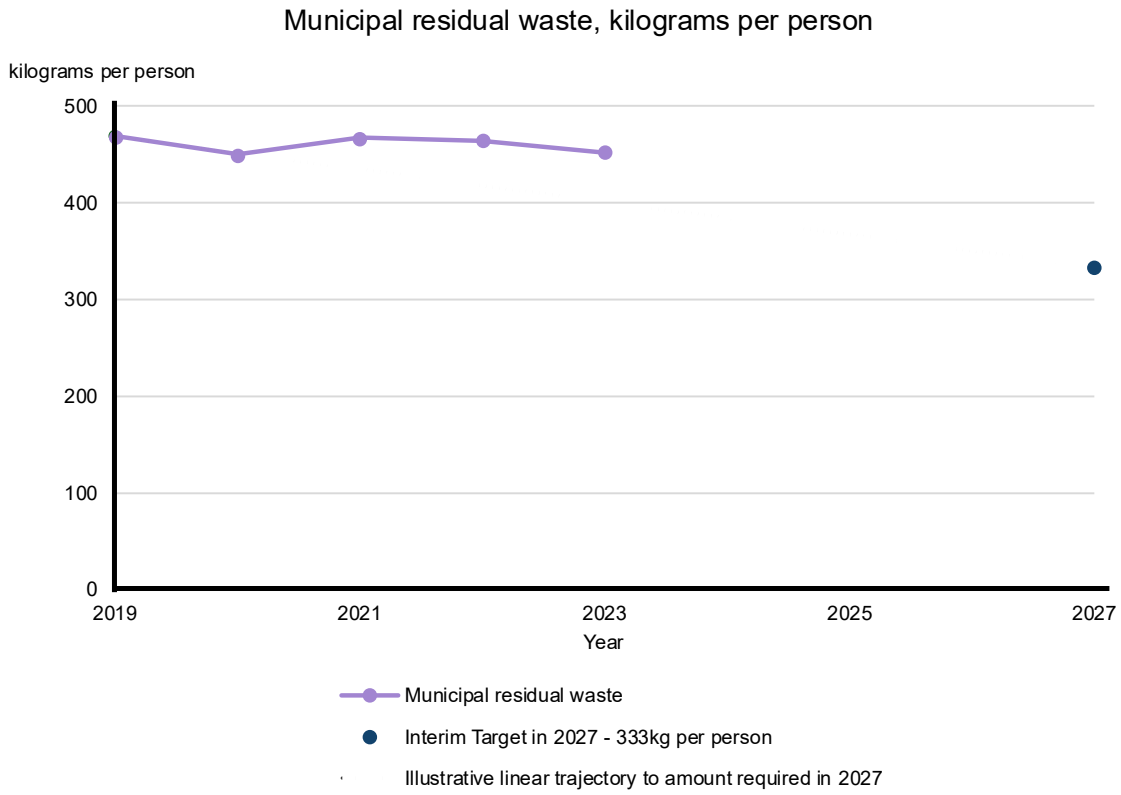

Figure 16 shows the historical data behind municipal residual waste levels (dark blue) relating to the interim waste target, with an illustrative linear trajectory depicting the progress required to reach the interim target of 333 kilograms per person (turquoise) in 2027.

As with the long-term target, it is too early to identify trends in the data, though it is anticipated that residual municipal waste will remain at a similar level to that in 2019 (the interim targets baseline year) until policies to reduce this waste are introduced. The packaging reforms are anticipated to achieve the majority of the reduction required to meet the target, and additional policies to close any gaps will be identified through the Circular Economy Strategy for England and work carried out by the wider circular economy programme in Defra. The reported figures for 2019 to 2023 are consistent with this as the packaging reforms have not yet been introduced.

Understanding this metric

This metric uses the same definition of residual waste as in the long-term target metric. It also uses the same data sources.

Municipal waste includes both waste from households and waste from other sources which is similar in nature and composition to waste from households, including

“household-like” waste generated by businesses. Tonnages of waste classed as municipal are identified in the data through a set of LoW codes.

Further detail on the methodology underlying the figures has been published alongside Defra’s Estimates of Residual Waste and Municipal Residual Waste in England statistics release. This includes further information on which LoW codes are considered municipal waste.

Interim target: By 31 January 2028, ensure that the total mass of residual municipal food, plastic, paper and card, metal, glass waste in the most recent full calendar year does not exceed a given figure of kilograms per head of population in England

Estimates of residual waste generated in England have been published by Defra for the 2019 to 2023 calendar years. This includes estimates of residual municipal:

- food waste
- plastic waste
- paper and card waste
- metal waste
- glass waste

As only 5 years of data are available, it is too early to identify trends. These metrics will be reported annually, noting that progress towards the targets is expected to be reported with some lag (approximately 15 months), for the same reasons as given for the other targets. Figures reporting the 2024 calendar year are anticipated to be published in the next update to Estimates of Residual Waste and Municipal Residual Waste in England, provisionally scheduled for Spring 2026.

2024 to 2025 monitoring progress update

In addition to the monitoring progress updates outlined for the other target, Defra have ongoing commissioned research to obtain up-to-date estimates of material composition in the residual municipal waste stream. The outputs of this research will allow for more accurate estimates of the amount of food, plastic, paper and card, metal and glass waste in residual municipal waste.

What the data show

Figure 18 and Table 3 show the amount of municipal residual waste in England from 2019 to 2023 in kilograms per person for the different material streams including food, paper and card, plastic, metal and glass. Note that these material streams do not sum to total municipal residual waste as this would include other materials such as textiles and waste electricals.

Figure 17: Municipal residual waste by material streams, measured in kilograms per person in England, 2019 to 2023

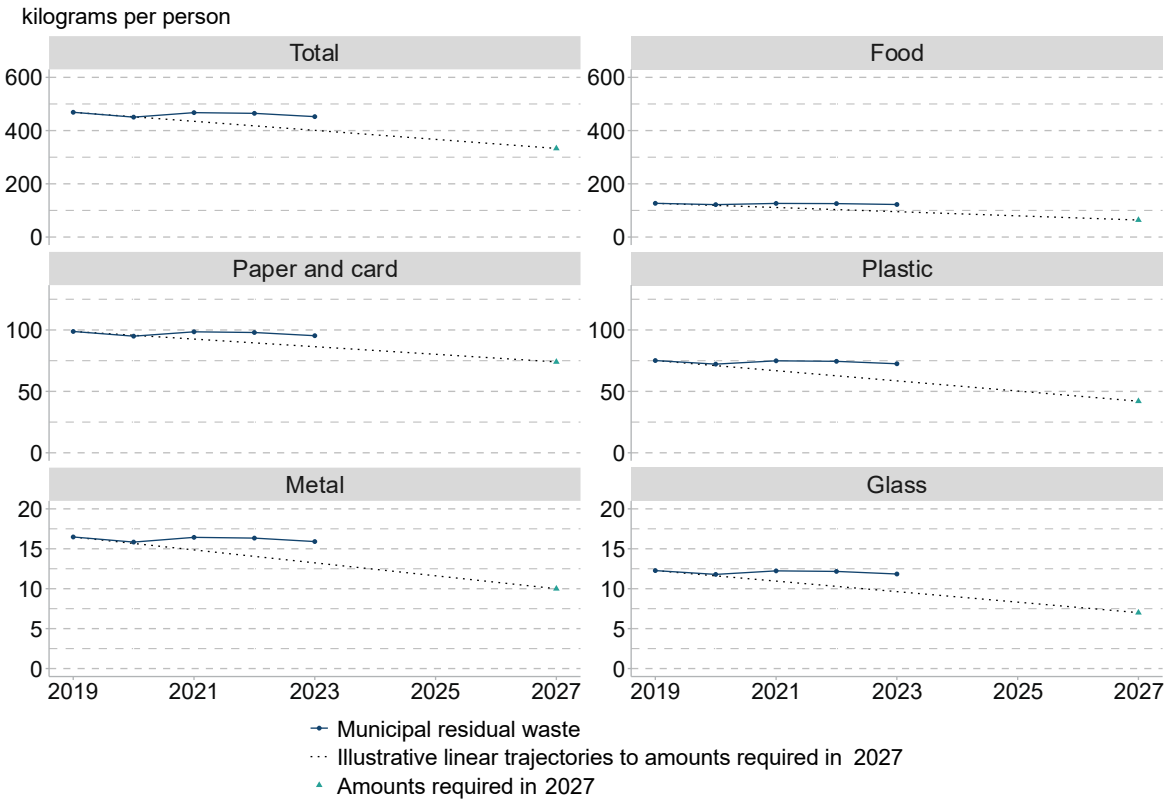

Figure 17 shows the historical data behind residual waste by interim targets material streams (food, paper and card, plastic, metal and glass), kilograms per person in England from 2019 to 2023, as well as illustrative linear trajectories to reach the required interim targets in 2027.

Table 3: Municipal residual waste by types of material in England from 2019 to 2023, measured in kilograms per person

Municipal residual waste	2019	2020	2021	2022	2023
Food	126.7	121.8	126.4	125.6	122.3
Paper and card	98.8	94.9	98.5	97.9	95.3
Plastic	75.1	72.2	74.9	74.5	72.5

Municipal residual waste	2019	2020	2021	2022	2023
Metal	16.5	15.8	16.4	16.3	15.9
Glass	12.3	11.8	12.2	12.2	11.8
Total	464.8	450.5	467.4	464.8	452.4

Note: the 'Total' row in the table is an estimate of total municipal residual waste for that year. The material streams in the table do not sum to total municipal residual waste as this includes other materials such as textiles and waste electricals.

As with other targets, it is too early to identify trends in the data, though it is anticipated that residual municipal food, plastic, paper and card, metal, and glass waste will remain at a similar level to that in 2019 (the interim targets baseline year) until policies to reduce this waste are introduced. The packaging reforms are anticipated to achieve the majority of the reduction required to meet the interim targets, and further work will be undertaken to identify and implement policies to close any gaps. The reported figures for 2019 to 2023 are consistent with this as the packaging reforms have not yet been introduced.

Understanding this metric

These metrics use the same definition of residual waste and municipal waste as in the other targets. To obtain estimates of the amount of food, plastic, paper and card, metal and glass in the residual municipal waste stream, scale factors are applied to the total tonnage of residual municipal waste. For example, if food waste comprises 27% of residual municipal waste and there were 100,000 tonnes of residual municipal waste, then there would be 27,000 tonnes of residual municipal food waste (not actual tonnage figures.) These scale factors are based on the latest available composition analysis, which was carried out by WRAP for the 2017 calendar year and are held flat for the 2019 to 2023 calendar years in the absence of more recent data. Defra have commissioned research to provide updated composition analysis.

Further detail on the methodology underlying the figures has been published alongside Defra's Estimates of Residual Waste and Municipal Residual Waste in England statistics release. This includes further information on the assumed composition of residual municipal waste.

Goal 6: Using our resources from nature sustainably

There are no legally binding Environment Act targets linked to this area.

Improving our mitigation of climate change

Goal 7: Mitigating and adapting to climate change

There are no legally binding Environment Act targets linked to this area.

Goal 8: Reduced risk of harm from environmental hazards

There are no legally binding Environment Act targets linked to this area.

Improving our biosecurity

Goal 9: Enhancing biosecurity

There are no legally binding Environment Act targets linked to this area.

Enhancing beauty and our engagement with the natural environment

Goal 10: Enhancing beauty and our engagement with the natural environment

There are no legally binding Environment Act targets linked to this area.

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