



Department  
for Environment  
Food & Rural Affairs

# **25 Year Environment Plan Annual Progress Report**

**April 2021 to March 2022**

Presented to Parliament pursuant to Section 9 of the Environment Act 2021



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# Executive Summary

This is the government's 4th annual report since the 25 Year Environment Plan was published in 2018. This report spans a year in which the Environment Act 2021 came into force, establishing the statutory framework for the government to deliver its environmental ambitions. We published a Nature Recovery Green Paper and the Net Zero Strategy. We also confirmed the investment of £5.2 billion to better protect homes across England from flooding.

Over the past year, we passed the Environment Act 2021, which will protect and enhance our environment for future generations. The successful implementation of the Act will clean up the country's air, restore natural habitats, increase biodiversity, reduce waste, and make better use of our resources. These changes will be driven by new legally binding environmental targets which are being consulted on and will be set later in 2022, followed by interim targets and delivery pathways in the Environmental Improvement Plan.

The Act also provides significant legal duties for public bodies to consider environmental principles in policymaking, increase powers for government to fine for illegal waste and improve the links between local and national planning through Biodiversity Net Gain and Local Nature Recovery Strategies.

These changes will be enforced by a new, independent Office for Environmental Protection (OEP) which will hold government and public bodies to account on their environmental obligations. Their role is to monitor, critically assess and report on governments' progress in improving the natural environment in line with their Environmental Improvement Plans (EIPs), goals and targets, as well as investigate alleged failures to comply with environmental law.

The Environment Act designated the 25 Year Environment Plan as the first Environmental Improvement Plan, recognising the importance of the direction of travel it had already set, and bolstering it with new long-term targets set under the Act. The first revised EIP will be published in 2023. It will set out in one place for the first time the action that has been taken over the last five years, and the action that will be taken to drive progress towards the goals, including how our statutory targets and non-statutory commitments are helping to drive progress across the public and private sector.

In the Autumn, the government published its 3-year Spending Review. The settlement continues to support delivery against the 25 Year Environment Plan goals for nature recovery and the new legally binding target to halt biodiversity loss by 2030. The settlement will also play an important role in helping us to deliver net zero by expanding the Nature for Climate Fund on peat restoration and woodland creation and management.

The Spending Review also confirmed the investment of £5.2 billion to better protect 336,000 properties across England from flooding over the lifetime of the programme.

The progress report covers the period from April 2021 to March 2022 and has been structured in the following sections:

- an Executive Summary that provides an overview of progress toward the ambitions of the 25 Year Environment Plan across legislation, policy design and delivery, and goals
- qualitative assessment of delivery progress by outcome indicator
- detailed view of delivery action for each of the 25 YEP Goals and in demonstrating global leadership, setting out the ambition a summary of progress over the past year and our priorities over the forthcoming year
- update on the use of natural capital, outcome indicators and ecosystem assessments

## Progress over the past year on 25 YEP delivery

Delivery of the 25 Year Environment Plan is monitored across a range of measures. For example, the status of projects and programmes and whether they are on track against key milestones or trends in outcome indicators and whether the condition of the natural environment is improving. These assessments are used as part of government management of performance against each of the 25 YEP Goals through the Defra Environment Committee and cross-government 25 Year Environment Plan Board, alongside governance delivery boards for all the major projects and programmes in place.

Table 1 provides a summary of the actions we have taken over the past year. These have been grouped to reflect their contribution towards our long-term ambitions. This covers actions having an impact on environmental improvement now, and those actions that are enabling environmental improvement in the future.

Table 1: Summary of key progress by goal

Goal	Key progress over the past year
<b>Clean air</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>• introduced new legislation that restricts the sale of the most polluting fuels used in domestic burning</li> <li>• supported local authorities to launch Clean Air Zones in three cities to reduce nitrogen dioxide concentrations, to safeguard public health, and to support regional economic growth</li> <li>• granted local authorities more than £11 million to implement measures that benefit schools, businesses, and communities by reducing the impact of air quality on people's health</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>• reviewing and revising the National Atmospheric Pollution Control Plan that sets out the policies and measures being considered to achieve compliance with 2030 emissions targets</li> </ul> <p>developing National and Local Air Quality Strategy</p>

	<ul style="list-style-type: none"> <li>• developing legally binding targets through the Environment Act 2021</li> <li>• consulted on review of Local Air Quality Management Policy pre-publication of guidance</li> <li>• published consultation response on reducing ammonia emissions from urea fertilisers</li> <li>• consulted on designation of National Highways as a relevant public body to collaborate with local authorities on improvements to local air quality</li> </ul>
<b>Clean and plentiful water</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>• expanded the Catchment Sensitive Farming programme to cover all of England. Since the CSF was launched, farmers have implemented over 75,000 mitigation measures to reduce water pollution</li> <li>• supported projects through the Water and Abandoned Metal Mines programme, treating over 7.4 billion litres of mine water each year and preventing 800 tonnes of metals from polluting rivers</li> <li>• supported projects through the Water Environment Investment Fund that aim to deliver 674 kilometres of enhanced water environment and 219 kilometres of enhanced protected sites.</li> <li>• supported projects through the Water Environment Grant, with a forecast 800 – 1,000 kilometres of enhanced water bodies to date</li> <li>• designated 2 new bathing waters sites in England. 99% of bathing waters in England passed water quality standards after tests at 400+ designated sites</li> <li>• launched the Woodlands for Water project to encourage support for woodland creation within river corridors</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>• introducing a duty through the Environment Act to ensure water companies secure a progressive reduction in the adverse impacts of discharges from storm overflows. New duties will also require the government to publish a plan to reduce sewage discharges from storm overflows and report to Parliament on the progress towards implementing the plan</li> <li>• consulted on the Water Industry National Environment Programme</li> <li>• published the Strategic Policy Statement for Ofwat's regulation of the water sector</li> <li>• developing legally binding targets through the Environment Act 2021</li> <li>• published approach to reducing demand for water such as through mandatory water efficiency labelling</li> <li>• completed consultation response on draft update to River Basin Management Plans including environmental objectives and summary of measures</li> </ul>

	<ul style="list-style-type: none"> <li>published Chalk Stream Restoration Strategy through the Chalk Stream Restoration Group that Defra sits on, setting out the issues threatening chalk streams and recommendations towards recovery and good health</li> </ul>
<b>Thriving plants and wildlife (Terrestrial)</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>launched 5 more landscape-scale nature recovery projects and the G7 Nature Recovery Legacy Project in Cornwall.</li> <li>completed the Back from the Brink programme with 96 priority species moving towards recovery</li> <li>created new Somerset Wetlands super National Nature Reserve that will protect 6,140 hectares of precious habitats.</li> <li>supported projects through the Species Recovery Programme to act on priority and threatened species</li> <li>delivering the Green Recovery Challenge Fund that through round 1 projects has resulted in over 100,000 trees planted and supported at least 459 positions</li> <li>delivering the Natural Environment Investment Readiness Fund that will generate repayable investment from a range of ecosystem services</li> <li>continued support through the Countryside Stewardship scheme to enable farmers and other land managers to create, conserve and restore wildlife habitats, such as grasslands, wildflower meadows and wood pasture</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>published Nature Recovery Green Paper that sets ambition and approach to nature's recovery</li> <li>developing legally binding targets through the Environment Act 2021</li> <li>published England Trees and Peat Action Plans with vision to at least treble tree planting by end of Parliament and manage, protect, and restore peatlands, respectively</li> <li>published Pollinator Action Plan to help pollinators thrive</li> <li>declared a series of super National Nature Reserves to show how landscape-scale conservation helps wildlife thrive and builds resilience to climate change</li> <li>consulted on Biodiversity Net Gain for nature's recovery, to improve the process for developers, and create better places.</li> <li>completed Local Nature Recovery Strategy Pilots that assessed spatial strategies to establish priorities and map proposals for action and published evaluation</li> <li>consulted on approach to beaver reintroductions and management</li> </ul>
<b>Thriving Plants and Wildlife (Marine)</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>supported projects through the £500 million Blue Planet Fund that will enable developing countries to protect the marine environment and reduce poverty</li> </ul>

	<ul style="list-style-type: none"> <li>implemented measures in Marine Protected Areas to protect sensitive features from damaging fishing gear</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>consulted on UK Marine Strategy Part 3 that proposes measures to help achieve Good Environmental Status</li> <li>published 6-year report on progress with Marine Plans to support protection of marine environment</li> <li>published response to Benyon review for Highly Protected Marine Areas and started identifying sites</li> <li>consulted on Offshore Wind Enabling Action Programme guidance on compensatory measures within Marine Protected Areas</li> <li>delivering the Poseidon Project on environmental risks and tools for future offshore wind planning</li> <li>developing English Seabird Conservation Strategy</li> </ul>
<b>Reduced risk of harm from environmental hazards</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>in the first year of the £5.2 billion 2021 – 2027 Capital Investment Programme, over 32,000 homes were better protected. All schemes supported by £170 million of additional funding to accelerate shovel ready flood defence projects, are now underway</li> <li>supporting 25 local areas through the Flood and Coastal Resilience Innovation Programme that is acting to protect frequently flooded communities</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>published an assessment of the 2015 – 2021 Flood and Coastal Defence Capital Investment Programme. 314,000 homes better protected from flooding, saving economy more than £28 billion in avoided damages over lifetime of the supported projects</li> <li>published 1-year Flood and Coastal Erosion Risk Management (FCERM) Strategy Action Plan and FCERM Strategy Roadmap to 2026</li> </ul>
<b>Using resources from nature more sustainably and efficiently</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>Committed over £270 million through the Farming Innovation Programme to support projects that transform productivity and enhance environmental sustainability in the agricultural and horticultural sectors, whilst driving the sectors towards net zero</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>consulted on the draft Joint Fisheries Statement and Fisheries Management Plans that will be key to delivering sustainable and well managed fisheries</li> <li>introduced UK Seafood Fund to ensure best science, research, and technology for fisheries management</li> <li>announced fisheries byelaws in offshore waters</li> </ul>



	<ul style="list-style-type: none"> <li>established government / industry Timber in Construction working group to develop roadmap to safely increase timber use in construction</li> <li>published National Food Strategy to make the food system healthier, sustainable, resilient, and accessible</li> <li>set out priorities for the Environmental Land Management scheme, co-working with farmers on the design of initiatives such as the Sustainable Farming Incentive and Landscape Recovery scheme</li> </ul>
<b>Enhanced beauty, heritage, and engagement with the natural environment</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>supported over 1,000 projects through the Farming in Protected Landscapes Programme to enable people to discover, enjoy and understand the landscape and cultural heritage in Areas of Outstanding Natural Beauty and National Parks</li> <li>gone live with 7 test and learn sites through the Green Social Prescribing Programme with the Department of Health and Social Care, with 1,500 referrals to nature-based activities given so far</li> <li>completed Children and Nature Programme with the Department for Education, supporting 270 schools to develop skills and confidence of staff, improving school grounds for learning and wildlife</li> <li>opened a further 169 miles of the England Coast Path, taking the total opened to 550 miles, with a further 1,529 miles of paths having been approved</li> <li>supported the planting of 130,000 urban trees and a further 44,000 trees through most recent funding</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>published response to Julian Glover's Landscapes Review, setting out plans for landscapes, how to improve access to nature, and ensure that landscapes are key to tackling climate change</li> <li>assessing proposals for 2 new AONB's and 2 extensions to existing AONB's</li> <li>carrying out an 'All England Assessment' on potential for further AONB and National Parks designations.</li> <li>developing an accreditation scheme for national green urban landscapes</li> <li>launched 15 Principles of Good Green Infrastructure and beta Green Infrastructure Mapping database</li> <li>developing Rights of Way Reforms legislation to preserve historic rights of way</li> </ul>
<b>Mitigating and adapting to climate change</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>funded 5 projects through the first round of the Peatland Restoration Grant Scheme to restore over 8,000 hectares of peatland</li> </ul>

	<ul style="list-style-type: none"> <li>• funded 10 projects through the Peatland Discovery Grants to help groups develop new projects seeking to restore peatland systems to a natural and healthy state at a landscape scale</li> <li>• launched a range of grants to support woodland creation on all scales</li> <li>• tree planting has increased to c.2700 hectares with over half a million trees planted outside of woodlands</li> <li>• launched a series of forestry innovation funds aimed at encouraging increased woodland management to improve the ecological condition of woodlands and their resilience to climate change</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>• published Net Zero Strategy that sets policies and proposals to decarbonise all sectors of UK economy towards net zero by 2050</li> <li>• published England Trees and Peat Action Plans with vision to manage, protect, and restore peatlands and to at least treble tree planting by end of Parliament</li> <li>• published response to Climate Change Committee's Progress Report on Adapting to Climate Change and UK's 3<sup>rd</sup> Climate Change Risk Assessment</li> <li>• announced support for local authorities to implement separate food waste collections</li> <li>• supported research and innovation programme to assess decarbonisation options for Defra sectors</li> <li>• reviewing domestic F-gas legislation towards developing proposals to meet the Kigali 2036 target.</li> <li>• established the UK Blue Carbon Evidence Partnership to address key research questions related to blue carbon</li> </ul>
<b>Minimising waste</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>• introduced a plastic packaging tax on packaging that does not contain at least 30% recycled content</li> <li>• increased single-use carrier bag charge from 5 pence to 10 pence and extended to all retailers</li> <li>• supported local authorities in purchasing new litter bins and to help towards tackling fly-tipping</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>• developing legally binding targets through the Environment Act 2021</li> <li>• published consultation response on Extended Producer Responsibility for Packaging</li> <li>• consulted on proposals to ban commonly littered single-use plastic items such as plastic plates</li> <li>• published call for evidence on commonly littered single-use items</li> </ul>

	<ul style="list-style-type: none"> <li>• consulted on Deposit Return Scheme for drinks containers</li> <li>• consulted on proposals to improve consistency in recycling from households, businesses, and others</li> <li>• consulted on mandatory digital waste tracking</li> <li>• consulted on waste carrier, broker, dealer reforms</li> <li>• published Zero Avoidable Waste in Construction route map</li> <li>• published response to proposed Standards for bio-based, biodegradable, and compostable plastics</li> <li>• published Evaluation Plan and Indicator Framework of Resources and Waste Strategy and Waste Statistics</li> </ul>
<b>Managing exposure to chemicals and pesticides</b>	<p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>• consulted on an update to the UK National Implementation Plan for the Stockholm Convention on POPs, setting out proposals for “new POPs” and plans to monitor and eliminate them in the future</li> <li>• published response to the Sustainable use of Pesticides: draft National Action Plan consultation</li> <li>• published a chemicals and pesticides provisional framework on regulating chemicals and pesticides</li> <li>• published UK REACH Report and Work Programme</li> </ul>
<b>Enhanced biosecurity</b>	<p>Actions having an impact on environmental improvement now:</p> <ul style="list-style-type: none"> <li>• launched pilot requirement for tree suppliers to source saplings from approved suppliers when applying for tree planting grants</li> <li>• launched 2<sup>nd</sup> round of Local Authority Treescapes Fund to support restoration of ecologically degraded land, including that from tree diseases</li> <li>• launched 5 new pilot Tree Health Grants for farmers to restock and improve woodland after tree health problems</li> <li>• recruited 200 new plant health inspectors</li> <li>• established a new pilot inspectorate for invasive non-native species, carrying out over 400 inspections</li> <li>• releasing biological control agents and other measures to help tackle invasive non-native species</li> </ul> <p>Actions enabling environmental improvement in the future:</p> <ul style="list-style-type: none"> <li>• published independent review of the GB Invasive Non-native Species Strategy to assess its effectiveness in implementation and the approach going forward</li> <li>• published consultation response for the Plant Biosecurity Strategy that sets out actions to tackle plant health pests and diseases</li> <li>• launched the science Centre for Forest Protection to protect the future of forests, woodland, and trees from environmental and socio-economic threats</li> <li>• reviewing Pathway Action Plans for angling, recreational boating, zoos, and horticultural sector</li> </ul>

## Environmental Outcome Indicators

As part of our annual reporting on progress toward the 25 Year Environment Plan, we produce an [Outcome Indicator Framework](#). The framework is a comprehensive set of indicators describing environmental change that relates to the 10 goals within the 25 Year Environment Plan.

The 2022 report includes data for 50 of 66 indicators including statistics for 5 indicators which were newly reported this year. The latest Outcome Indicator Framework update was published in May 2022. The report includes data on environmental trends for 50 of the 66 outcome indicators spanning across 9 of the 10 themes in the Outcome Indicator Framework.

In this year's update report, we update trends for 35 of the indicators reported in 2021, reflecting the most recent available data. The remaining 10 indicators presented in 2021 have not been updated as no new data were available for inclusion in the 2022 report at the time of analysis. This year's update report also includes data for 5 additional indicators newly reported with interim status in 2022:

- C11: Productive seas: status of sensitive fish and shellfish stocks
- G3: Enhancement of green/blue infrastructure
- G6: Environmental attitudes and behaviours
- G7: Health and wellbeing benefits
- K1: Overseas environmental Impacts of UK consumption of key commodities

An online, interactive [dashboard](#) is available as part of the Outcome Indicator Framework, improving transparency and enabling a much greater degree of user interaction by offering direct access to the underlying indicator data.











## Outcome Indicators – quantitative progress assessment

As part of improving our understanding of changes to the natural environment, the 2022 update to the Outcome Indicator Framework includes an assessment of indicator data categorising direction of environmental changes observed over different historical time periods. The assessment categories state whether change is in a favourable direction for meeting environmental goals but does not consider whether any improvements seen are on a sufficient scale for meeting targets.





The short-term assessment reflects an assessment of change over the most recent 5-year period for which data are available. A supporting narrative is provided for each indicator in Section B of the Outcome Indicator Framework report. Summaries of assessment results by each 25 Year Environment Plan Goal are provided later in this report.

Table 2: Short term assessment of change by indicator component

















**Clean Air**





Indicator component	Short term assessment of change	Date range	Percent change*
A1 Emissions of ammonia (NH <sub>3</sub> ) in England	 deterioration	2013-2018	+4.5
A1 Emissions of non-methane volatile organic compounds (NMVOC) in England	 improvement	2013-2018	-5.2
A1 Emissions of fine particulate matter (PM <sub>2.5</sub> ) in England	 improvement	2013-2018	-4.1
A1 Emissions of nitrogen oxides (NO <sub>x</sub> ) in England	 improvement	2013-2018	-22.4
A1 Emissions of sulphur dioxide (SO <sub>2</sub> ) in England	 improvement	2013-2018	-56.3
A3 Concentrations of fine particulate matter (PM <sub>2.5</sub> ) in the air in England	 improvement	2014-2019	-17.3
A4 Rural background concentrations of ozone (O <sub>3</sub> ) in England	 deterioration	2014-2019	+4.9
A5 Roadside nitrogen dioxide (NO <sub>2</sub> ) concentrations in England	 improvement	2014-2019	-27.1
A6 Exceedances of damaging levels of nutrient nitrogen deposition on ecosystems in England	 little or no change	2014-2019	-0.3
A7 Area of land in England exposed to damaging levels of ammonia (NH <sub>3</sub> ) in the atmosphere	 deterioration	2013-2018	+3.6

**Clean and plentiful water**

Indicator component	Short term assessment of change	Date range	Percent change*
B2 Serious pollution incidents to water (category 1 and 2)	 improvement	2014-2019	-10.2
B4 Condition of bathing waters in England (at least Sufficient)	 improvement	2015-2020	+5.5
B7a Salmon stock status – principal salmon rivers at risk in England (Not at risk or probably not at risk)	 deterioration	2014-2019	-55.2
B7b Classification of fish in English rivers (high or good cycle 1)	 improvement	2009-2014	+16.1








## Thriving plants and wildlife

Indicator component	Short term assessment of change	Date range	Percent change*
C3aia Abundance of harbour seals north-east England	 improvement	2013-2018	+10.0
C3aib Abundance of harbour seals south-east England	 deterioration	2015-2020	-14.8
C3aiia Atlantic grey seal pup production north-east England	 improvement	2013-2018	+50.3
C3aiib Atlantic grey seal pup production south-east England	 improvement	2013-2018	+77.3
C3bia Percentage of breeding seabirds meeting abundance targets for Good Environmental Status (GES) Greater North Sea	 little or no change	2008-2013	-0.6
C3bib Percentage of breeding seabirds meeting abundance targets for Good Environmental Status (GES) Celtic Seas	 little or no change	2009-2014	+1.3
C3biia Percentage of wintering waterbirds meeting abundance targets for Good Environmental Status (GES) Greater North Sea	 little or no change	2007/2008-2012/2013	-2.6
C3biib Percentage of wintering waterbirds meeting abundance targets for Good Environmental Status (GES) Celtic Seas	 deterioration	2008/2009-2013/2014	-15.5
D2ai Extent of protected sites in England (sites on land and water)	 little or no change	2016-2021	+1.8
D2aii Extent of protected sites in England (sites at sea)	 improvement	2016-2021	+82.7
D2b Condition of Sites of Special Scientific Interest in England (favourable condition)	 little or no change	2016-2021	-0.5
D3 Area of woodland in England	 little or no change	2016-2021	+1.1
D4ai Abundance of breeding wild birds in woodland in England	 deterioration	2013-2018	-6.0
D4aii Abundance of breeding wild birds on farmland in England	 deterioration	2013-2018	-6.4
D4bi Abundance of widespread butterflies in woodland in England	 little or no change	2015-2020	+10.4
D4bii Abundance of widespread butterflies on farmland in England	 little or no change	2015-2020	+10.2




Indicator component	Short term assessment of change	Date range	Percent change*
D4c Abundance of widespread bats in England	 improvement	2014-2019	+9.1
D6ai Relative abundance of priority species in England	 deterioration	2013-2018	-17.2
D6bi Distribution of priority species in England	 deterioration	2011-2016	-9.3
D7i Change in the distribution of pollinators in the UK	 little or no change	2012-2017	-1.7

Note that the individual species indicators, such as those for bats and butterflies, use slightly different assessment methods specifically developed by specialist ecologists. The assessment approach is based on the confidence intervals of the data rather than on whether the observed percentage change has crossed a particular threshold. The assessment methodology is further explained in the 2022 update to the Outcome Indicator Framework.



### Using resources from nature more sustainably and efficiently

Indicator component	Short term assessment of change	Date range	Percent change*
C10a Marine fish (quota) stocks of UK interest harvested sustainably (below $F_{MSY}$ or in $F_{MSY}$ range)	 improvement	2013-2018	+39.3
C10b Marine fish (quota) stocks of UK interest with biomass at levels capable of maintaining full reproductive capacity (above $MSY B_{trigger}$ )	 improvement	2013-2018	+5.6
E1 Area of productive agricultural land in England	 little or no change	2015-2020	-0.3
E2 Volume of agricultural production in the UK	Change (increasing)	2014-2019	+5.8
E3 Volume of inputs used in agricultural production in the UK	Change (increasing)	2014-2019	+4.3
E4 Efficiency of agricultural production measured by Total Factor Productivity in the UK	 little or no change	2014-2019	+1.9
E5 Percentage of the annual growth of trees in English woodlands that is harvested	 little or no change	2015-2020	-0.7
E6 Volume of timber brought to market from English sources	 improvement	2015-2020	+9.4
E8a Water leakage in England	 little or no change	2015/2016 - 2020/2021	-1.6





Indicator component	Short term assessment of change	Date range	Percent change*
E8b Per capita water consumption in England	 deterioration	2015/2016 - 2020/2021	+3.7
J2a Raw material consumption (excluding fossil fuels) per capita in England (total)	 deterioration	2012-2017	+10.3
J2b Gross value added per kg of raw material consumption (excluding fossil fuels) in England	 little or no change	2012-2017	-2.3





### Beauty, heritage, and engagement with the natural environment

Indicator component	Short term assessment of change	Date range	Percent change*
G4a Frequency of visits to the natural environment in the past 12 months in England	 improvement	2013-2018	+13.9
G5 Volunteer time spent on the natural environment in England	 improvement	2013-2018	+8.3





### Mitigating and adapting to climate change

Indicator component	Short term assessment of change	Date range	Percent change*
A2 Emissions of greenhouse gases from natural resources in England	 improvement	2013-2018	-6.2
J1 Consumption based greenhouse gas emissions in England (total)	 improvement	2012-2017	-12.4








### Minimising waste

Indicator component	Short term assessment of change	Date range	Percent change*
C1ai Items of litter per 100m of beach, Celtic Seas	 improvement	2009-2014	-9.6
C1aii Items of litter per 100m of beach, Greater North Sea	 deterioration	2009-2014	+73.7
C1b Percentage of sampled fulmars having more than 0.1g of plastic in their stomach, UK	 improvement	2014-2019	-22.2
J1 Consumption based greenhouse gas emissions in England	 improvement	2012-2017	-12.4




Indicator component	Short term assessment of change	Date range	Percent change*
J3 Waste from households recycling rates in England	 little or no change	2014/2015-2019/2020	+0.5
J4 Residual waste (excluding major mineral wastes) in England (total)	 deterioration	2013-2018	+3.6
J6a Illegal waste sites in England (total active sites)	 little or no change	2013-2018	-1.4
J6b Fly-tipping incidents in England	 deterioration	2013-2018	+36.0

### Managing exposure to chemicals and pesticides

Indicator component	Short term assessment of change	Date range	Percent change*
H3bi Emissions of dioxins and furans to air land and water in England	 improvement	2013-2018	-5
H3bii Emissions of hexachlorobenzene to air land and water in England	 deterioration	2013-2018	+57.2
H3biii Emission of pentachlorophenol to air land and water in England	 improvement	2013-2018	-28.6
H3biv Emissions of polychlorinated biphenyl to air land and water in England	 improvement	2013-2018	-28.3
H3bv Emissions of dioxin-like polychlorinated biphenyl to air land and water in England	 improvement	2013-2018	-40.3
H3bvi Emissions of polychlorinated naphthalenes to air land and water in England	 little or no change	2013-2018	+2.7
H3bvii UK emissions of pentachlorobenzene to air land and water in England	 improvement	2013-2018	-15.5

### Enhancing biosecurity

Indicator component	Short term assessment of change	Date range	Percent change*
H2 Number of additional tree pests and diseases becoming established in England	 little or no change	2015-2020	0

\* Note that some assessment categories were assigned based on smoothed data, so percent change figures listed here may differ from unsmoothed values quoted elsewhere. Percent change refers to the difference seen from the first to last year in the specified date range. For further information on the assessment methodology, including the approach to smoothing for individual indicators, refer to the Outcome Indicator Framework.

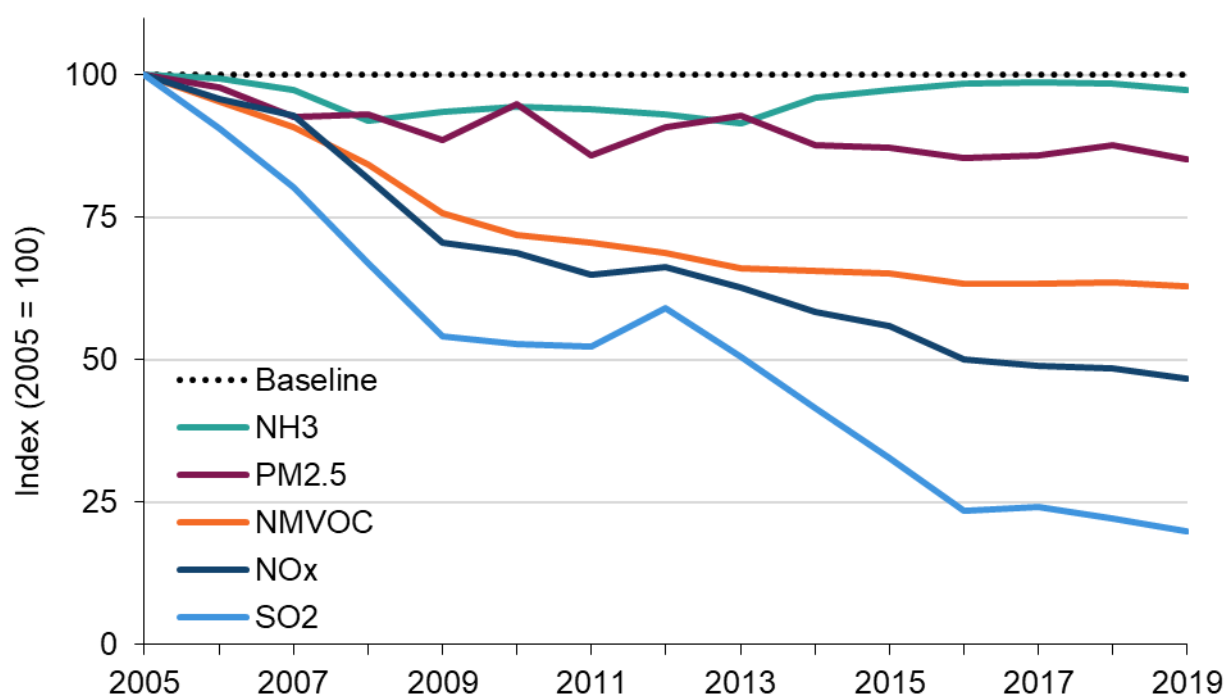
## Clean air

### What are our long-term ambitions?

We will tackle all sources of air pollution, making our air healthier to breathe, protecting nature and boosting the economy. We will do this by meeting existing legally binding targets set through the National Emissions Ceilings Regulations to reduce emissions of 5 damaging air pollutants and nitrogen dioxide (NO<sub>2</sub>) concentrations. We will also contribute towards restoring 75% of our 1 million hectares of terrestrial and freshwater protected sites to favourable condition, securing their wildlife value for the long term.

### What is the condition of the natural environment?

Figure 1. Emissions for 5 key air pollutants in England, 2005 to 2019



Source: Ricardo Energy and Environment (reported as A1 indicator in the Outcome Indicator Framework)

Emissions for all 5 key air pollutants (ammonia, fine particulate matter, nitrogen oxides, non-methane volatile organic compounds and sulphur dioxide) in England have fallen over the latest 15 years for which annual, country-level data are available. Emissions of SO<sub>2</sub> have seen the greatest reductions, falling by 80% between 2005 and 2019. Emissions of NO<sub>x</sub> and NMVOCs have also fallen considerably, by 53% and 37% respectively; emissions of PM<sub>2.5</sub> and NH<sub>3</sub> have fallen by 15% and 3% respectively over the same period. More recently, the trends in annual emissions of PM<sub>2.5</sub> and NMVOC have levelled off and emissions of NH<sub>3</sub> have increased. For PM<sub>2.5</sub>, decreases in emissions from many sources have been partially offset by increases in emissions from residential burning (domestic combustion); emissions of PM<sub>2.5</sub> from this source increased by 66% between 2005 and 2019.

Figure 2: Summary of assessment results - clean air indicator components

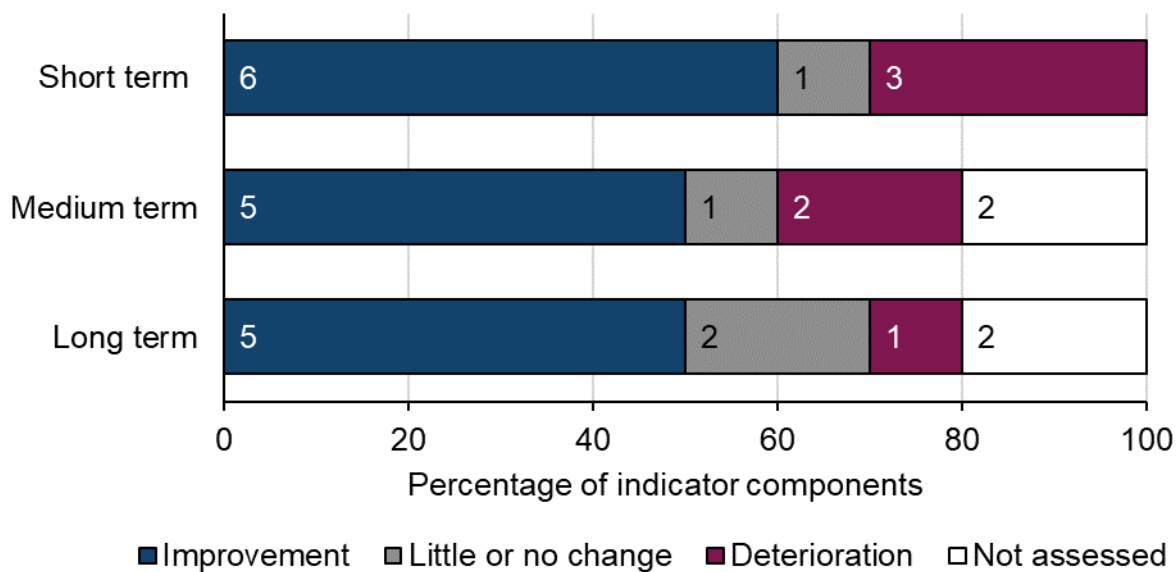


Figure 2 shows the proportion of indicators for which 'Clean air' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

Of 10 indicator components that were assessed, 6 showed an improvement over the short term. One indicator component showed little or no change and 3 showed a deterioration. This short-term time period covered the most recent 5 years for which an assessment can be made. This was 2013 to 2018 for most components, and 2014 to 2019 or 2015 to 2020 for others. Most indicator components recorded the same results over the medium and long-term time periods, where a sufficiently long time series was available to make an assessment. However, emissions of ammonia assessed by A1 showed a deterioration in the short to medium term in contrast to little or no change over the long term.

For further information, refer to the [Outcome Indicator Framework](#).

### What actions are being taken towards achieving our ambitions?

In addition to consulting on Air Quality targets under the Environment Act 2022 to reduce exposure to PM<sub>2.5</sub> which will benefit public health, we are also taking the following actions.

This year, we will review and revise the National Air Pollution Control Plan that sets out the policies and measures that the UK is proposing to consider achieving compliance with 2030 emissions targets. We will also launch a consultation on the national and local Air Quality Strategy this year, towards final publication in 2023.

We opened a consultation on the review of the [Local Air Quality Management Policy](#); and will publish Local Air Quality Management guidance this year. We granted local authorities more than £11 million to develop and implement measures to benefit schools, businesses and communities and reduce the impact of air pollution on people's health. We also opened a consultation on the designation of National Highways as a relevant public body to collaborate with local authorities on improving local air quality.

[Clean Air Zones](#) (CAZ) were launched by local authorities with the support of the Joint Air Quality Unit in Bath and North-East Somerset, Birmingham, and Portsmouth over the past year. Defra and the Department for Transport are currently supporting 64 local authorities in total to deliver CAZs and other mitigating measures to reduce NO<sub>2</sub> exceedances. Government continues work with local authorities to deliver legal levels of NO<sub>2</sub>, supported by £883 million dedicated funding to help local authorities develop and implement local air quality plans and to support those impacted by these plans. This forms part of the government's drive to reduce nitrogen dioxide concentrations, to safeguard public health, and support regional economic growth.

We introduced the first phase of [legislation to restrict the sale of wet wood for domestic burning in England](#), put limits on emission of sulphur and smoke from manufactured solid fuels, and phased out the sale of bituminous coal. This year, we introduced the next phase of the legislation which requires small foresters (those supplying 600m<sup>3</sup> or less of wood per year) to comply with the legislation for moisture content of wood.

We published our response to the consultation on [reducing ammonia emissions from urea fertilisers](#). This includes a proposal to be implemented through the Red Tractor farm assurance scheme and FACTS qualified advisors from next year at the earliest. This year, we will open applications for farmers to apply for grants to support investment in slurry systems including for slurry stores and stores covers as part of the expanded Farming Investment Fund. Air quality has also been included as a primary objective for an expanded Catchment Sensitive Farming programme with voluntary advice to be provided to all farmers in England.

We are in the process of implementing a UK mechanism for regulating industrial emissions by developing Best Available Techniques (BAT) to determine new technologies and methods that operators should put in place to reduce emissions. This year, we will publish our response to the Best Available Techniques consultation.

We have initiated work with the Department of Health and Social Care and the UK Health Security Agency to review how the government communicates air quality information to ensure members of the public, and vulnerable groups in particular, have what they need to protect themselves and understand their impact on air quality. This year, we will be engaging with representatives from vulnerable groups and other key stakeholders to ensure that their needs are captured in the review.

## Clean and plentiful water

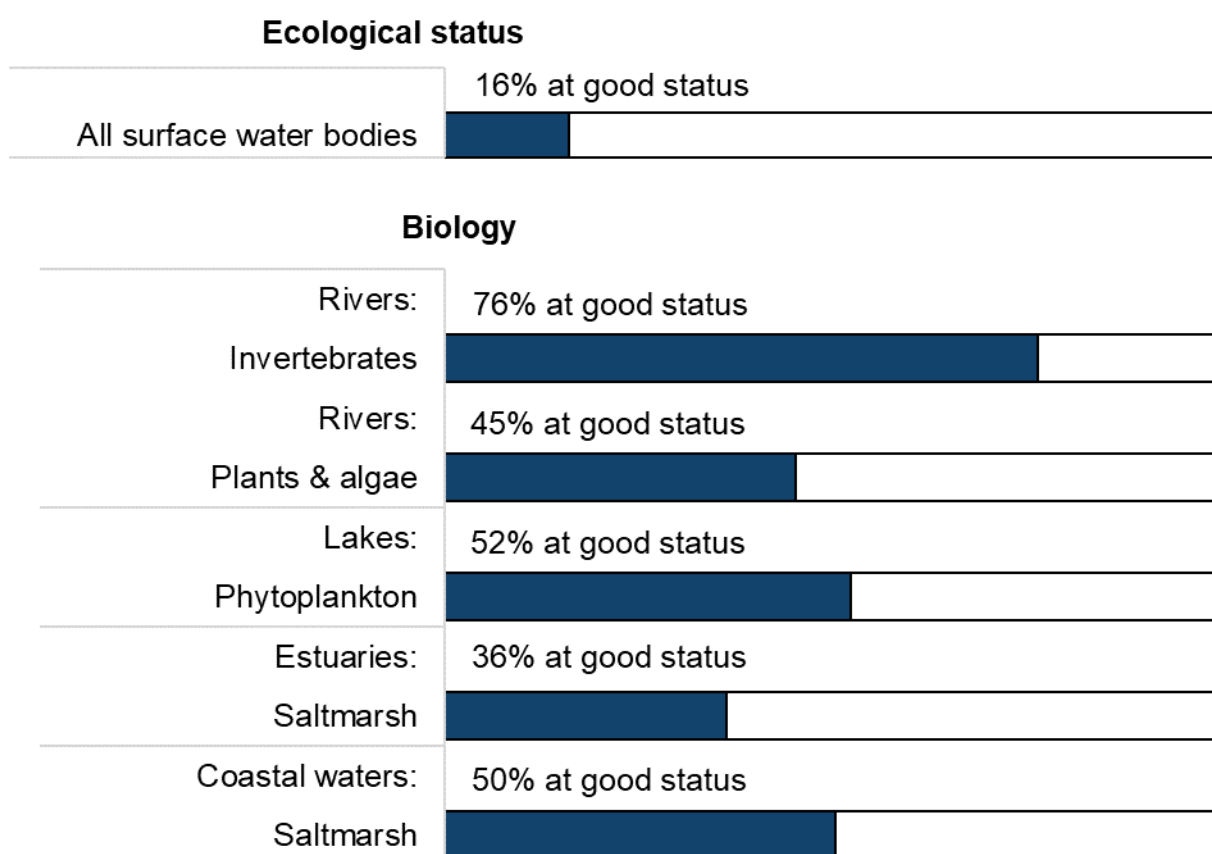
### What are our long-term ambitions?

We will achieve at least 75% of our waters to be as close to their natural state as soon as practicable. We will reach or exceed our objectives for rivers, lakes, coastal water, and ground waters that are specially protected, whether for biodiversity or drinking water as per our River Basin Management Plans. We will also contribute towards restoring 75% of our 1 million hectares of terrestrial and freshwater protected sites to favourable condition, securing their wildlife value for the long-term. We will make the abstraction system more equitable and protect the environment from damaging over-abstraction. Furthermore, we

will implement measures to reduce personal water usage, and support the commitment made by Ofwat and water companies to deliver a 50% reduction in water leakage by 2050.

### What is the condition of the natural environment?

Figure 3: Status of surface waters in England, 2019



Source: Environment Agency (reported as B3a (interim) indicator in the Outcome Indicator Framework)

In total, 16% of surface water bodies met all the relevant criteria of the Water Framework Directive Regulations in 2019. For rivers, invertebrates, and the combined test for macrophytes and phytobenthos (plants and algae) are reported to indicate biological quality, where 76% and 45% of tests carried out passed for the water bodies assessed, respectively. For lakes, the representative biological element shown is phytoplankton with 52% of water bodies assessed passing. For estuaries and coasts saltmarsh is used to reflect the extent and quality of habitat; results show 36% and 50% of water bodies monitored pass the test, respectively.

Figure 4: Summary of assessment results - Clean and plentiful water indicator components

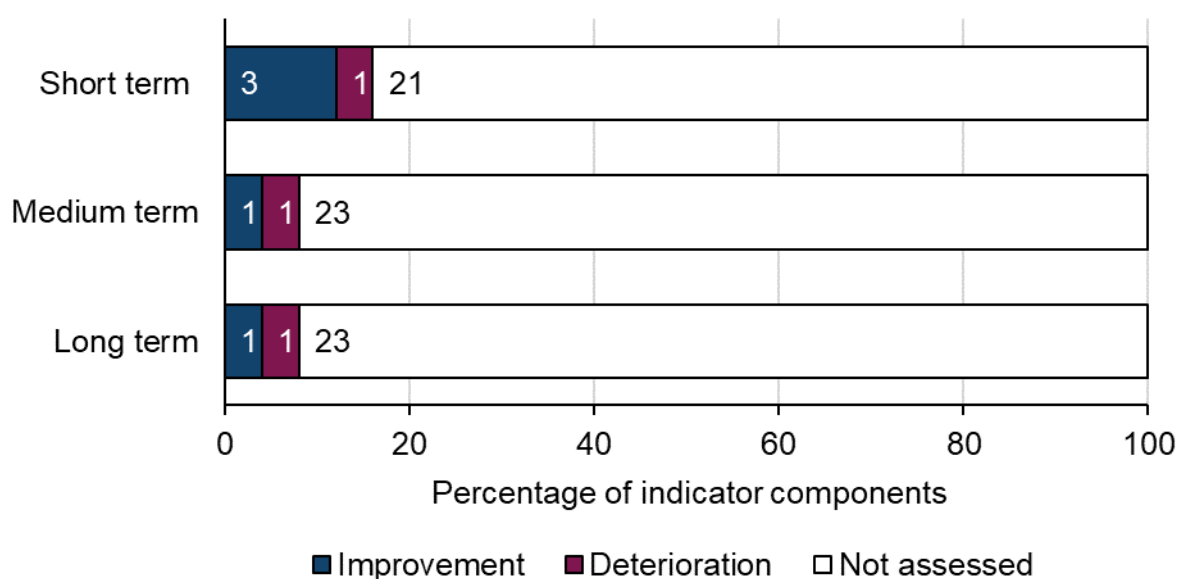


Figure 4 shows the proportion of indicator components for which 'Clean and plentiful water' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

Of the 4 indicator components that were assessed, 3 showed an improvement over the short term and 1 showed a deterioration (principal salmon rivers at risk in England). Note that the assessment of 'improvement' for B7b Classification of fish in English rivers does not include more recent years where a new method was adopted; these new data will be assessed once a sufficient time series has been built up. The short-term time period covered the most recent 5 years for which an assessment can be made (2009 to 2014, 2014 to 2019 or 2015 to 2020).

For further information, including information on indicators not assessed, refer to the [Outcome Indicator Framework](#).

### What actions are being taken towards achieving our ambitions?

In addition to consulting on water targets under the Environment Act 2022 to improve our water quality and reduce water usage, helping restore water bodies to their natural state, we are also taking the following actions.

We published our [strategic priorities for Ofwat](#) which made protecting and enhancing the environment a key priority for the first time, alongside delivering a resilient water sector, serving and protecting customers and using markets to deliver for customers. The Strategic Policy Statement for Ofwat sets an expectation on water companies to make progressive reductions in the adverse impacts from storm overflows, including reducing their frequency and volume. We are holding water companies to account over illegal discharges, with a record £90 million fine handed out in July 2021.

Following this, we completed the consultation and proposals for the [Water Industry National Environment Programme](#), setting out how the water industry will improve the

natural environment between 2020 - 2025 through a £5.2 billion investment. We set out what the 2024 Price Review (PR24) can achieve for customers and the environment, and the principles for the approach and design for PR24. This year, Ofwat will publish the PR24 draft methodology.

We launched the Woodlands for Water project as well as developing a package of targeted supplements to encourage support for woodland creation within river corridors as part of the England Woodland Creation Offer.

Over the past year, we completed the consultation on the draft update to the [River Basin Management Plans](#), including environmental objectives and a summary of measures. This year, we will publish the updated River Basin Management Plans covering 2021 to 2027

We have also made extra budget totalling £13.5m available to the Environment Agency to enable at least 4000 farm visits per year which will target high-risk river catchments to ensure compliance with environmental regulations. We have also expanded the [Catchment Sensitive Farming \(CSF\) programme](#) to cover all of England. Since the CSF was launched in 2005, farmers have implemented over 75,000 individual mitigation measures to reduce water pollution. This year, the CSF programme will provide expert advice to 7,300 farmers.

We have recently consulted on our Storm Overflows Discharge Reduction Plan. This will revolutionise how water companies tackle the number of discharges of untreated sewage, which the government and the public have made clear are completely unacceptable. This plan will be published in September 2022.

Government and regulators also continue to hold the water industry to account on a scale never seen before, with the Environment Agency carrying out 50 prosecutions against water and sewerage companies since 2015, securing fines worth over £137 million.

Water companies will face strict new limits on when they can use storm overflows and must completely eliminate the harm any sewage discharge causes to the environment. This will be the largest programme of work to tackle storm sewage discharges in history.

The Chalk Stream Restoration Group, on which Defra sits, published the [Chalk Stream Restoration Strategy](#). This sets out the issues threatening chalk streams in England, and recommendations towards their ecological recovery and good health. This year, we will launch the Chalk Stream Flagship Restoration Project to restore chalk streams by 2035.

Through the [Water and Abandoned Metal Mines programme](#), we supported the operation of 3 existing mine water treatment schemes. These schemes treat 7.4 billion litres of mine water each year and prevent 800 tonnes of metals from entering and polluting rivers. We continue construction of a 4th scheme, alongside other actions to clean our rivers.

We supported 414 projects through the Water Environment Investment Fund. These aim to deliver 674 kilometres of enhanced water environment and 219 kilometres of enhanced protected sites towards meeting Water Framework Directive and protected site objectives.

We published our approach to [reducing demand for water](#) including improving water efficiency in homes and new developments and introducing mandatory water efficiency



labelling. This year, we will publish our roadmap towards greater water efficiency in new developments and retrofits.

We published a consultation on moving the [abstraction licensing regime](#) into the Environmental Permitting Regulations (EPR). This year, we will publish the summary of responses and government response to our consultation.

As set out in the National Framework for water resources, 5 regional groups consulted on their emerging [regional water resources plans](#). This year, regional groups and water companies will undertake further consultation and finalise their plans in 2023. Strong collaboration will be used to inform the plans, setting out how the gap between water supply and demand is met in the long-term.

Through the Water Environment Grant, we supported a further 6 projects from a total 57 projects supported over the duration of the 3-year programme. There has been a forecast 800 – 1,000 kilometres of enhanced water bodies from projects supported to date.

There was a record 99% of English bathing waters (beaches and inland waters) that passed the stringent water quality standards. We also designated 2 new bathing waters and are reviewing this process.

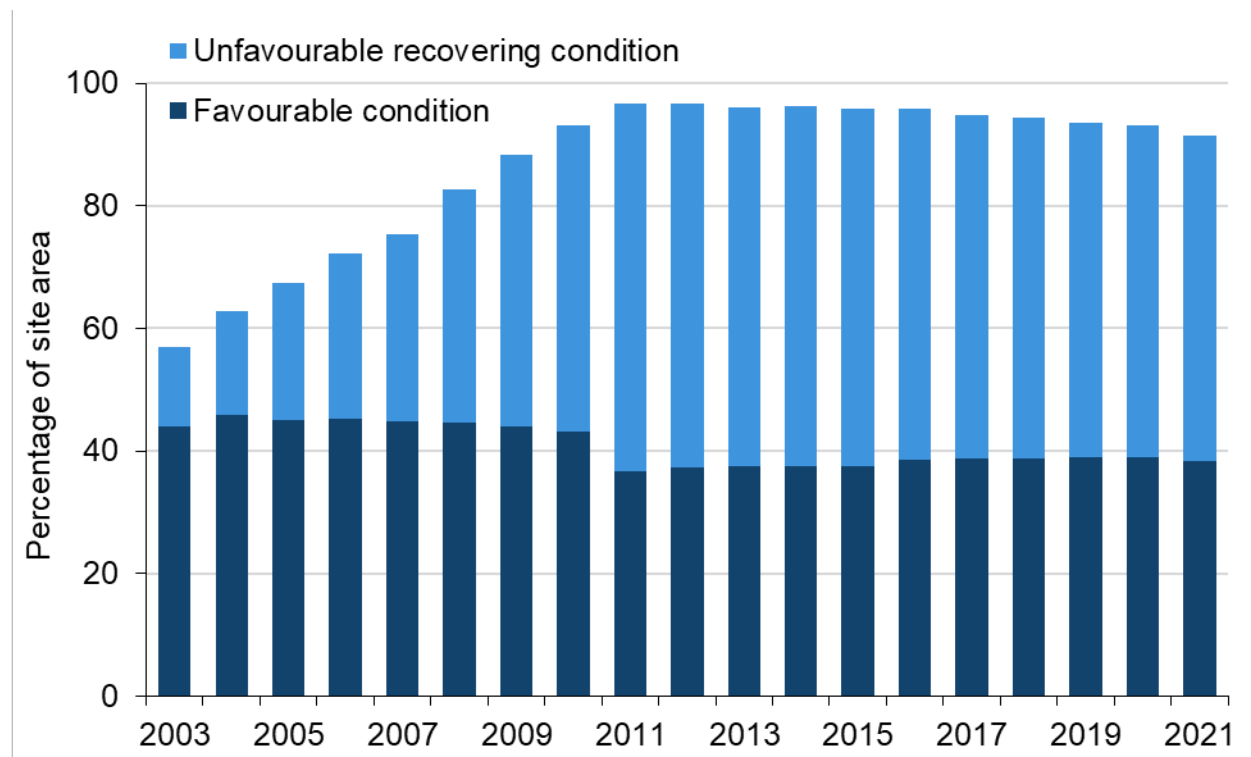
## Thriving plants and wildlife (terrestrial)

### What are our long-term ambitions?

We will restore nature on land, water and in the sea so that it is richer in plants and wildlife with thriving ecosystem functioning and processes. We will do this by meeting our [Environment Act 2021](#) targets including our legally binding apex target to halt the decline in species abundance by 2030, and proposed targets to increase species abundance by at least 10% by 2042; improve the England-level GB Red List Index for species extinction risk by 2042; and create or restore in excess of 500,000 hectares of wildlife-rich habitat outside projected sites by 2042. This will contribute towards the government's commitment to protect 30% of land by 2030 and help deliver England's Nature Recovery Network.

## What is the condition of the natural environment?

Figure 5: Condition of Sites of Special Scientific Interest in England, 2003 to 2021



Source: Natural England (reported as D2b (interim) indicator in the Outcome Indicator Framework)

There has been a net decrease in the area of Sites of Special Scientific Interest (SSSIs) in favourable condition; down from 44% in 2003 to 38.4% in 2021. The sudden drop in the area of SSSIs in favourable condition from 43.2% in 2010 to 36.6% in 2011 was largely due to a more rigorous application of the 'Common Standard for Monitoring' protocols in assessing unit condition. While there has been a small increase in the area in favourable condition over the last 10 years (from 36.6% in 2011 to 38.4% in 2021), the figure has fallen slightly in the latest year. The area of SSSIs in unfavourable recovering condition has increased substantially from 13% in 2003 to 53% in 2021.

Figure 6: Summary of assessment results - Thriving plants and wildlife indicator components

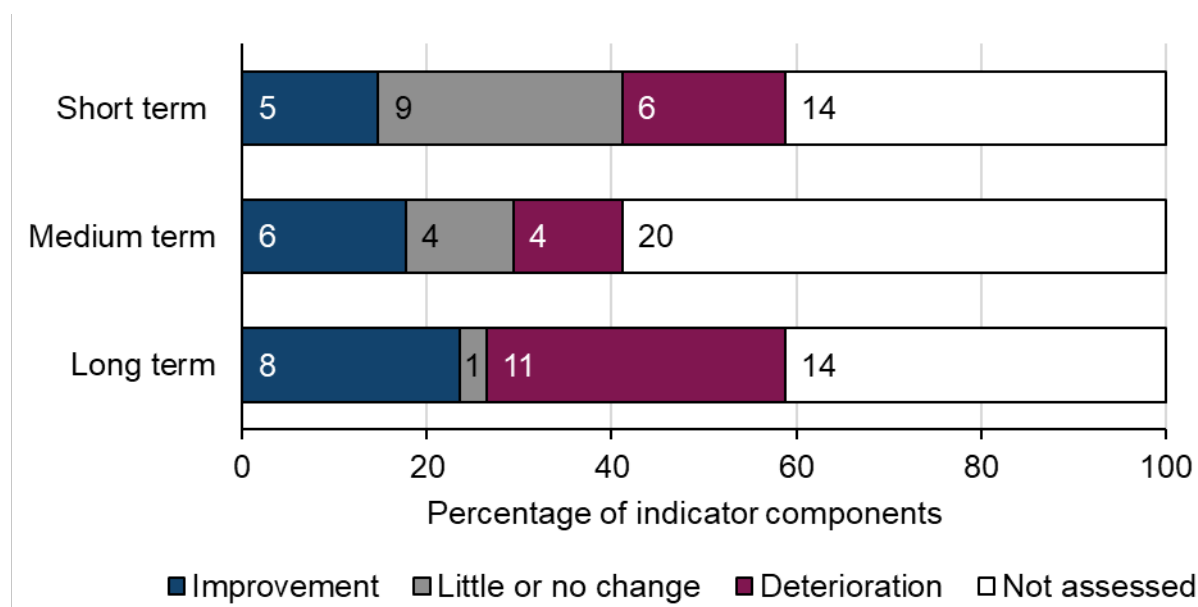


Figure 6 shows the proportion of indicator components for which 'Thriving plants and wildlife' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

Of the 20 indicator components that were assessed, 5 showed an improvement over the short term, 6 showed a deterioration and 9 showed little or no change. This short-term time period covered the most recent 5 years for which an assessment can be made. Over the long term, more indicator components showed a deterioration, but a higher number were also improving. Several marine bird indicators, widespread butterflies in woodland and change in the distribution of pollinators moved from deterioration to little or no change in the short term. However, 2 indicator components for protected sites moved from improvement to little or no change.

For further information, including information on indicators not assessed, refer to the [Outcome Indicator Framework](#).

### What actions are being taken towards achieving our ambitions?

In addition to consulting on biodiversity targets under the Environment Act 2022 to halt the decline in species abundance by 2030; and then bend the curve to increase species abundance by 2042, we are also taking the following actions.

We published the [Nature Recovery Green Paper](#). This sets out our ambition and proposed approach to enable nature's recovery in England, to support the delivery of our commitment to halt the decline in our biodiversity and protect 30% of our land and sea by 2030.

We announced at the Spending Review the investment of more than £250 million over 3 years to protect and restore nature in support of the government's world-leading target to halt biodiversity decline by 2030. This included the implementation of mandatory

biodiversity net gain for development, designating at least 15 new National Nature Reserves, and expanding the Species Recovery Programme supported by new grants.

We also announced an ambitious new target to raise at least £500 million in private finance for nature's recovery every year by 2027. This will rise to more than £1 billion per year by 2030. We will also make a £30 million anchor investment in an innovative, new Big Nature Impact Fund to kickstart private investment in new natural capital markets.

In addition, we announced a further £625 million for the Nature for Climate Fund ensuring a total spend of more than £750 million by 2025 on peat restoration and woodland creation and management. Prior to that, we published our England [Peat](#) and [Trees](#) Action Plans. These set out our vision for the management, protection, and restoration of peatlands and how we will deliver our aim to at least treble tree planting rates in England by the end of this Parliament.

We have used Nature for Climate funding to launch a range of new flexible grants to provide greater incentives for woodland creation on all scales – from trees in urban areas and along rivers, to large scale productive forestry in well-managed mixed woodlands. We are also supporting projects to increase effective management of existing woodlands and the increase in the nursery and forestry sector needed to support our ambitions.

We have also used the Nature for Climate Fund, to support projects under the first round of the [Peatland Restoration Grant Scheme](#) and [Peatland Discovery Grants](#); and will announce round 2 awards this year. We will also update the Peatland Code; and publish the Lowland Agricultural Peat Taskforce recommendations.

We launched the 21,000 ha [G7 Nature Recovery Legacy Project](#) in Cornwall. We have since launched 5 more partnership led landscape-scale Nature Recovery Projects that will help nature recover across an estimated 99,000 hectares. We plan to launch a further 6 projects in 2022/23.

Supporting the establishment of the Nature Recovery Network, with partners we developed and delivered 140 innovative, collaborative 'kick-start' projects across England. We also delivered over 275 projects that will contribute towards creating and restoring 20,000 hectares of priority habitats by 2030.

We launched the [Nature Recovery Network Delivery Partnership](#) to drive collaborative, cross-sectoral action for nature's recovery. Led by a management group of 30 organisations, growing membership currently stands at 600 individuals and organisations from a range of sectors.

We established a Natural England, National Parks England, and National Association for Areas of Outstanding Natural Beauty Joint Agreement with the national landscapes. To date, this agreement has secured a commitment to deliver 153,739ha towards nature's recovery.

To drive nature's recovery and wider benefits, we completed 5 [Local Nature Recovery Strategy \(LNRS\) Pilots](#). These assessed a new, England-wide system of spatial strategies that will establish priorities and map proposals for specific actions. We also published the [LNRS lessons learned report](#). The findings are being used to support LNRS rollout.

We published our consultation on Biodiversity Net Gain. This will inform the development of legislation, processes, and guidance to ensure the requirement delivers positive outcomes for nature, improves the process for developers, and creates better places.

Working with Rethink Nature organisations, we completed the 5-year [Back from the Brink Programme](#) of Species Recovery action for some of England's most endangered species. The programme resulted in 96 priority species moving towards recovery. We also supported 58 projects to take action for our priority and threatened species through our Species Recovery Programme. We launched a consultation on the approach to beaver reintroduction and management in England. We aim to publish a response later this year.

We announced an [England Species Reintroduction Taskforce](#) which will be established this year, the aim being to provide a collective view on potential species for conservation translocation and reintroduction in England. We also supported the [Isle of Wight White-Tailed Eagle Reintroduction Project](#) led by the Roy Dennis Wildlife Foundation. We published a [Pollinator Action Plan](#) in May supporting the [National Pollinator Strategy](#). This plan sets out how we will continue to work with partners to help pollinators thrive. The plan will help us to look after important pollinator habitats and understand more about how we can help pollinators and improve their health.

We are kickstarting nature-based projects in England through the [Green Recovery Challenge Fund](#). The 69 projects supported through Round 1 have seen environmental action on 121 sites, benefitting 0.3 million hectares, have resulted in tree planting on 56 sites, with 106,000 trees planted. Through Round 2 of the Fund, we supported 90 projects that will restore nature, help tackle climate change, connect people with nature, and create or protect jobs.

Through the Natural Environment Investment Readiness Fund, we supported 27 projects that will generate repayable investment from a range of ecosystem services and provide valuable learning opportunities as we seek to channel more private investment into nature. We launched the first round of the Landscape Recovery scheme applications, which would provide funding for long-term and large-scale projects. Applications closed in May 2022.

### **Case Study: Nature's Recovery: For Nature, For Climate, For People**

The G7 Legacy Project for Nature Recovery (G7 LPNR) is an ambitious 5-year nature recovery project based in mid-Cornwall. Natural England and Cornwall Wildlife Trust run the project in partnership, which was announced ahead of the G7 Summit in June 2021 with support from Defra. The project will deliver for nature, climate, and people, and will contribute to the UK's commitment to protect 30% of land for nature by 2030. The project aims to create a lasting legacy in a variety of ways:

Restoring land through nature recovery and recreating scarce habitats through sustainable farming. Natural regeneration will be used to create scrub and woodland communities; scarce habitats such as heathland and wetland will be created, as well as the development of meadows and pasture, and the restoration of peat mires in the River Fal headwaters.

Providing opportunities to reintroduce lost species and improving resilience for key species including dormice, marsh fritillary butterflies, and willow tit.

Sequestering approximately 440,000 tonnes of CO<sub>2</sub> through forest growth and wetland restoration, including peat habitats, improved soil condition and the recovery of marine blue carbon habitats.

Improving water quality, encouraging fish diversity and abundance, and reducing flood peaks to reduce downstream flooding.

Improving access to green space and green social prescribing so people across the county can enjoy the wellbeing benefits of contact with nature.



## Thriving plants and wildlife (marine)

### What are our long-term ambitions?

We will ensure that UK has clean, healthy, safe, productive, and biologically diverse seas, which are used sustainably. We will do this by delivering Good Environmental Status (GES) through the [UK Marine Strategy](#) alongside actions which support species and habitats restoration. In addition, we will protect at least 30% of land and sea by 2030; and deliver world-class fisheries management.



## What is the condition of the natural environment?

In addition to consulting on a marine target under the Environment Act 2022 to protect marine habitats which are so crucial for marine life, we are also taking the following actions.

The updated [UK Marine Strategy Part 1](#) (UKMS Part 1, October 2019) showed we have made good progress towards achieving GES in some areas but that further action is necessary to achieve that ambition for all eleven descriptors assessed. Further details, including the science and methodologies underpinning the assessments, can be found on the government's [Marine Online Assessment tool \(MOAT\)](#).

## What actions are being taken towards achieving our ambitions?

To support progress towards GES, we drafted and consulted on the [UK Marine Strategy \(UKMS\) Part 3](#). This sets out the programme of measures we will implement to help us achieve or maintain GES until 2027. This year, we will publish the updated UKMS Part 3 and the government response to the consultation.

We are committed to marine plans that support sustainable development for our marine area, and on-going protection of the marine environment. Over the past year, we published our [6-year report on progress](#) with marine plans in England covering 2015 – 2021.

With the competition for marine space increasing, we set-up and continue to lead a cross-government programme on Marine Spatial Prioritisation. This will consider a 2050 strategic vision for the future use of the marine environment and will help government deliver on its 25-YEP commitments. This includes allowing marine industries to thrive, delivering marine nature recovery in tandem with energy security; and creating sustainable fisheries.

We have built a comprehensive network of [Marine Protected Areas](#) (MPAs) and are focussing on making sure they are now properly protected. 98 MPAs in English inshore waters now have measures to protect sensitive features from damaging fishing gears. In offshore waters, the first 4 fisheries byelaws have now also been announced. A call for evidence has also been issued for 13 more sites and with plans to put place effective fisheries management for all offshore sites by the end of 2024.

For Highly Protected Marine Areas (HPMAs), we published our [response](#) to the [Benyon review](#) and have started to identify candidate sites. This year, we will consult on the proposed candidate HPMAs sites, and will then designate pilot HPMAs.

To support developing countries to protect the marine environment and reduce poverty, we launched the Blue Planet Fund. This is a 5-year, £500 million programme portfolio that we are delivering in partnership with the Foreign, Commonwealth and Development Office (FCDO). The Fund is part of the UK government's Overseas Development Assistance commitments. Through the first round of awards, we supported programmes that will increase marine protection, tackle plastic pollution and the decline of global coral reefs, as well as help respond to marine pollution disasters. Further programmes are also due on stream later this year.

We consulted on the Offshore Wind Enabling Action Programme's (OWEAP) Guidance on Compensatory Measures within Marine Protected Areas and published the [summary of responses](#). We published best practice guidance on offshore wind impact assessments. We also published the joint position statement which demonstrates, for the first time, our preference for quieter alternative technologies in the removal of unexploded ordnance from the marine environment, and that low noise alternatives should be prioritised, wherever possible, over high-order detonations. We are investigating the options to optimise coexistence between commercial and recreational fishing practices and offshore wind development. We are also consulting on the development of Marine Net Gain.

Following the announcement of the British Energy Security Strategy the OWEAP is pivoting its work to deliver the new ambition of 50GW of offshore wind by 2030, including up to 5GW of floating offshore wind. To enable the government's ambition, we are developing an Offshore Wind Environmental Improvement Package (OWEIP) to ensure we continue to meet our commitments on ocean recovery as offshore wind deployment is accelerated. The following measures will be delivered through the package; strategic compensation, a Marine Recovery Fund, nature-based design standards, and strategic monitoring. An 'opportunity to comment' for the OWEIP proposal has been opened via an online survey for initial engagement with stakeholders. Further opportunities for comment will be available as the proposals develop to implementation.

In advancing sustainable fisheries management, we consulted on the draft Joint Fisheries Statement (JFS). This sets out the policies the fisheries policy authorities in the UK will follow, as they work together to deliver world-class fisheries management. The draft JFS includes a list of provisional Fisheries Management Plans (FMPs) that will be published, over time, by the UK Administrations. FMPs will be key tools to deliver sustainable and well-managed fisheries that meet our national and international commitments. This year we will publish the final JFS to meet the requirements of the Fisheries Act 2020.

We also introduced the £100 million UK Seafood Fund with objectives to: ensure the best science, research and technology is used in fisheries management and enable an environmentally sustainable fishing industry that reflects the long-term needs of the sector. This has already generated innovative findings including demonstrating the proof of concept that scallops can be caught in illuminated pots.

Over the past year, we have continued to build support for a global '30by30' target to protect at least 30% of the ocean by 2030. This is supported by over 100 countries through the UK-led Global Ocean Alliance and High Ambition Coalition for Nature & People.

This year, we will publish the UK Bycatch Mitigation Initiative. This initiative will describe policy objectives and potential actions to minimise and, where possible, eliminate incidental catches of sensitive marine species in fishing gear. We are also working with Natural England to develop a comprehensive and ambitious English Seabird Conservation Strategy. This strategy will aim to assess the vulnerability of each seabird species in light of the pressures they are facing and propose actions to address them. We are beginning to scope what a Forage Fish policy might look like and findings from initial Marine Natural Capital work have been used to inform our position on the North Sea sandeel fishery (closed in UK waters for 2022).



## Reduced risk of harm from environmental hazards

### What are our long-term ambitions?

We will reduce the risk of harm to people, the environment and the economy from natural hazards including flooding, drought, and coastal erosion. We will do this by better protecting 100,000 properties from flooding and coastal erosion by 2024, and 336,000 by 2027. This will reduce the national flood risk by 11% from 2021 to 2027.

### What is the condition of the natural environment?

The 25 Year Environment Plan includes outcome indicators relating to drought, flood and coastal erosion risk management which are currently in development. There is a growing body of observational and modelled evidence on how climate change has affected the probability of significant weather events. The [Met Office State of the UK Climate Report](#) shows that:

- UK winters in the most recent decade (2010 to 2019) have been 5% wetter than 1981 to 2010, and 12% wetter than 1961 to 1990
- four of the top 10 wettest winters recorded have occurred since 2007, and 7 since 1998
- since 1884 the UK's 10 warmest years have all occurred since 2002, and 2020 was the third warmest year

### What actions are being taken towards achieving our ambitions?

We published the assessment of the [2015 – 2021 flood and coastal defence capital investment programme](#). This found that we exceeded our target, by better protecting over 314,000 homes from flooding, with more than 850 new flood and coastal erosion defence projects completed over the 6-year period. Early analysis suggests the programme saved the economy more than £28 billion in avoided damages over the lifetime of these projects.

In the first year of the record £5.2 billion [2021 – 2027 capital investment programme](#), over 32,000 homes were better protected from flooding. All schemes supported by £170 million of additional funding to accelerate shovel ready flood defence projects, are now underway.

At the 2021 Spending Review, the government agreed a 3-year uplift to deliver the capital programme, The Spending Review also announced additional funding for the next 3 years to support flood defence maintenance. This will maintain the current level of 94 - 95% of assets in high consequence systems in good condition by 2025.

We published our response to a call for evidence on [factors in managing flood and coastal erosion risk and property flood resilience](#). We are considering steps to provide further protection to frequently flooded communities through the capital investment programme.

We are supporting 25 local areas through the £200 million [Flood and Coastal Resilience Innovation Programme](#) to take forward innovative actions that help to bolster resilience to flooding and coastal change. This year, we will have delivery plans in place for all projects through to 2027.

We also announced the [Coastal Transition Accelerator Programme](#), that will explore innovative approaches of adapting to the effects of coastal erosion.

We published an update report on progress with the [Surface Water Management Action Plan](#) and our response to the independent review into surface water and drainage responsibilities. This year, we will incorporate surface water flood risk into the digital Flood Map for Planning. This will help local planning authorities and developers better mitigate the surface water flood risks from new development.

This year we made changes to the Flood Re Scheme. In particular, insurance companies can now pay an additional £10,000 on flood insurance claims so that residents can build back better after a flooding incident, in ways that are resilient to future flooding.

We also supported 28 lead local flood authority areas to provide better surface water flood risk maps this year. The improved mapping will provide 3.3 million people with more detailed information on their local surface water flood risk.

We published the 1-year [FCERM Strategy Action Plan](#). Notable actions include enhancing the appraisal guidance for flooding and coastal change projects, so that investment decisions can better reflect a wider range of resilience actions and climate change scenarios. We subsequently published a [Flood and Coastal Erosion Risk Management Strategy Roadmap](#). This includes a suite of actions which risk management authorities and a range of partners will take between now and 2026.

The government's [National Infrastructure Strategy](#) confirmed that government will require water companies' water supplies to be more resilient to extreme (1 in 500 year) drought events.

We supported regional groups and water company implementation of the National Framework for water resources in order to secure resilient water supplies in the long term. Regional groups consulted on their emerging plans and will carry out further consultation later this year. This will be alongside water company statutory water resources management plans. Water companies also consulted on and revised their drought plans.

## Case Study: Townfoot Farm, Cumbria, Eden Rivers Trust



The project site is a 600-hectare working farm at the foot of the Pennine escarpment in the Eden Valley. A settlement downstream of the farm, Warwick Bridge, has been identified by the Environment Agency as a community at risk of flooding, and this risk is predicted to become more severe as more frequent and severe climate-induced weather events occur. Historically a 230-metre stretch of the Cairn Beck River had been highly modified, greatly reducing the capacity of the channel. This was accompanied by a loss of floodplain and dynamic sediments which help mitigate flood pulse, provide temporary water storage, and increase habitat structure with benefits for biodiversity.

In August 2021, Eden Rivers Trust received funding for capital works through the Farming in Protected Landscapes programme with support from the North Pennines AONB Partnership.

Newly created meanders will slow the flow of water travelling downstream and enable a higher volume of water to be stored in the channel, which has been increased in length by 165m. This project contributes to creation of a 5km connected reach of natural flood management and habitat improvements along the Cairn Beck River, and total hydraulic habitat area has been increased from 13,982m<sup>2</sup> to 29,304m<sup>2</sup>.

The project delivers for biodiversity on a meaningful scale with improvements to in-stream (1.8 hectares) and riparian (8 hectares) habitats within the project area and benefits to local biodiversity including white-clawed crayfish, salmonids, and a wide range of freshwater invertebrates. Tree planting will provide shade for in-channel species and valuable habitat for a wide range of birds, bats, and invertebrates, while wading birds will benefit from a more dynamic, better-connected floodplain.

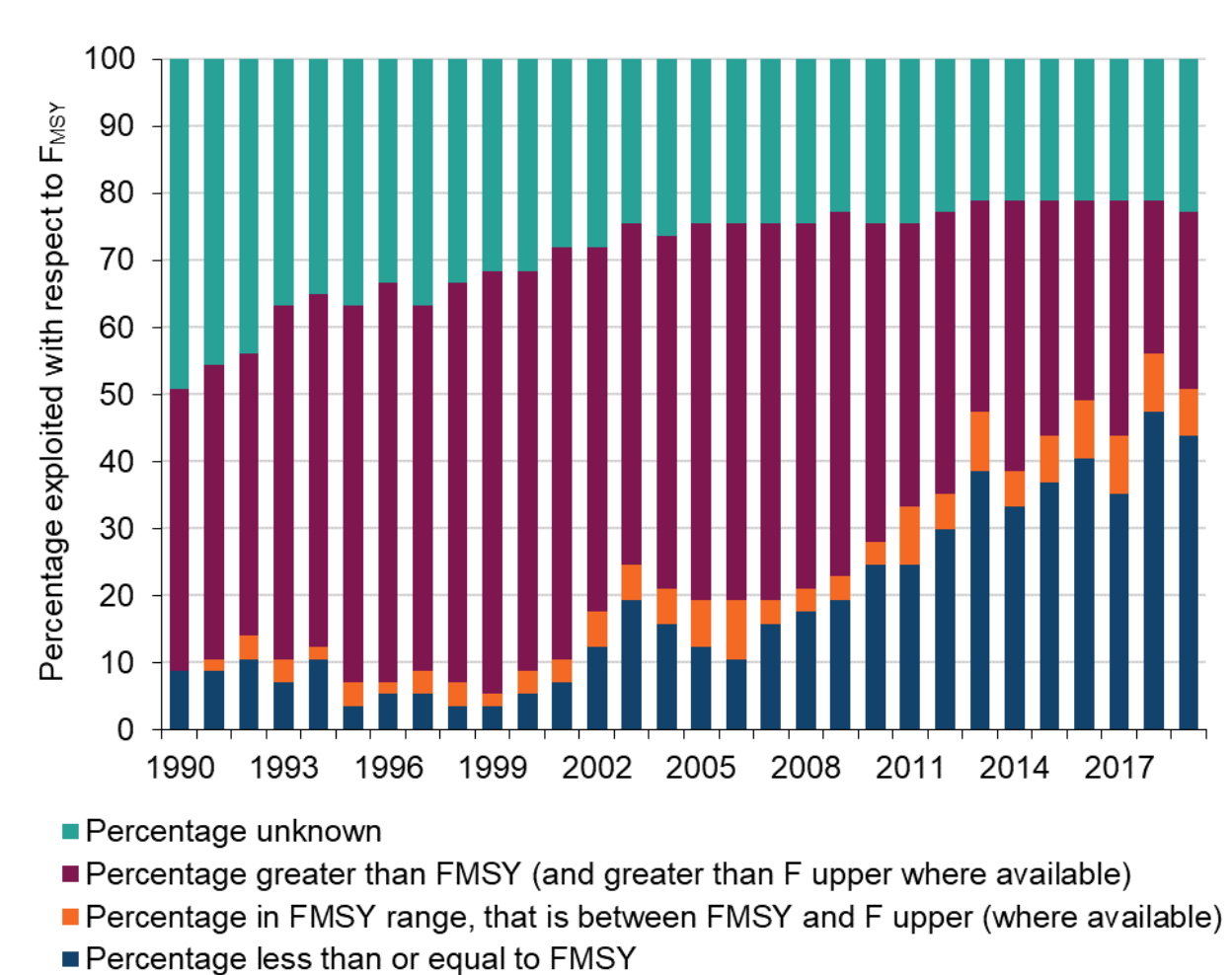
## Using resources from nature more sustainably and efficiently

### What are our long-term ambitions?

We will double resource productivity by 2050. We will do this by delivering world-class fisheries management to achieve sustainable fisheries, safeguarding stocks and the environment. We will also increase the use of timber in construction to reduce emissions from making construction materials and driving investment into tree planting and establishment over the long-term. In addition, we will protect and enhance our soils so that they function better to deliver a wide range of ecosystem services. Furthermore, we will support the development of a food system that is sustainable, resilient, and affordable, that will support people to live healthy lives and that will protect animal health and welfare.

### What is the condition of the natural environment?

Figure 7: Marine fish (quota) stocks of UK interest harvested sustainably, 1990 to 2019



Source: Defra (reported as C10a (interim) indicator in the Outcome Indicator Framework)

Overall, there is evidence of a positive trend towards a greater proportion of stocks fished sustainably in both the long term and in recent years. There is also a positive trend for fish stocks remaining within safe biological limits in the long term, but a negative trend in

recent years. For both measures, there is a decreasing percentage of stocks with unknown status, from almost 50% in 1990 to 23% in 2019.

Figure 8: Summary of assessment results - Using resources from nature more sustainably and efficiently indicator components

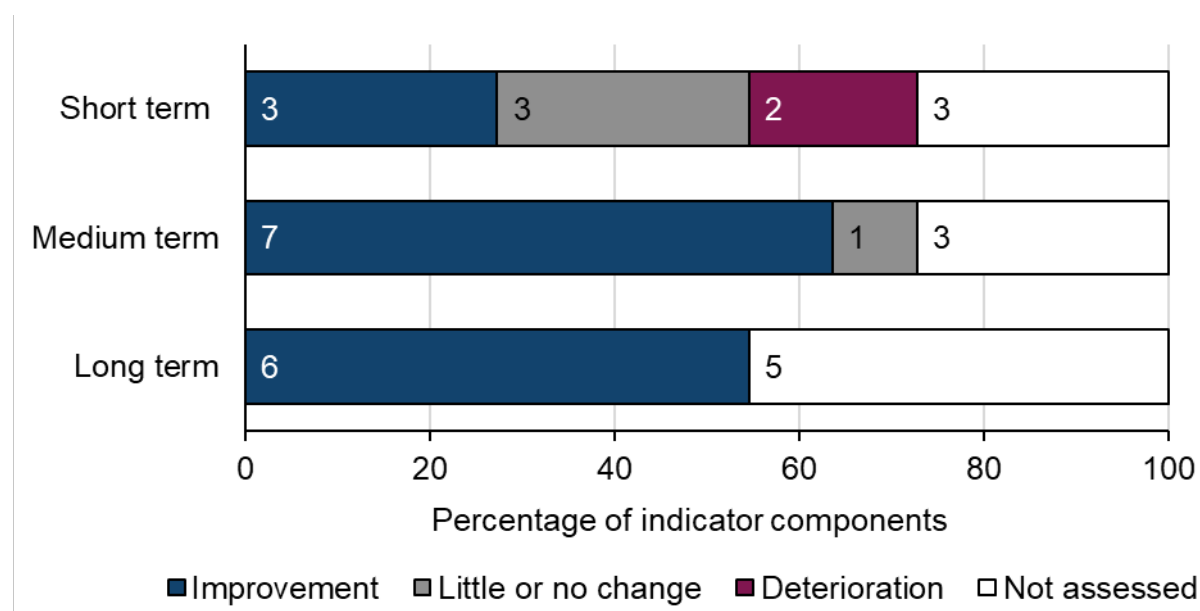


Figure 8 shows the proportion of indicator components for which 'Using resources from nature more sustainably and efficiently' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

Of the 8 indicator components that were assessed, 7 showed an improvement over the medium term and 1 showed little or no change. However, over the short term, 5 indicators moved into a less positive category; E8b Per capita water consumption in England and J2a Raw material consumption moved to deterioration, and E5 Percentage of the annual growth of trees that is harvested, E8a Water leakage and J2b Gross value added per kg of raw material consumption moved to little or no change. The short-term time period covered the most recent 5 years for which an assessment could be made. This varied from 2012 to 2017 to 2016 to 2021, depending on the indicator. E5 and E6 did not have sufficiently long time series available for a long-term assessment, but all others showed an improvement over this period.

For further information, including information on indicators not assessed, refer to the [Outcome Indicator Framework](#).

## What actions are being taken towards achieving our ambitions?

### Fisheries

To deliver sustainable fisheries management, we consulted on the draft Joint fisheries Statement (JFS). This sets out the policies the fisheries policy authorities in the UK will

follow. The JFS proposes Fisheries Management Plans (FMPs). FMPs will be key to deliver sustainable and well managed fisheries that meet our national and international commitments. This year, we will publish the final JFS to meet the requirements of the Fisheries Act 2020.

Over the past year, for the 43 Total Allowable Catch (TAC) limits agreed with the EU, 19 were consistent with Maximum Sustainable Yield (MSY) advice. We will continue to increase the number of TACs set consistent with advice from the International Council for the Exploration of the Sea (ICES) during annual fisheries negotiations. Where there is insufficient data for ICES to provide an MSY assessment, we will work towards establishing proxies to ensure that we fish sustainably, while minimising the impacts on the natural environment.

We also introduced the £100 million UK Seafood with relevant objectives to: ensure the best science, research and technology is used in fisheries management and enable an environmentally sustainable fishing industry that reflects the long-term needs of the sector.

## **Soil**

To support the government's commitment to have sustainably managed soils by 2030, we have continued to develop policy measures that seek to improve and protect soil health from future degradation and making soil resilient to impact of climate change. For example, we are developing a healthy soil indicator and soil structure monitoring methodology to help land managers and farmers track the health of our soil and the impact of their management practices over time. These actions, in conjunction with Natural Capital and Ecosystem Assessment soil monitoring activities, will create a robust baseline from which we can monitor improvements in soil health, identify trends and support informed policy decisions, including any future environmental targets for soil health.

The Sustainable Farming Incentive soil standards (arable and horticulture soil and improved grasslands soil) will support sustainable approaches to farm husbandry that deliver for the environment, improve soil health, and support farm productivity. This will include the introduction of herbal leys, and the use of grass-legume mixtures or cover crops. Local Nature Recovery will pay for actions that support nature recovery and meet local environmental priorities, with improving soil health being a key aspect.

We published our [England Peat Action Plan](#) and [England Trees Action Plan](#) (ETAP). This sets out our vision for the management, protection, and restoration of peatlands and how we will deliver our aim to at least treble tree planting rates in England by the end of this Parliament.

## **Timber**

We have established a cross-government and cross-industry Timber in Construction (TiC) working group. They will develop a policy roadmap identifying key actions for government, the construction sector, the timber sector, and academia to safely increase timber use in construction. These include, driving the use of modern methods of construction, increasing public demand for sustainably sourced timber through procurement, and encouraging research into barriers to uptake of timber. Their work will include considering what impact



increasing use of TiC will have on domestic timber supplies as well as considering appropriate targets for TiC. The group will report before the end of this Parliament.

We have also launched our [Timber in Construction Innovation Fund](#). This will provide £1.5 million over the next 3 years to develop innovative timber products. Additionally, we have been working with DLUHC, Homes England and other partners to explore ways to increase timber use in the delivery of housing programmes.

## **Food and farming**

We published the government's [Food Strategy](#). This strategy sets out what we will do to create a more prosperous agri-food sector that delivers healthier, more sustainable, and affordable diets for all. The strategy sets objectives for:

- a prosperous agri-food and seafood sector that ensures a secure food supply in an unpredictable world and contributes to the levelling up agenda through good quality jobs around the country
- a sustainable, nature positive, affordable food system that provides choice and access to high quality products that support healthier and home-grown diets for all
- trade that provides export opportunities and consumer choice through imports, without compromising our regulatory standards for food and animal welfare, whether produced domestically or imported

As part of our investment in innovation, research and development, the Food Strategy, committed to spending over £270 million through our [Farming Innovation Programme](#). We are also supporting £120 million investment in research across the food system in partnership with UK Research and Innovation in addition to other funding packages.

As part of our agricultural transition, we have set out our [environmental priorities](#) for the Environmental Land Management scheme. We published [the high-level outcomes expected](#) from the schemes in January 2022, with a commitment of keeping our aims under review as we develop long-term legally binding targets under the Environment Act 2021, and set out the policy pathways to meet them under our update of the Environmental Improvement Plan due in 2023. We also updated on the progress we have made through co-working with farmers on the design of new systems to support the choices that they make for their own holdings. This includes through initiatives such as the Sustainable Farming Incentive, Local Nature Recovery and Landscape Recovery schemes.

The Sustainable Farming Incentive focuses on making agricultural activities more sustainable and will pay for actions that all farmers can choose to take. This scheme will pay for actions that can be taken across the whole farmed landscape in order to have the most impact. This includes reducing inorganic fertiliser and pesticide use, taking care of our soils, and improving farmland biodiversity, water quality and carbon sequestration.

Local Nature Recovery is the more ambitious successor to Countryside Stewardship, paying for the right things in the right places and supporting local collaboration to make space for nature in the farmed landscape. This scheme will particularly contribute to our

targets for trees, peatland restoration, habitat creation and restoration and natural flood management.

We also launched the first round of the Landscape Recovery scheme applications, that will pay landowners or managers who want to take a more radical and large-scale approach to producing environmental and climate outcomes through land use change and habitat and ecosystem restoration. Applications closed in May 2022.

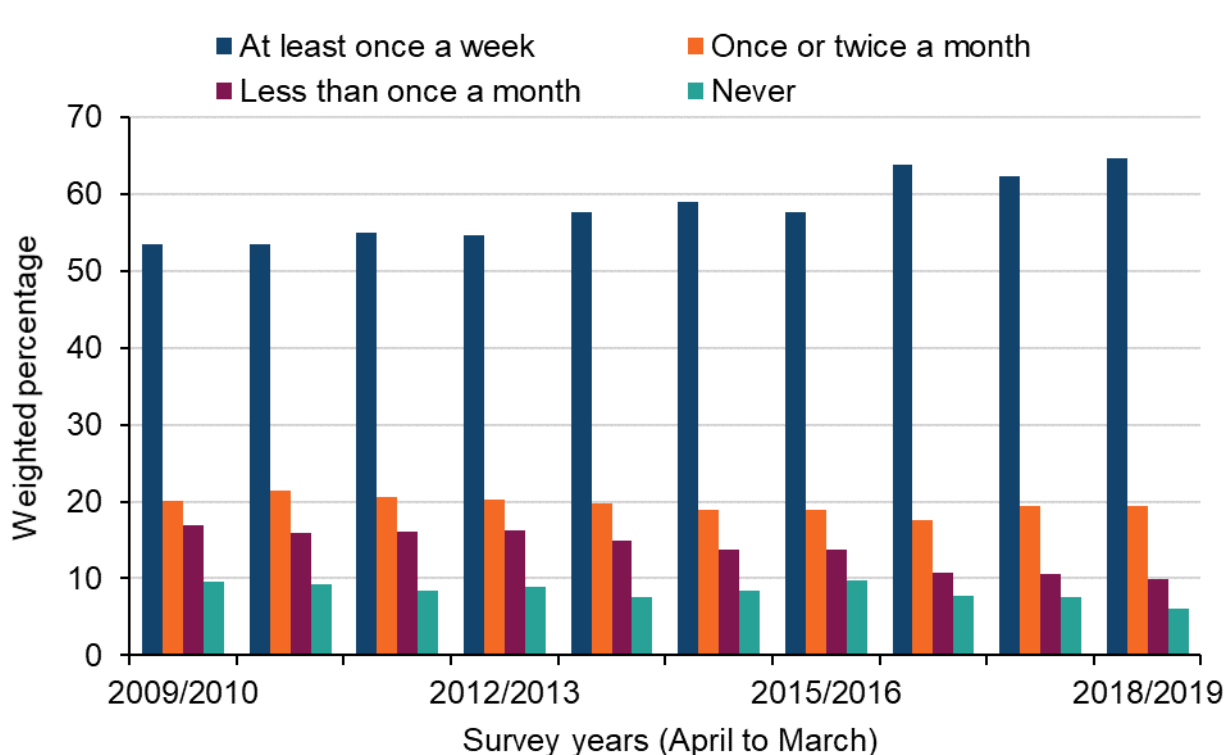
## Enhanced beauty, heritage, and engagement with the natural environment

### What are our long-term ambitions?

We will ensure the protection, enhancement and safeguarding of England's natural heritage for present and future generations. We will also support more equitable access to enable people from all backgrounds to connect with the natural environment and take steps to conserve and enhance it. We will do this through a range of measures. For example, by completing the England Coast Path and planting 1 million urban trees – both by the end of this parliament. We will also increase access for under-represented groups visiting our national landscapes, enhance health and wellbeing through green social prescribing and support children and young people to connect with nature, including through education.

### What does access to the natural environment currently look like?

Figure 9: Frequency of visits to the natural environment in the past 12 months, percentage of adults in England, survey years 2009/2010 to 2018/2019





Source: Natural England (reported as G4a (interim) indicator in the Outcome Indicator Framework)

Figure 10: Summary of assessment results – Enhanced beauty, heritage, and engagement with the natural environment indicator components

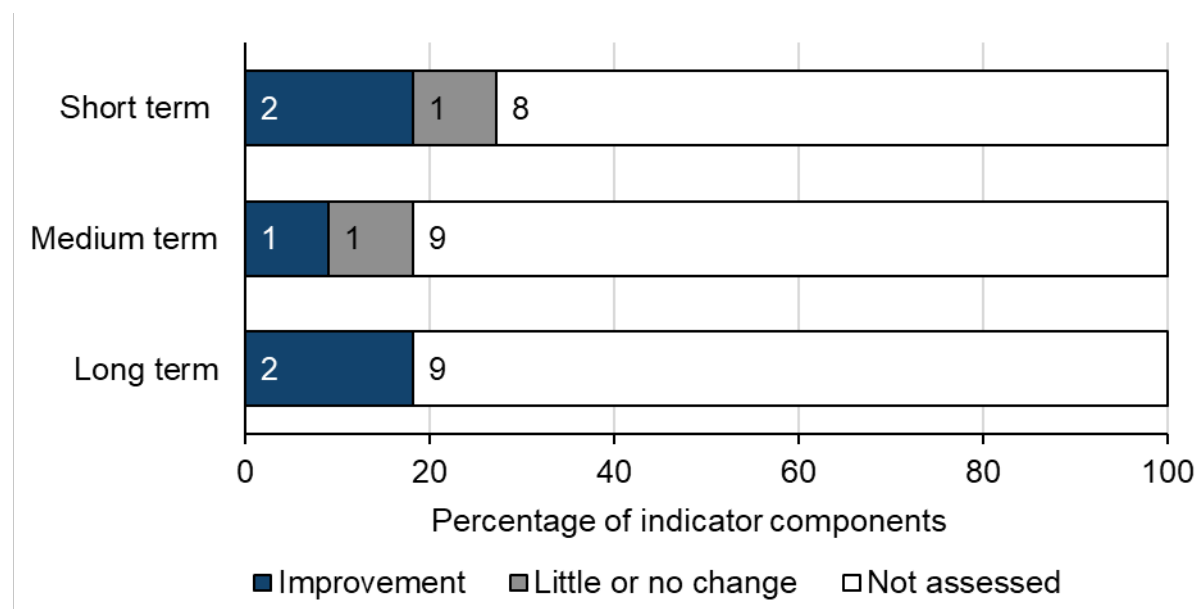


Figure 10 shows the proportion of indicator components for which 'Enhancing beauty, heritage and engagement with the natural environment' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

Two indicator components were assessed: Frequency of visits to the natural environment and Volunteer time spent on the natural environment in England. Both showed an improvement in the most recent 5-year period for which data were available (2013 to 2018).

For further information, including information on indicators not assessed, refer to the [Outcome Indicator Framework](#).

### What actions are being taken towards achieving our ambitions?

So far, we have supported over 1,000 projects through the Farming in Protected Landscapes Programme. Projects will enable people to discover, enjoy and understand the landscape and its cultural heritage in Areas of Outstanding Natural Beauty and National Parks.

We continue to deliver the Green Social Prescribing Programme that links people to nature-based interventions and activities including culture and heritage. 7 test and learn sites are now operational, with over 1,500 referrals to nature-based activities having been given so far. The programme will provide evidence on how to scale up green social prescribing nationally.

We announced at the Spending Review how we will improve public access to green spaces. We will invest an additional £30 million over three years in support of health,

wellbeing, and the environment, including an expanded network of green routes for different users.

We will also continue to collaborate across government, ensuring connection with nature is embedded into other government department's policies and strategies. This will include feeding into delivery of DLUHC's Levelling Up Parks Fund, due for launch this summer. We are also contributing to the development of DHSC's Mental Health Plan, due to be published by the end of the year. In addition, we worked closely with DfE's Sustainability and Climate Strategy and continue to work closely with them on their initiatives to connect children to nature, such as through the proposed Natural History GCSE, the Climate Leaders Award, and the National Education Nature Park.

Recognising the importance of England's National Parks and Areas of Outstanding of Natural Beauty, we published our [response](#) to Julian Glover's Landscapes Review. This not only sets out our plans for landscapes, but the ways we can improve access to nature; and ensure that landscapes are key to tackling climate change. We are currently reviewing the responses to our consultation which closed in April. The potential for 2 new AONBs in the Yorkshire Wolds and Cheshire Sandstone Ridge is currently being investigated by Natural England, as are extensions to the Chilterns and Surrey Hills AONBs. As a further response to the Landscapes Review, a strategic 'All England Assessment' is exploring further areas that might be considered for National Park or AONB designation.

We completed the Children and Nature Programme which worked with over 270 schools over its duration. Initiatives were successful in developing skills and confidence in schools' staff, improving school grounds for learning and wildlife. The programme provided experiences in natural spaces that have supported over 53,000 pupils. It also increased the number of care farming places by over 50% to 600,000 places a year and rolled out the care farming code of practice to support and assurance to care farmers and users. The independent evaluation of the largest Children and Nature project, Nature Friendly Schools, is due to report this year, as is a programme wide delivery report.

We are also enabling children and young people to connect with nature through the Green Recovery Challenge Fund. As an example, the Generation Green project is providing more than 100,000 opportunities to connect young people to nature – many for the first time.

Towards our aim to complete the England Coast Path, a further 169 miles was opened over the past year, taking the total opened to 550 miles. A further 1,529 miles have received approval. When completed, the 2,795-mile path will be the longest waymarked and maintained coastal walking route in the world.

In readiness for the launch of the Green Infrastructure Framework – Principles and Standards this year, Natural England have launched the [15 Principles of Good Green Infrastructure](#) and a beta version of the England-wide [Green Infrastructure Mapping Database](#). We will support local authorities in assessing provisions against these standards. We will also explore how reforms to the planning system can ensure green and blue infrastructure is better incorporated into new development.

We supported the planting of 130,000 urban trees, including 20,000 valuable street trees. The most recent funding round supported planting 44,000 large trees over 2 years.

We are using Rights of Way Reforms to preserve historic rights of ways for the future. We will lay the legislation for the reforms as soon as reasonably practicable, including repealing the 2026 cut-off date for recording historic rights of way.

Through the current Agri-Environment scheme we are addressing Heritage at Risk assets removing 59 sites from the risk register in 2021. We will also continue to pay for heritage, access and engagement through our existing schemes and we will consider how to maintain investment in these areas as part of future schemes.

We are protecting the historic environment and connecting people with nature through the Peatland Grant Scheme and the development of an historic environment standard that helps ensure the supported projects are sensitive to heritage considerations.

### **Case Study: The National Forest: Forest Foxes**

Since the 1990s, the National Forest Company (NFC) has been leading the creation of the National Forest throughout 200 square miles of the Midlands, creating woodlands and green spaces where 200,000 people live and work. The Forest Foxes project has directly brought disadvantaged young people into close contact with the natural world through outdoor learning and established a new partnership approach to engage with under-represented groups.

Since 2017, the NFC has been supporting schools within the Forest to develop their outdoor learning provision so that every child can enjoy outdoor learning as a regular part of their education. This challenge has been enthusiastically embraced with uptake growing from 20% to more than 60% of the National Forest's 88 primary schools. Using this experience, the NFC collaborated with Leicester City Football Club and the Forest School Association to work with some of Leicester city's most deprived and diverse schools, developing a trial programme for outdoor learning within schools and through visits to the National Forest.

Funded by the Department for Education and then Natural England, with additional support from the Premier League Charitable Fund and the NFC, this project was selected as 1 of 5 national pilots within Community Forest Woodland Outreach, part of Defra's response to the 25 Year Environment Plan. It was delivered between 2019 and 2022 with the intention of increasing children's access to the natural world, thereby improving their mental health and wellbeing, as well as their positive engagement with learning.

The project aimed to build a sustainable method of delivering outdoor learning within inner city schools, training teachers, creating outdoor classrooms, including outdoor learning in school improvement plans, and developing a school support network. Covid-19 prompted the development of this network sooner than intended, with the resultant remote sessions proving to be an effective ongoing complement to face to face work. The project has successfully reached a total of 30 schools, 91 members of staff and 2,289 individuals through direct school outreach activity, with positive feedback and impact.

The success of the project means that the NFC is committed to taking Forest Foxes forward. The project is part of Natural England's wider Children and Nature programme,

with findings being shared with practitioners, academics and stakeholders all looking to mainstream outdoor learning.



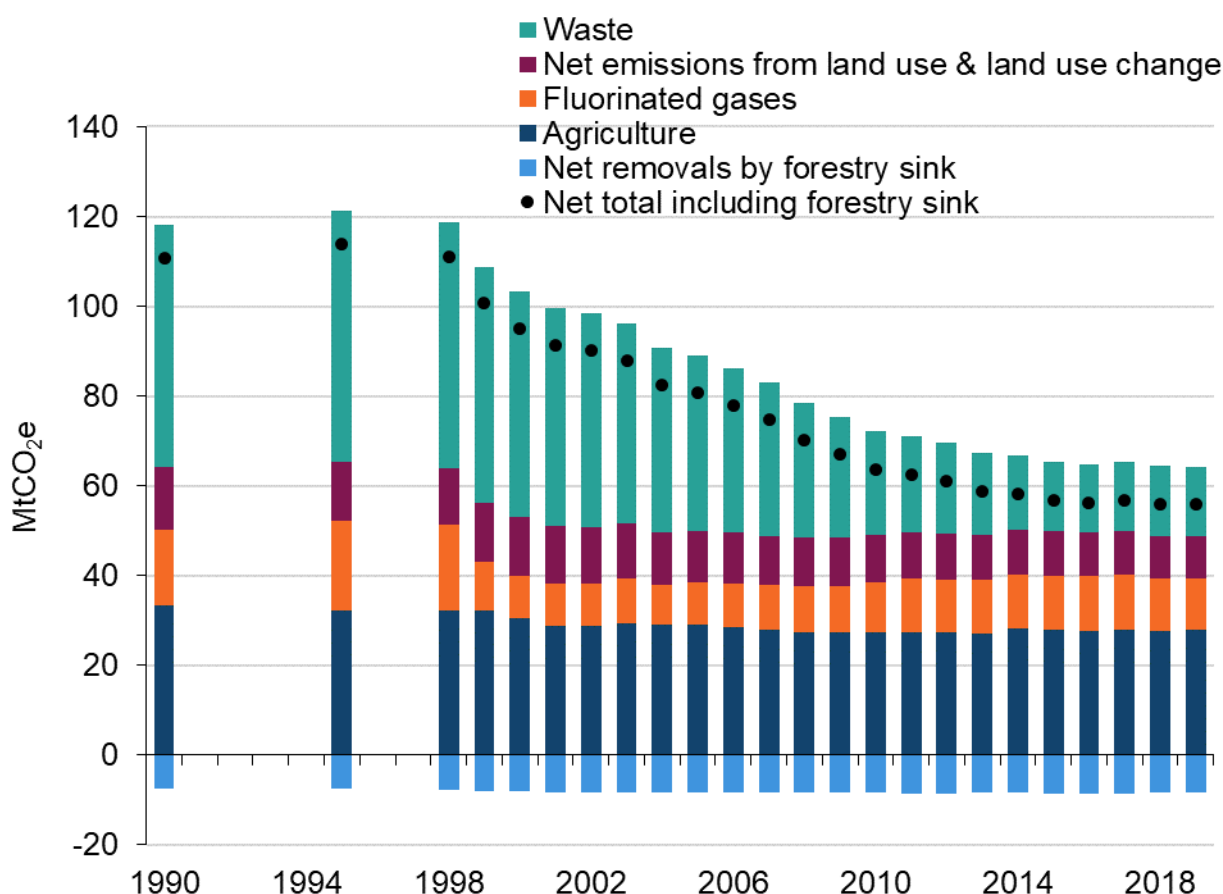
## Mitigating and adapting to climate change

### What are our long-term ambitions?

We will reduce greenhouse gas emissions and increase carbon storage to help deliver net zero, while also building our resilience to climate change. We will move towards a circular economy, improve resource efficiency, and achieve near elimination of biodegradable waste to landfill from 2028. We will at least treble tree planting rates in England, reflecting England's contribution to meeting the UK's target of planting 30,000 hectares per year by 2025. We will increase canopy provided by woodlands and trees outside of woodlands from 14.5% to 17.5% and restore approximately 280,000 ha of peatland by 2050. We will also mobilise additional public and private investment of approximately £30 billion, in line with our 2037 delivery pathway. We will support farmers to implement a range of low carbon, resilient farming practices that can help increase productivity, reduce future climate impacts, and enable more efficient use of land. [The Net Zero Strategy](#) set a goal for 75% of farmers in England to be engaged in low carbon practices by 2030, rising to 85% by 2035.

## What is the condition of the natural environment?

Figure 11: Emissions of greenhouse gases from natural resources in England by sector, 1990 to 2019



Net emissions of GHGs from natural resources in England have fallen by 50%, from 111 MtCO<sub>2</sub>e in 1990 to 56 MtCO<sub>2</sub>e in 2019. Net GHG emissions have fallen from all sectors included within this indicator; however, the greatest reduction has been achieved in the waste sector (38 MtCO<sub>2</sub>e or 71%). Net emissions from land use and land use change, and emissions from fluorinated gases and agriculture have fallen by 33%, 33% and 16% respectively, and net removals by the forestry sector have increased by 14%. Emissions from fluorinated gases have increased by 10% since 2009.

Source, Department for Business, Energy & Industrial Strategy (reported as A2 indicator in the Outcome Indicator Framework)

Figure 12: Summary of assessment results – Mitigating and adapting to climate change

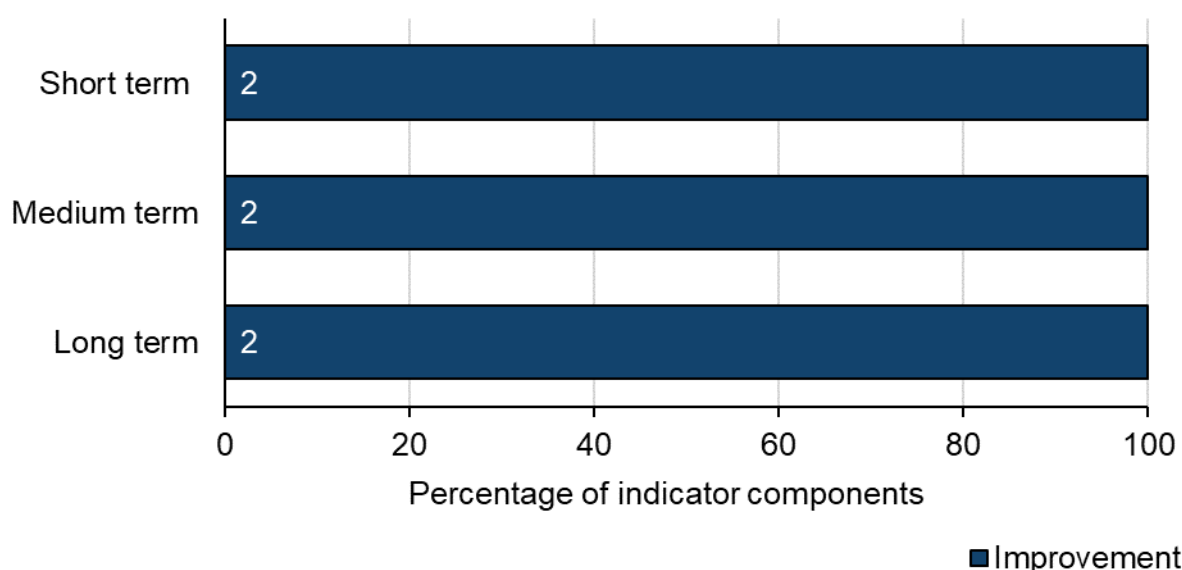


Figure 12 shows the proportion of indicator components for which 'Mitigating and adapting to climate change' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

Both A2 Emissions of greenhouse gases from natural resources in England and J1 Consumption based greenhouse gas emissions in England showed an improvement over all assessed time periods. The short-term time period relates to the most recent 5 years for which an assessment could be undertaken (2013 to 2018 for A2 and 2012 to 2017 for J1).

The inclusion of this assessment is based on the individual indicators with a relevant primary goal; additional valuable insights can be understood by considering the holistic relevance of additional indicators, as many will be sensitive to the issue of climate change. The first Outcome Indicator Framework report (published in 2019) lists a sub-selection of indicators which are expected to give some indication of progress on adaptation, the need for adaptation or the resilience of natural assets to climate change. Future assessments of the Outcome Indicator Framework will continue to consider how best to derive inferences of progress to aid in understanding progress of the 25 Year Environment Plan.

For further information, refer to the [Outcome Indicator Framework](#).

### What actions are being taken towards achieving our ambitions?

Last year, the government's [Net Zero Strategy](#) was published. This sets out policies and proposals for decarbonising all sectors of the UK economy to meet our net zero target by 2050. We will continue to make progress in delivering the commitments in the strategy.

We published the England [Trees](#) and [Peat](#) Action Plans. These set out the government's long-term visions for trees, woodlands and forests and the management, protection, and restoration of our peatlands. We have awarded funding to 15 projects through the Nature for Climate Peatland Restoration Grant Scheme. Over the next year, will deliver against both plans, largely through the Nature for Climate Fund (NCF).



Through the Green Recovery Challenge Fund, 90 nature-based projects in England were awarded funding to restore nature, support climate change mitigation and adaptation, connect people with the natural environment, and create or protect jobs in the sector.

We published the [government's response to the Climate Change Committee's 2021 Progress Report](#) on Adapting to Climate Change and the [UK's Third Climate Change Risk Assessment \(CCRA3\)](#). Throughout 2022, we will be developing the 3rd National Adaptation Programme for publication in 2023, which will set out how the government will reduce climate risks to the natural environment, and beyond. As part of the NAP3 programme we will use the Local Nature Recovery Strategies to link nature recovery with helping society adapt to and mitigate climate change; through a National Nature Recovery Network, we will create space where species and ecosystems can thrive as our climate changes; and we will expand our National Nature Reserves and Protected Sites so they can accommodate the impacts of climate change as part of the 30 by 30 target.

We announced funding to support local authorities to implement free separate food waste collections for all households from 2025.

We have integrated carbon into the Moorland Sustainable Farming Incentive (SFI) standard. Environmental land management schemes, the Farming Investment Fund and Farming Innovation Programme will play an important role in incentivising tree planting and peat restoration. We will contribute to a new Biomass Strategy that reviews what amount of sustainable biomass could be available to the UK, and how this resource could be best utilised.

We allocated £75 million to the Net Zero Research and Innovation programme. This will assess decarbonisation options in all Defra sectors and ensure future emissions reductions and the meeting of carbon budgets.

The regulatory phase down of HFC gases will contribute towards reducing F-gases emissions. We are conducting a review of domestic F-gas legislation, which will, at the least, result in proposals to meet the Kigali 2036 target. By 2025, we will have put in place the next HFC phasedown step.

## Minimising waste

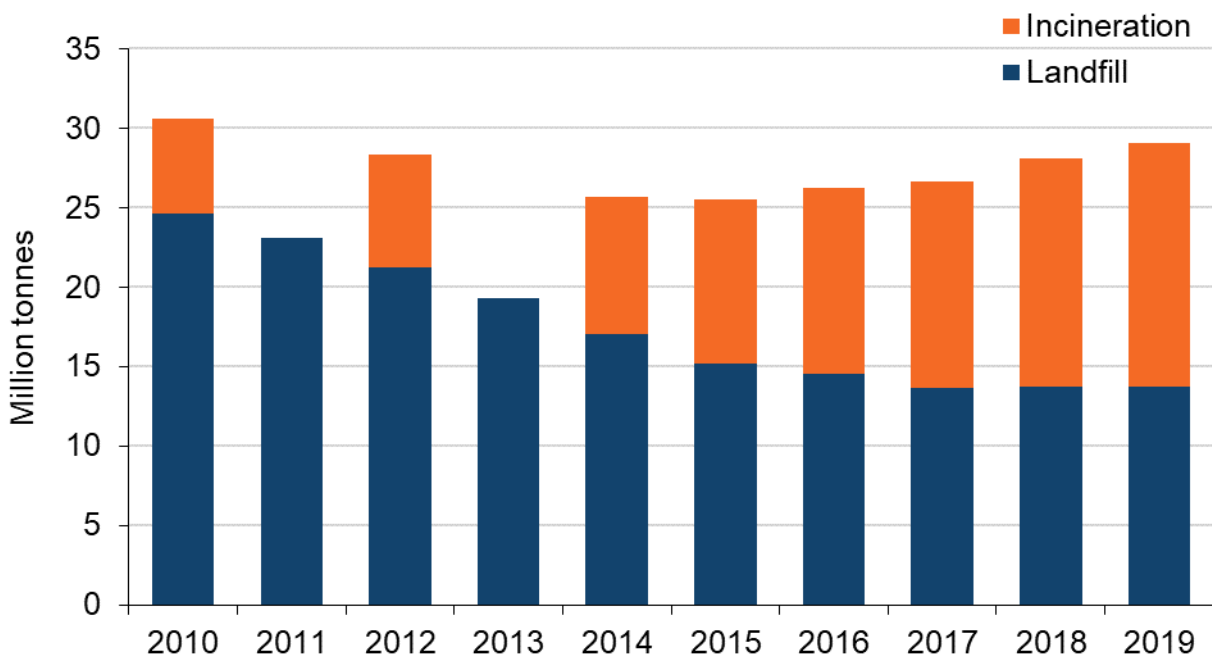
### What are our long-term ambitions?

We will maximise the value of the resources we use, minimise the waste we create and therefore avoid emissions from the waste sector, driving us towards our target of net zero emissions by 2050. We will do this by eliminating all avoidable plastic waste by the end of 2042, and all avoidable waste by 2050. In accordance with our Net Zero Strategy commitment, the government will explore options for the near elimination of biodegradable municipal waste to landfill from 2028. Targeting use of unnecessary single-use plastics, reducing food waste and waste crime, will maximise the value of resource use and minimise waste impact on the environment. Our [Resources and Waste Strategy](#) sets out the policies that will help achieve these ambitions.



## What is the condition of the natural environment?

Figure 13: Residual waste (including major mineral wastes) in England, 2010 to 2019



Source: Environment Agency (reported as J4 interim indicator in the Outcome Indicator Framework)

Figure 14: Summary of assessment results – Minimising waste indicator components

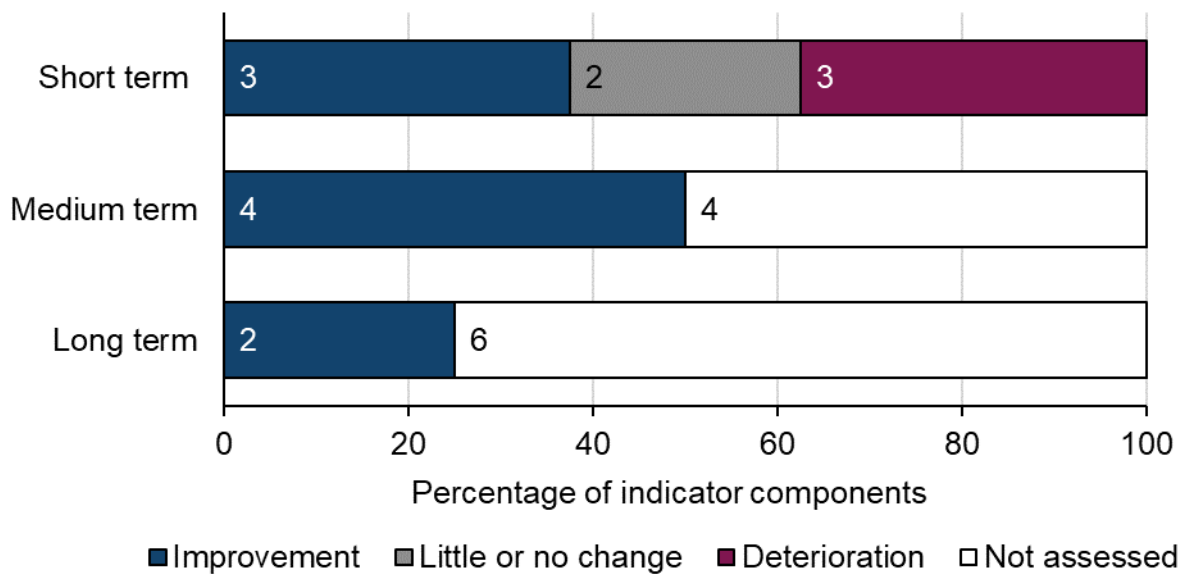


Figure 14 shows the proportion of indicator components for which 'Minimising waste' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

Of the 8 indicator components for which Minimising Waste is the primary goal, 3 indicator components showed an improvement, 2 showed little or no change and 3 showed a deterioration over the short term. The short-term time period covered the most recent 5 years for which an assessment could be made, which was 2013 to 2018 for all components except C1a (2009 to 2014), C1b (2014 to 2019) and J1 (2012 to 2017).

### **What actions are being taken towards achieving our ambitions?**

Last year, we consulted on a new [Waste Prevention Programme](#) for England. We will be publishing our response to the consultation later this year.

Together with the Devolved Administrations, we published the government's [response](#) to the second consultation on Extended Producer Responsibility (EPR) for Packaging. The reforms will implement EPR for packaging from 2024. We will focus on producer payments for managing household packaging waste and packaging in street bins managed by local authorities and will appoint a scheme administrator to oversee these arrangements. The EPR for Packaging Statutory Instrument will come into force next year.

The use of single-use carrier bags has been reduced in the main supermarkets by over 95% with our 5p charge. The May 2021 increase from 5p to 10p and extension to all retailers is expected to reduce SUCB issued by micro, small and medium-sized enterprises by 80% within 10 years. We have also introduced a plastic packaging tax on plastic packaging that does not contain at least 30% recycled content. In addition, we published a consultation on proposals to ban commonly littered single-use plastic items the supply of single-use plastic plates, cutlery, and balloon sticks, and expanded and extruded polystyrene food and beverage containers, including cups in England. We also published a call for evidence on commonly littered single-use plastic items. Later this year, we will consult on a Plastic Waste Exports Ban.

We confirmed at the Spending Review funding for local authorities to implement free, separate food waste collections in every local authority from 2025. This supports our commitment to explore options for the near elimination of biodegradable municipal waste to landfill from 2028.

We supported 44 councils to help them purchase new litter bins and announced that 11 councils will receive a share of funding to tackle fly-tipping.

We published a second [consultation](#) on the Deposit Return Scheme (DRS) for drinks containers. This includes proposals relating to the materials in scope for the DRS, retailer and return point obligations, implementation timeline and scheme governance. We also announced the materials in scope of the DRS as part of the EPR for packaging response.

Detailing policy proposals for increasing consistency in recycling collected from households, businesses, and other organisations, we published the second consultation on Consistency in Household and Business Recycling in England.

Through a public consultation, we sought views on the practical implementation of mandatory digital waste tracking, including what waste movements will be included, what information will need to be recorded, by whom and when.

We published a [public consultation](#) on reform of the waste carrier, broker, and dealer system, seeking views on moving from the current registration system to a permit-based system, and the introduction of a technical competence element. Later this year, we will publish a summary of responses to the consultation.

We published the Green Construction Board (GCB)'s Zero Avoidable Waste in Construction [route map](#).

We published a call for evidence and our [response](#) to the development of Standards for bio-based, biodegradable, and compostable plastics.

We consulted on reforms that will help us to tackle poor performance and illegality in the waste sector.

We published the [Evaluation Plan](#) & Indicator Framework of the Resources and Waste Strategy and the [2021 UK statistics on Waste](#).

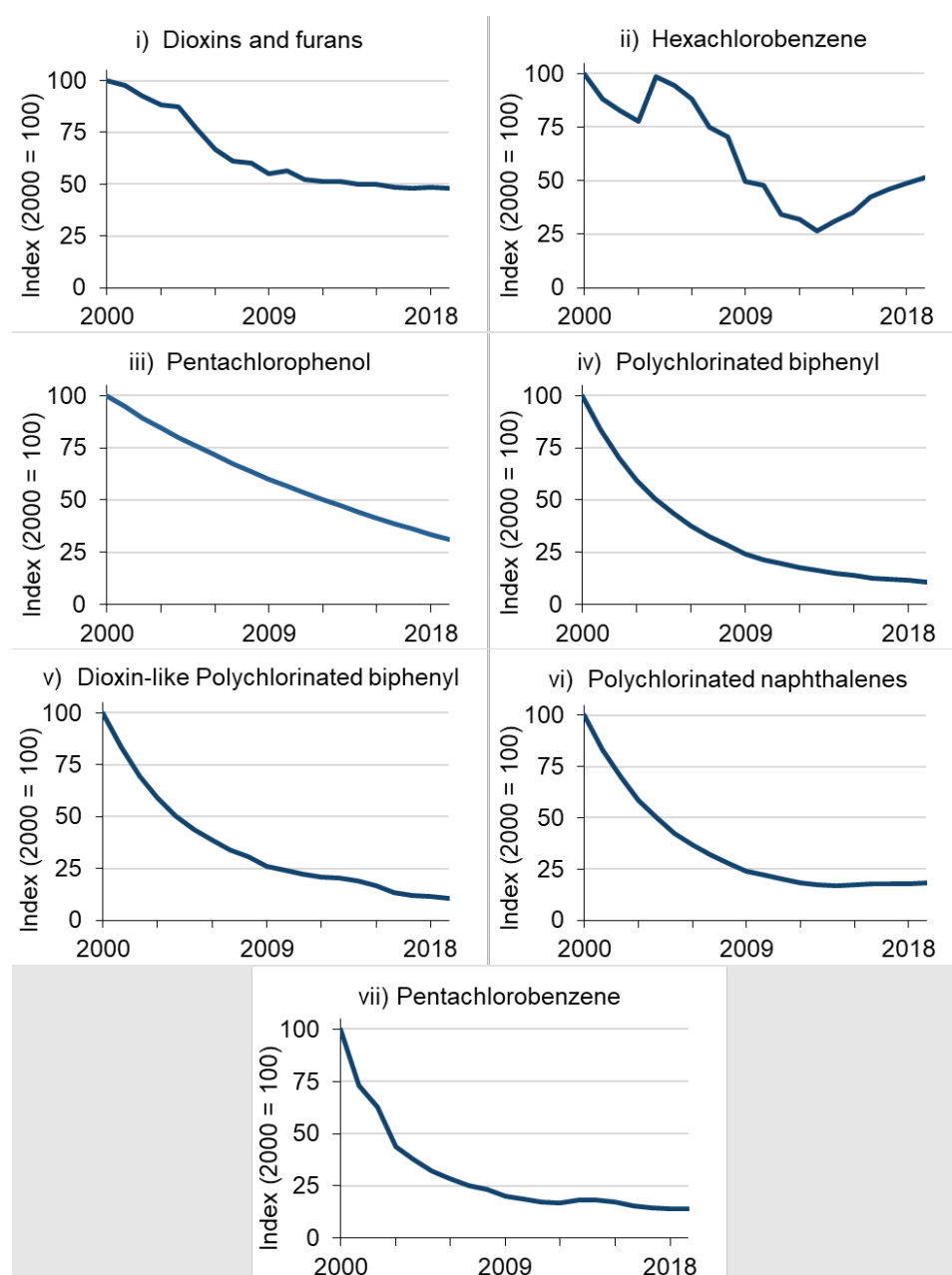
## Managing exposure to chemicals and pesticides

### What are our long-term ambitions?

Our ambition is that chemicals are safely used and managed, and that the levels of harmful chemicals entering the environment are significantly reduced. We will deliver a Chemicals Strategy which will set our immediate priorities, alongside any actions we will need to take to achieve safer and more environmentally sustainable management of chemicals for present and future generations. We will reduce and eliminate Persistent Organic Pollutants (POPs) in the environment, including the removal of Polychlorinated Biphenyls (PCBs) contaminated equipment from use by 2025. We will also put Integrated Pest Management (IPM) at the heart of a holistic approach to minimise the use of pesticides, by developing and implementing policies that encourage and support sustainable crop protection and protection of public infrastructure.

## What is the condition of the natural environment?

Figure 15: Emissions of persistent organic pollutants to air, land and water, England, 2000 to 2019



Emissions attributed to England for all 7 POPs included within this indicator have fallen between 2000 and 2019. Dioxins and furans are a family of chemicals strongly associated with thermal processes linked to combustion (particularly of waste) and manufacture of metals. Their emissions were already reduced by over 60% between 1990 and 2000, with improvements in technology and tighter environmental regulations contributing to this fall. Between 2000 and 2010, emissions of dioxins and furans fell by a further 43% but have since levelled out, with emissions post-2010 largely linked to more diffuse sources such as domestic combustion of solid fossil fuels, accidental fire, and illegal burning of waste.

By 2013, emissions of hexachlorobenzene had fallen to 27% of their 2000 baseline figure but they have risen annually since then to reach 52% of emissions in 2000. This is linked to waste incineration and the increasing use of a specific pesticide (chlorothalonil) for which it is a by-product. Emissions of pentachlorophenol have fallen consistently since 2000 to reach 31% of their baseline figure in 2019. Emissions of the remaining 4 POPs have followed a very similar pattern to each other, falling sharply in the first 10 years and then levelling out to between 11% and 18% of their baseline figures in 2019. In particular for polychlorinated biphenyls and dioxin-like polychlorinated biphenyls, this relates to remaining final in-use stocks of heat-transfer fluids in di-electric equipment in the energy transmission networks.

Source: Persistent Organic Pollutants Multimedia Emissions Inventory (reported as H3b (interim) indicator in the Outcome Indicator Framework)

Figure 16: Summary of assessment results – Managing exposure to chemicals indicator components

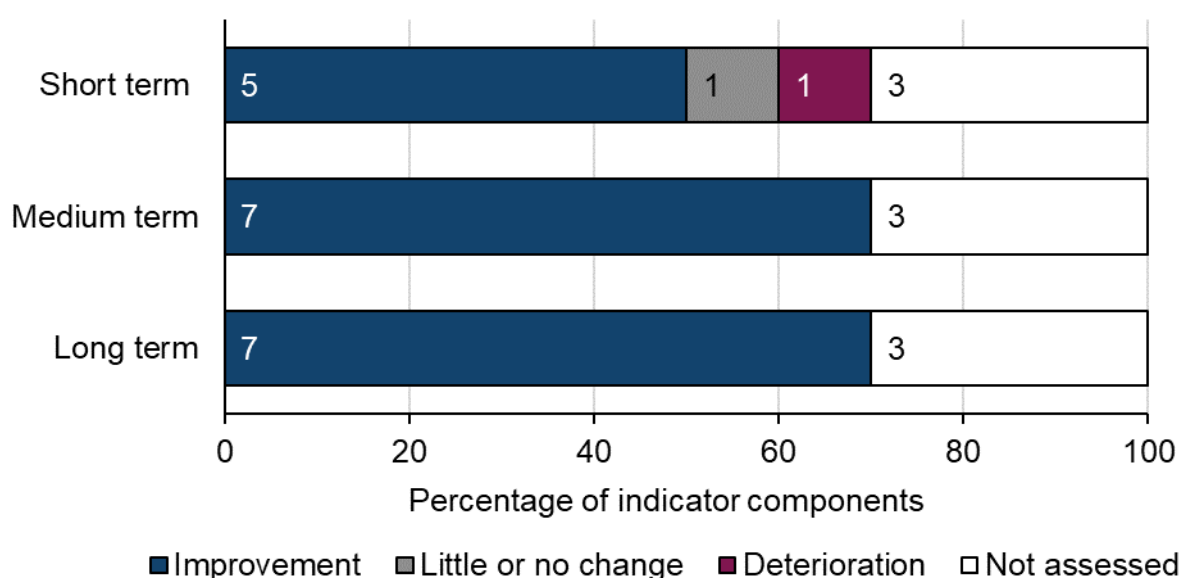


Figure 16 shows the proportion of indicator components for which 'Managing exposure to chemicals' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

H3b (emissions of persistent organic pollutants to air land and water in England) had sufficient data points to be assessed. All of the pollutants measured by H3b showed an improvement over the medium and long term. However, emissions of hexachlorobenzene increased over the short term and polychlorinated naphthalenes showed little or no change. The short-term time period covered the most recent 5 years for which an assessment can be made (2013 to 2018 for H3b).

For further information, including information on indicators not assessed, refer to the [Outcome Indicator Framework](#).

## What actions are being taken towards achieving our ambitions?

In the past year, we have consulted on an update to the UK National Implementation Plan for the Stockholm Convention on POPs, setting out the information available to us for “new POPs” and our plans to monitor and eliminate them in the future.

We published the [Summary of Responses to the Sustainable use of Pesticides](#): draft National Action Plan consultation, summarising the main themes highlighted by a range of stakeholders. Next, we will publish the UK National Action Plan for the Sustainable Use of Pesticides and look to incentivise the sustainable use of pesticides and IPM in future agri-environment land management schemes.

Through publication of a chemicals and pesticides provisional framework, we set out how the UK government and devolved governments propose to work together on regulating chemicals and pesticides.

Chemicals are now regulated through the new UK REACH regulation, which retains the key principles of EU REACH, but will diverge as the policy evolves. We have published the first annual [UK REACH Consolidated Report and Work Programme](#), setting out the activity that the Health and Safety Executive, the Environment Agency, and other relevant agencies will carry out to operate UK REACH. We have also published a recommendation of 2 priority substances to be added to the list of substances subject to authorisation. We have scoped a long-term monitoring and evaluation strategy to identify how to evaluate the process, impacts and value for money of the UK REACH policy.

The future focus of the UK REACH Work Programme will include; an evidence project on managing the risks of intentionally added microplastics, a Regulatory Management Options Analysis (RMOA) to review the evidence base and potential scope for a restriction on formaldehyde and formaldehyde releasors in articles and a restriction on bisphenols in thermal paper, developing guidance for waste handlers on POPs (decaBDE and HBCDD) in soft furnishings, completing research into the presence of POPs in landfill leachate and an evidence project to feed into wider chemicals policy on hazardous flame retardants.

Over the next year, we will develop policy approaches and actions, with stakeholder engagement, for the Chemicals Strategy to take on priority issues such as Endocrine Disrupting chemicals (EDCs), per- and poly-fluoroalkyl substances (PFAS) and unintentional mixtures.

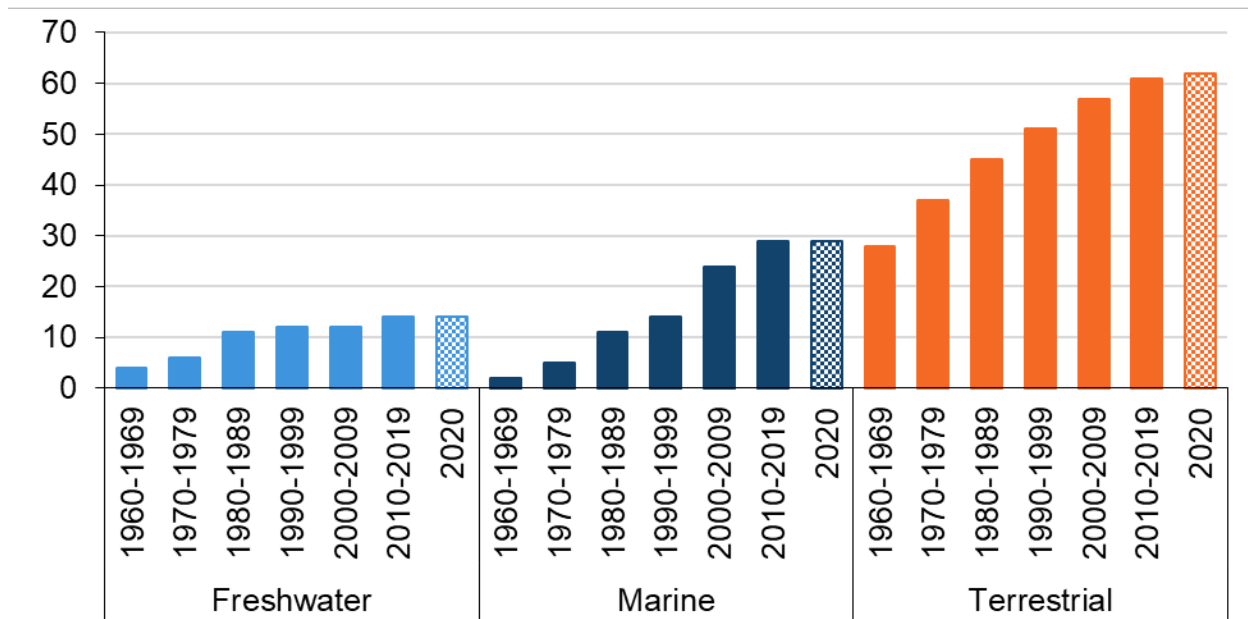
## Enhancing biosecurity

### What are our long-term ambitions?

Enhancing biosecurity and tackling invasive non-native species (INNS) to protect our native wildlife, ecosystems, and livestock; and boost the resilience of our trees and plants.

### What is the condition of the natural environment?

Figure 17: Number of invasive non-native species established across or along 10% or more of the land area or coastline of Great Britain, 1960 to 2020



Between the period 1960 to 1969 and the year 2020, the number of invasive non-native species established in or along 10% or more of Great Britain's land area or coastline has increased in the freshwater, terrestrial and marine (coastal) environments, with the greatest increases in numbers having been observed in the marine and terrestrial environments.

Source: Defra (reported as H1 (interim) indicator in the Outcome Indicator Framework)

Figure 18: Summary of assessment results – Enhancing biosecurity indicator components

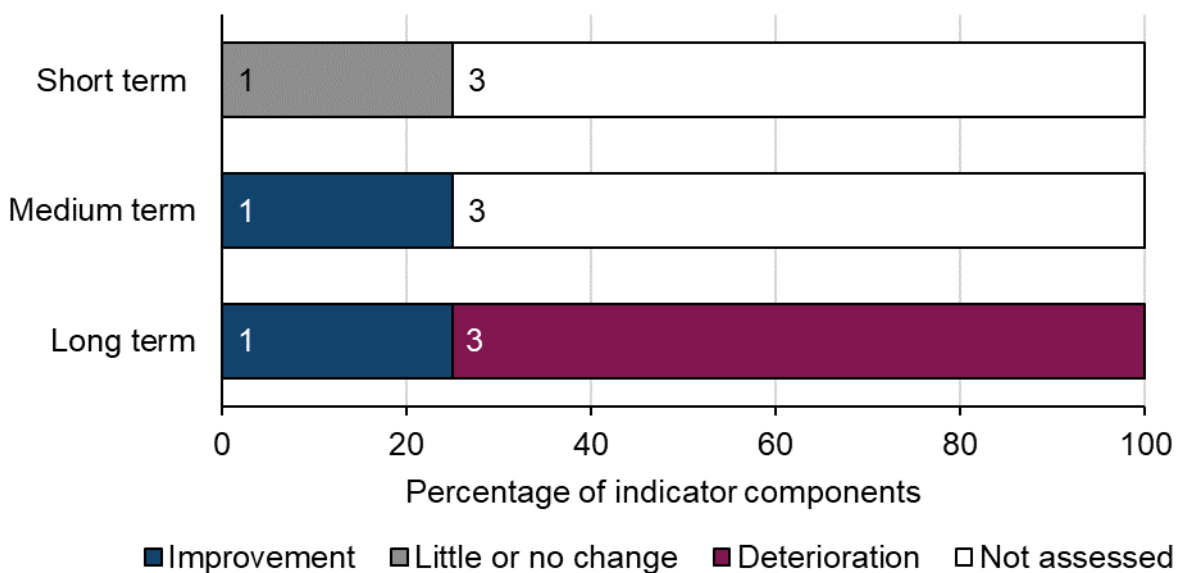




Figure 18 shows the proportion of indicator components for which 'Enhancing biosecurity' is the primary goal that have been assigned to each assessment category, with the exact number of indicator components shown as a label on the bars.

H1 (Abatement of the number of invasive non-native species entering and establishing against a baseline) reports one cumulative data point for each 10-year period included within the indicator, so it is only possible to assess long-term trends as there are insufficient data points to establish trends over shorter time periods. H2 (Distribution of invasive non-native species and plant pests and diseases) showed a deterioration for freshwater, marine and terrestrial ecosystems over the long term. H1 showed an improvement over the medium and long term, moving to 'little or no change' in the short term.

For further information, refer to the [Outcome Indicator Framework](#).

### **What actions are being taken towards achieving our ambitions?**

Actions to tackle invasive non-native species are set out in the [GB Invasive Non-native Species Strategy](#). Following [a review that we published in 2021](#), the strategy is being revised and will be published later this year.

Actions to tackle Plant Health pests and diseases are set out in the [Plant Biosecurity Strategy for Great Britain](#). Our [response to the consultation](#) of this strategy has been published and we plan to publish a new, 5-year Strategy later this year.

Both strategies aim, among other things, to prevent new incursions of invasive non-native species, pests, and diseases, establish surveillance to detect new incursions and rapidly respond to them when they occur and to support businesses, landowners, and local communities to help minimise the impact of organisms that are already well established and / or widespread.

Some key areas of work undertaken under these strategies in the past year includes:

- launching a new pilot requirement for tree suppliers, to strengthen UK biosecurity. Those that apply for government tree planting grants must source saplings from approved suppliers
- launching a second round of Local Authority Treescapes Fund, making a further £5.4 million available to support the restoration of ecologically degraded land, including that from tree diseases. We have also launched 5 new pilot Tree Health Grants for farmers and land managers to restock or improve woodland after tree health problems
- launching the new science Centre for Forest Protection (CFP) and the new £5.8 million, state-of-the-art Holt Quarantine Laboratory. Jointly led by Forest Research and Royal Botanic Gardens Kew, the CFP is a collaborative research hub which aims to protect the future of our forests, woodlands, and trees from environmental and socio-economic threats, through the provision of innovative science, interdisciplinary research, expert advice, and training – across the UK and internationally

- recruiting 200 new plant health inspectors (over the past 2 years), with recruitment ongoing for nearly 150 more
- undertaking the second annual release of a biological control agent to reduce the spread of Oriental Chestnut Gall Wasp
- establishing a new pilot inspectorate specifically for invasive non-native species which is working on inspecting priority pathways of INNS introduction including boating, angling, pet release / escape, horticulture, wildfowl, falconry, rescue centres and online sales. Over 400 inspections took place which have helped to better define the extent of the issues in GB and inform the future work of the inspectorate
- eradicating 2 incursions of the Asian Hornet and continuing the eradication of water primrose, variable-leaved water milfoil, topmouth gudgeon and monk parakeet, as well as maintaining contingency plans for a wide range of other species
- releasing a biocontrol agent to reduce the spread of Floating Pennywort as well as, through the Floating Pennywort Strategy, bringing voluntary groups and government agencies together to remove Floating Pennywort
- continuing to implement the retained IAS regulation on invasive alien (non-native) species including completing the comprehensive review of species of special concern which will help us refine and improve the list of regulated INNS species in GB
- reviewing Pathway Action Plans for angling, recreational boating and zoos and made good progress on a further plan to help reduce the risk of INNS introduction via the horticulture sector

## Global leadership

### What are our long-term ambitions?

Nature and the biodiversity that underpins it are crucial to the world's capacity to support healthy life, food systems and the global economy. Humanity faces the interlinked threats of climate change, pollution and biodiversity loss which together threaten these systems, and in turn the security of global health, food supply and the economy. The Integrated Review therefore sets tackling climate change and biodiversity loss as our top foreign policy priority. The UK government is committed to the global mission to halt and reverse biodiversity loss by 2030. At COP26, under the UK's Presidency of the United Nations Framework Convention on Climate Change (UNFCCC), all 197 Parties agreed to the Glasgow Climate Pact to urgently keep 1.5°C alive.

### What is the condition of the natural environment?

Since 1970, on average there has been over a 68% decrease in populations of mammals, fish, birds, reptiles, and amphibians. Around 1 million species are already facing extinction globally unless action is taken to reduce the pressures they face. Major ecosystems such as forests and oceans that support billions of people are increasingly degraded and under threat, negatively impacting global economic, food, and health security.

## What actions are being taken towards achieving our ambitions?

The UK presidencies of UNFCCC COP26 in Glasgow, and the G7, along with the opening of the Convention on Biological Diversity COP15, made 2021 a critical year to drive global action on the Environmental agenda. The UK has sought to galvanise global action to deliver on three objectives in 2021 and beyond:

- protect, conserve, and restore nature: including through the adoption of ambitious biodiversity targets
- drive investment in nature and a nature positive economy
- lead a global transition to tackle the key drivers of nature loss and degradation

We have used a range of policy levers to progress these objectives including securing commitments through multilateral forums and campaigns, such as the Leaders' Pledge for Nature, mobilising finance for nature and leading by example. These will be incorporated into the 2030 Strategic Framework for International Climate and Nature Action, due to be published in the autumn.

## Strengthening international ambition to Protect, Conserve and Restore Nature

The UK has worked through a range of international fora to ramp up ambition on biodiversity.

At the G7 Summit in June 2021, under the UK Presidency, leaders committed to halting and reversing biodiversity loss by 2030 in an ambitious [Nature Compact](#). Ahead of the Leaders' Summit, G7 Climate and Environment ministers agreed a landmark Communiqué including over 120 commitments. The G7 committed to support the global target to conserve or protect at least 30% of global land and ocean by 2030 (30x30), along with achieving 30x30 domestically and ensuring aid does no environmental harm and delivers positive outcomes for people, climate, and nature. The UK's G7 Presidency delivered a strong suite of ocean commitments and agreed an ambitious [Navigation Plan](#) to further our collective work on ocean science throughout the UN Ocean Decade of Ocean Science for Sustainable Development. In 2022, we supported the German G7 Presidency to build on these achievements, developing an Ocean Deal which we hope will be endorsed at the June Leaders' Summit and securing commitments to increase finance for nature and accelerate the transition to sustainable supply chains and reduce single-use plastics.

We worked with the Italian G20 Presidency in 2021 to secure commitments to scale up the implementation of nature-based solutions to address biodiversity loss, restore degraded land, boost resilience, mitigate and adapt to climate change, while providing multiple benefits across the economic, social, and environmental domains, and align financial flows with sustainable development. We are now supporting Indonesia's Presidency and seeking commitments to implement the post-2020 Global Biodiversity Framework and increase funding for nature.

At COP26 in November 2021, the UK Presidency put nature at the heart of the climate debate for the first time. All parties agreed to the Glasgow Climate Pact, which explicitly recognised the interlinkages between climate change and biodiversity loss and the importance of nature in meeting our climate mitigation and adaptation goals. Over 140 leaders, representing over 90% of the world's forests, pledged to halt and reverse forest loss and land degradation by 2030 through the Glasgow Leaders' Declaration on Forests

and Land Use, backed by almost £14 billion of public and private funding. 45 nations pledged urgent action and investment to shift to more sustainable ways of farming, and more than 100 countries signed up to protect at least 30% of the global ocean by 2030. COP26 also ensured the critical connection between the ocean and climate change is fully integrated within the UNFCCC through negotiated outcomes to strengthen ocean-based action and for a bespoke annual UNFCCC Ocean-Climate dialogue. We also announced that at least 33 financial institutions managing \$9 trillion in assets had committed to eliminate commodity-driven deforestation from their investment and lending portfolios. We are working with the UK financial sector and Glasgow Financial Alliance for Net Zero (GFANZ) to ensure accountability and scale this commitment in advance of COP27.

The first in-person negotiations for a new Global Biodiversity Framework (GBF) under the UN Convention on Biological Diversity (CBD) took place in 2022, with the UK playing a prominent role. The UK took part in the opening of CBD COP15 and is now pushing for agreement on an ambitious set of goals and targets, including protection of 30% of global land and ocean by 2030 and a stretching commitment on finance to underpin the agreement of an ambitious Global Biodiversity Framework at COP15 in Montreal under the Chinese Presidency in December 2022. We are leading the Global Ocean Alliance and acting as Ocean Co-Chair of the High Ambition Coalition for Nature and People.

### **Driving investment in nature and a nature positive economy**

The UK and other governments are supporting the shift in global financial markets towards deforestation-free and nature positive investments. Building on the Taskforce on Climate-related Financial Disclosures (TCFD), the Taskforce on Nature-related Financial Disclosures (TNFD), supported from its inception by the UK government and aiming to release its final recommendations in 2023, will provide a framework for businesses and financial institutions to report and act on nature-related risks, supporting a shift in global financial flows towards nature-positive outcomes.

In 2019 the Prime Minister committed to double the UK's public International Climate Finance (ICF) to at least £11.6 billion between 2021 and 2025, to help developing countries tackle climate change, and we have committed to spending at least £3 billion of our ICF on solutions that protect and restore nature over the next five years. Through the [International Development Strategy](#), the UK has committed to ensuring that all new bilateral UK ODA helps to mitigate climate change and supports partners in adaptation to a changing climate. We will build on our 2021 commitment to ensure all new UK bilateral aid is nature positive by aligning spending with the Global Biodiversity Framework, once agreed at the Convention on Biological Diversity (CBD) in December 2022. The UK has committed £330 million to the Global Environment Facility, which supports developing countries in tackling the most pressing environmental problems.

Defra has a maturing, growing ODA portfolio delivering which will support outcomes for climate, biodiversity, and poverty in developing countries. During 2021/22 we put in place a new £100 million Biodiverse Landscapes Fund to deliver strengthened governance of six critical ecosystems across Latin America, Africa and Asia, as well as enhanced and restructured Darwin Initiative and Illegal Wildlife Trade (IWT) programmes to address key drivers of biodiversity loss in developing countries. At COP26 we announced a new £40 million research and development (R&D) programme through the Global Centre on Biodiversity and Climate as well as a new £12 million investment to support developing

countries achieve lower carbon cooling solutions, including cold supply chains, through a new African Centre for Excellence in Rwanda.

In August 2021, we launched the first set of programmes to receive funding from the UK's £500 million Blue Planet Fund. This will increase marine protection, tackle plastic pollution, the decline of coral reefs, and support developing countries in harnessing nature-based solutions to tackle climate change, through providing access to UK scientific expertise. The Blue Planet Fund is also supporting the Global Ocean Alliance target of protecting 30% of the global ocean by 2030, which more than 100 countries now support.

### **Leading a global transition to tackle the key drivers of nature's loss and degradation**

The UK is deploying a package of measures domestically and internationally to tackle global deforestation. In May 2021 we launched the Forest, Agriculture and Commodity Trade (FACT) Dialogue, co-chaired with Indonesia. FACT convenes the major producer and consumer countries of internationally traded agricultural commodities, to agree actions to protect forests and other ecosystems while promoting sustainable trade and development. Participating countries represent over 90% of global exports of palm oil, 80% of cocoa, and 57% of soya, as well as major consumer markets for these commodities. They also account for 8 million hectares, or 34%, of annual global tree cover loss.

The UK is committed to implementing due diligence provisions to ensure sustainable supply chains at the earliest opportunity and will come forward with secondary legislation in due course. In June 2022, we published the Consultation on Implementing Due Diligence on Forest Risk Commodities summary and government response.

As part of the 25 Year Environment Plan outcome indicator framework, the UK government recently included two metrics for a new world-leading Global Footprint Indicator focused on deforestation and water usage. We will continue to support an international trading system that rewards sustainable commodity production and the reduction of negative externalities from commodity trade.

The UK, as an active participant in setting global trade and investment rules, will seek to strengthen standards, ensure increased traceability and transparency in global supply chains, and promote clean and nature-positive trade and investment. We will use free trade agreements (FTAs) to enhance cooperation on the environment, including opportunities for knowledge exchange, research, and development (R&D), and mitigating the impact of trade on the environment.

The UK Sustainable Agriculture COP26 Campaign seeks to deliver triple wins for people, climate and nature through policy action, innovation, and investment. Ahead of COP26 the UK and World Bank co-convened a Policy Dialogue on 'Transition to Sustainable Agriculture through redirecting public policies and support and scaling innovation'. A Policy Action Agenda was launched at COP26 which provides guidance on the actions needed, including highlighting the critical role of farmers and other stakeholders in the policy making process. The Global Action Agenda for Innovation in Agriculture was also launched at COP26 with the support of over 200 partners, with the aims of increasing investment in agriculture research and development (R&D), providing demand-driven solutions, and facilitating new partnerships to bring R&D to scale. The Glasgow Breakthrough Agenda, likewise, launched at COP26, is an unprecedented international clean technology plan to help keep 1.5°C in reach, with a goal of making climate-resilient,



sustainable agriculture the most attractive and widely adopted option for farmers everywhere by 2030.

The UK is shaping global decisions and practices on pollution through a range of multilateral processes and agreements, as well as taking action at home and supporting low and middle-income countries to address pollution. The UK played a key role in securing a resolution from the United Nations Environment Assembly to prepare a new legally binding treaty to end plastic pollution. We are committed to tackling ocean plastic pollution, including through the Global Plastic Action Partnership announced under our Blue Planet Fund, which takes collaborative action on plastic pollution in developing countries.

We have also made significant contributions to the updating of international guidelines and methods on managing plastic waste and Persistent Organic Pollutants (POPs), and to the development of new methods for chemicals management. The UK is a world leader on understanding the science of POPs and will push for agreement that new substances should be restricted or banned internationally. We will also continue pushing for agreement on international standards for shipments of waste and advocate for stricter controls on the export of electrical waste. Under the UNECE Convention on Long Range Transboundary Air Pollution, the UK is co-chairing a new forum to promote regional and global collaboration to reduce air pollution. We are playing an active part in reviewing protocols that set emission limits for air pollutants to assess whether these are sufficient and effective.

We continued to deliver on our investment of over £46 million between 2014 and 2022 to counter the Illegal Wildlife Trade (IWT) by reducing demand, strengthening enforcement, ensuring effective legal frameworks, and developing sustainable livelihoods. The IWT Challenge Fund supports projects including combatting pangolin trafficking in the Philippines, strengthening judicial processes in Malawi and community-led wildlife protection in Indonesia. We continue to partner with the British military to deliver the Counter IWT Taskforce, helping to reduce poaching by sharing expertise with rangers and other park staff and facilitating information sharing to disrupt poaching across the region. The taskforce has deployed to Zambia during 2021/22, building on previous successful deployments.

The UK has provided funding to the Secretariat of the Convention on International Trade in Endangered Species (CITES) to support capacity building, evidence gathering, and in-country engagement, further enhancing the UK's reputation as a global leader in tackling IWT and helping to support future development of grants and strategic partnerships.

## Natural Capital Accounting

Alongside the development of indicators for the 25 Year Environment Plan, the government is increasing the use of Natural Capital to assess environmental impact.

The Office for National Statistics continues to develop and report a range of Natural Capital Accounts for the UK. This work is driving new modelling and measurement of services provided by natural capital, for example water purification and flood regulation. A roadmap for the next phase of work is planned for publication in 2022.

The UK accounts bring together information on ecosystem condition and ecosystem services by broad habitat and, by estimating the value of services and assets, add explanatory power. They can provide standard ways of aggregating indicators within or across ecosystem types, as well as providing a basis for developing new indicators relevant to the wider economy.

Alongside the UK Natural Capital Accounts, Defra's Enabling a Natural Capital Approach (ENCA) resource collates a vast range of evidence on the benefits of natural capital, and cross references all the relevant outcome indicators and natural capital accounts. ENCA was refreshed and expanded in August 2021 and forms part of the government's Green Book appraisal guidance. A further refresh is planned later in 2022.

### **Natural Capital and Ecosystem Assessment**

The [Natural Capital and Ecosystem Assessment Programme](#) (NCEA) is Defra's flagship 3-year research and development programme. Part science innovation and part transformation, NCEA spans land, coast, and sea. NCEA has now completed a pilot year for the Terrestrial Programme and a proof-of-concept year for the Marine Programme. Over 100 outputs (such as the Living England natural habitat map) were jointly delivered by Defra and a consortium of partners. The 2021 Spending review committed £140 million over 3 years to scale up NCEA which will map the extent, condition, and biodiversity of England's ecosystems and provide a framework where ecological, societal, and economic information is brought together, improving our understanding of our environment and its natural capital.

This will underpin the immense value of managing our natural capital, transform the way we make decisions and policy and ensure we invest in environmental reforms that achieve maximum benefit. NCEA will provide necessary baseline data to help indicate trends and determine if England is on track to meet climate and environmental targets. More specifically, NCEA will provide data that will be used to report against several 25YEP indicators.



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