



House of Commons
Environmental Audit Committee

Biodiversity in the UK: bloom or bust?: Government Response to the Committee's First Report

**Third Special Report of Session
2021–22**

*Ordered by the House of Commons
to be printed 22 September 2021*

Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

Current membership

[Rt Hon Philip Dunne MP](#) (*Conservative, Ludlow*) (Chair)

[Duncan Baker MP](#) (*Conservative, North Norfolk*)

[Dan Carden MP](#) (*Labour, Liverpool, Walton*)

[Sir Christopher Chope MP](#) (*Conservative, Christchurch*)

[Barry Gardiner MP](#) (*Labour, Brent North*)

[Rt Hon Robert Goodwill MP](#) (*Conservative, Scarborough and Whitby*)

[James Gray MP](#) (*Conservative, North Wiltshire*)

[Helen Hayes MP](#) (*Labour, Dulwich and West Norwood*)

[Ian Levy MP](#) (*Conservative, Blyth Valley*)

[Caroline Lucas MP](#) (*Green Party, Brighton, Pavilion*)

[Cherilyn Mackrory MP](#) (*Conservative, Truro and Falmouth*)

[Jerome Mayhew MP](#) (*Conservative, Broadland*)

[John McNally MP](#) (*Scottish National Party, Falkirk*)

[Dr Matthew Offord MP](#) (*Conservative, Hendon*)

[Claudia Webbe MP](#) (*Independent, Leicester East*)

[Nadia Whittome MP](#) (*Labour, Nottingham East*)

The following Members were also members of the Committee during this Parliament:

[Feryal Clark MP](#) (*Labour, Enfield North*), [Marco Longhi MP](#) (*Conservative, Dudley North*), [Kerry McCarthy MP](#) (*Labour, Bristol East*), [Alex Sobel MP](#) (*Leeds, North West*), and [Mr Shailesh Vara MP](#) (*Conservative, North West Cambridgeshire*).

Powers

The constitution and powers are set out in House of Commons Standing Orders, principally in SO No 152A. These are available on the internet via www.parliament.uk.

Publications

© Parliamentary Copyright House of Commons 2021. This publication may be reproduced under the terms of the Open Parliament Licence, which is published at www.parliament.uk/site-information/copyright-parliament.

Committee reports are published on the Committee's website at www.parliament.uk/eacom and in print by Order of the House.

Committee staff

Martyn Atkins (Clerk), Medha Bhasin (Second Clerk), Amy Brew (Committee Specialist), James Camp (Committee Operations Officer), Nick Davies (Senior Committee Specialist), Marc Geddes (Parliamentary Fellow), Laura Grant (Committee Specialist), Kirsty MacLeod (Committee Researcher), Ben Smith (Committee Support Apprentice), and Jonathan Wright (Committee Operations Manager).

Contacts

All correspondence should be addressed to the Clerk of the Environmental Audit Committee, House of Commons, London SW1A 0AA. The telephone number for general enquiries is 020 7219 8890; the Committee's email address is eacom@parliament.uk.

You can follow the Committee on Twitter using [@CommonsEAC](https://twitter.com/CommonsEAC).

Third Special Report

On 30 June 2021 the Environmental Audit Committee published its First Report of Session 2021–22, [Biodiversity in the UK: bloom or bust?](#) (HC 136). The Government's response was received on 15 September 2021, and is appended below. In the Government Response, the Committee's recommendations are shown in ***bold italic*** type followed by a government response to each one.

The Committee has responded to several of the Government's responses in this Special Report, in the Committee's Second Report of Session 2021-22, [The UK's footprint on global biodiversity](#) (HC 674).¹

Appendix: Government Response

Introduction

The government is grateful to the Environmental Audit Committee (the Committee) for its report on biodiversity and ecosystems. Meeting the targets and commitments that the government has set itself will be hugely challenging but as the responses to the Committee's 31 recommendations set out below attempt to illustrate, we already have a range of policies and programmes in place to support this transition. We also know there is more to do to truly tackle the causes of biodiversity loss and to meet the world-leading target we are bringing forward to halt the decline in species abundance by 2030.

Biodiversity matters, and the UK is currently one of the most nature depleted countries in the world, following centuries of species decline. We are determined to turn the tide on that trend. We value our wildlife and our wild places for their own sake, but also for their beauty and how they contribute to our wellbeing. The health of our natural world is also fundamentally tied to our economic prosperity, as was set out comprehensively by the seminal Dasgupta Review. We depend upon nature for many things and, crucially, restoring nature can also make an important contribution to our climate change response.

That is why it is critical we act now, internationally and at home, to ensure we leave our environment in a better state for future generations. This government is determined to maintain our status as a world leader in protecting the natural environment and we have put in place multiple measures to complement existing work and drive action towards this objective. This reflects our understanding of the need to act at speed on biodiversity loss.

UK domestic biodiversity policy is devolved and each of the four countries produces their own plans or strategies for biodiversity. The bulk of the Committee's recommendations relate to domestic policies in England, and our responses, unless otherwise stated, or on international matters, relate to action in England.

The 25 Year Environment Plan (25YEP) marked a step-change in ambition for wildlife and the natural environment in England, on which we are taking action. We are maintaining

1 Environmental Audit Committee, Second Report of Session 2021–22, [The UK's footprint on global biodiversity](#), HC 674.

and extending key protections; introducing new legislation and new funding streams; we are supporting partnerships and we are working across Government to secure broad action

Our Environment Bill will deliver the most ambitious environmental programme of any country on earth and drive forward action to protect nature and improve biodiversity, including through setting a world-leading target on species abundance, to halt the decline in nature by 2030.

This is alongside our guaranteed £640m investment in the Nature for Climate Fund for woodland creation and peat restoration, plans to treble tree planting before the end of this Parliament, increased protections for England's waters through piloting Highly Protected Marine Areas, and the development of new schemes that will reward farmers and land managers for delivering environmental benefits. All of this work is also inherently tied to the government's climate change commitments, to reach net zero by 2050, given the significant threat that climate change poses to the natural environment.

The Scottish Government's high level [Statement of Intent on biodiversity](#) was published on 14 December 2020. This announced a new post-2020 biodiversity strategy setting out changes in the way land is used and managed, and Scotland's approach to protecting habitats and ecosystems. Scottish Ministers committed to protect 30% of Scotland's land and sea areas for nature by 2030, and to highly protect 10%, including adding to the existing network of Marine Protected Areas (MPAs) by designating a suite of Highly Protected Marine Areas covering at least 10% of Scottish waters by 2026. Significant investment in the natural economy will be made in this parliamentary period to meet the commitment of restoring 250,000 hectares of degraded peatlands by 2030, and accelerating progress towards 18,000 hectares of tree planting a year by 2024. A new Environment Bill will also be introduced which will include targets for nature restoration that cover land and sea, based on an overarching goal of preventing any further extinctions of wildlife and halting declines by 2030, and making significant progress in restoring Scotland's natural environment by 2045.

Welsh Ministers have committed to tackling the nature emergency and reversing the decline in biodiversity ensuring it is at the heart of everything we do. This ambition is set out in the [Nature Recovery Action Plan \(NRAP\)](#), Welsh Government's National Biodiversity Strategy and Action plan. NRAP will need to be revised in light of the post 2020 global framework. In Wales, Ministers have taken an ecosystem approach to reverse the decline of biodiversity, embedding this into key legislation. The Well-being of Future Generations (WFG) Act 2015 sets out goals including the Resilient Wales goal for public bodies and the Environment (Wales) Act 2016 which sets out the objective, principles and framework for the sustainable management of natural resources (SMNR). This, along with further actions such as the creation of resilient ecological networks, a National Forest, and restoring our Peatlands, is intended to help Wales tackle the nature and climate emergencies. Development of new land management practices through the sustainable farming scheme will play a significant role in helping deliver Wales's ambition.

The Northern Ireland Minister has endorsed the development of a new, Post 2020, Northern Ireland Biodiversity Strategy. The international Convention on Biological Diversity (CBD) targets that are to be agreed at COP15 will be the foundation of the strategy and, of the 21 draft CBD targets, it is envisaged that target 3, Protecting 30% of Land and Sea by

2030—the 30x30 target, will be an apex target for Northern Ireland. A Peatland Strategy is also in development, which will compliment many of the goals that will be included in a Biodiversity Strategy. These strategies will sit under the umbrella of Green Growth and the Environment Strategy for Northern Ireland and will assist in the realisation of their objectives. A public consultation has also been launched seeking views on the future of agricultural support. With around 70% of land in Northern Ireland set aside for agriculture, environmentally sustainable farming practices will be key in achieving nature positive outcomes for Northern Ireland.

Response to the Environmental Audit Committee's recommendations

The state of biodiversity (recommendations 1-4)

1. *We recommend that the UK Government play a leadership role in addressing global biodiversity loss by demonstrating what 'transformative action' to address biodiversity loss in an advanced industrialised economy looks like. This should entail the production of credible plans, which include measures to phase out economic incentives which threaten conservation and restoration, with a view to meeting the 2030 Biodiversity Framework, once agreed, and the development of robust means to ensure that these plans are owned and implemented across Government. Assessments of the potential impact of Government actions on biodiversity loss must be introduced for all Government departments.* (Paragraph 38)

The government has already announced ambitious action at home to implement commitments under the Convention on Biological Diversity (CBD) and contribute to the new framework of goals and targets which is being developed internationally, and we acknowledge there is more to do to address biodiversity loss. In June, the Government published its response to the landmark Dasgupta Review on the Economics of Biodiversity, which committed to a wide-ranging series of actions to tackle biodiversity loss and support the delivery of a nature positive future, including by ensuring that economic and financial decision making supports that goal.

Domestic biodiversity policy is devolved in the UK. In England, we are legislating through the Environment Bill to drive forward action to protect nature and improve biodiversity, including through setting a legally-binding target to halt the decline in species abundance by 2030. The Environment Bill also creates a duty on the government to publish Environmental Improvement Plans, the first of which was the 25 Year Environment Plan. This plan, its update due in 2023, and its associated regular reporting requirements, are crucial to delivering the government's goals on biodiversity and the wider environment.

The Bill further includes world-leading due diligence provisions to tackle illegal deforestation in UK supply chains. This is one part of a wider package of measures to improve the sustainability of our supply chains and will contribute to global efforts to protect forests, which host around 80% of the world's biodiversity.

We are extending protections at home on land and at sea. We have committed to protecting 30% of our land and sea—across the UK—by 2030. Later this year we will publish a Nature Recovery Green Paper, setting out further detail on our approach to delivering this important commitment in England. In English waters there are 178 sustainable-use

Marine Protected Areas protecting 40% of our seas, and we recently committed to piloting Highly Protected Marine Areas waters to boost biodiversity recovery. Our UK 'Blue Belt' now spans 338,000 square kilometres.

We are investing in nature restoration and in nature-based solutions to tackle biodiversity loss and climate change and to safeguard green jobs in England, including through our £640m Nature for Climate and £80m Green Recovery Challenge funds. The Nature for Climate Fund will help us achieve our aim to at least treble tree planting rates in England by the end of this Parliament; and as part of the Fund we have launched our Peatland Grant Scheme which will help us restore approximately 35,000ha of peatland by 2025. We are also continuing to take and drive action across government to adapt to climate change and address climate risks which affect our natural environment, our critical infrastructure services, our communities and buildings, local government and businesses. The importance of adapting to these climate challenges and transitioning to a low carbon economy is set out in our National Adaptation Programme, drawing on a large body of ongoing work across government.

We are transitioning from the damaging Common Agricultural Payment subsidies to payments that actively reward farmers for the delivery of environmental benefits, by introducing new schemes that reward actions that recover nature: the Sustainable Farming Incentive, the Local Nature Recovery scheme and the Landscape Recovery scheme. These schemes will pay for sustainable farming practices, improving animal health and welfare, mitigation of and adaptation to climate change, creating and preserving habitat, and making landscape-scale environmental changes. Further detail on how we are phasing out economic incentives which threaten conservation and restoration, can be found in our response to recommendation 14.

This though is not the extent of our ambition. We will continue to develop our approach to implementing our CBD commitments, updating our plans and strategies in response to the 15th Conference of the Parties to the CBD. This will include actions across Government, which are considered further under Recommendations 3 and 7.

Later this year we will publish a Nature Recovery Green Paper, setting out our approach to driving nature recovery in England and providing the primary vehicle for developing and engaging on our future plans and proposals. The paper will set out the government's vision for how we will achieve our nature recovery ambitions across a number of key policy areas, on land and at sea, including our 30x30 commitment and the Nature Recovery Network, protected sites, species and wildlife law reform, and trees and forests. It will allow us to publicly consult on our initial policy proposals in these areas, and along with feedback from related consultations will allow us to consider how best to put tangible changes in place that will deliver on our goals of nature restoration. This is a significant opportunity to set out the immediate steps we must take to get on track to meeting our target to halt the decline in species abundance by 2030. Our intention then is to set out further our approach to delivering our international biodiversity commitments at home through the update of our Environmental Improvement Plan (EIP). The EIP will then be subject to the relevant accountability and scrutiny procedures as set out in the Environment Bill, ensuring our approach is transparent and collaborative.

2. We recommend that the Government introduce, preferably via the Environment Bill currently before Parliament, a mechanism for statutory interim targets to ensure

that its proposed species abundance target is met to halt the decline of nature by 2030. We further recommend that the scope of the proposed 2030 target be extended to encompass legally binding outcome measures on species distribution, extinction risk, habitat extent and condition: it must also reinstate the expired target for Sites of Special Scientific Interest. (Paragraph 61)

As a core part of our commitment to leave the environment in a better state than we found it, we have amended the Environment Bill to require a new, historic legally binding target to be set to halt the decline in species abundance by 2030 in England. The details of the 2030 species target will be set in secondary legislation, brought forwards by 31 October 2022. The 2030 species target will be subject to the same requirements as the long-term legally binding targets set under the Bill.

The 2030 target will sit alongside other targets that will be set under Part 1 of the Environment Bill. Our proposed objectives for biodiversity targets include improving the status of species, restoring habitats and improving the condition of our protected sites on land (we note the Committee's reference to *Biodiversity 2020's* target for at least 50% of Sites of Special Scientific Interest to be in favourable condition by 2020, and underline our 25 Year Environment Plan commitment to restore 75% of protected sites to favourable condition by 2042).

The Environment Bill targets will be set following a robust, evidence led process that includes seeking independent expert advice, a role for stakeholders and the public, as well as scrutiny from Parliament. We do not want to prejudge where this process will take us.

Interim targets will help the government stay on track and avoid the longer-term targets being considered too far off to worry about. The robust statutory cycle of monitoring, planning and reporting, combined with regular Office for Environmental Protection and Parliamentary scrutiny, ensures that meeting interim targets is taken seriously, without the need for them to be legally binding in and of themselves.

The statutory cycle drives short term progress through three key elements:

- (1) The government must have an Environmental Improvement Plan which sets out the steps it intends to take to improve the environment, and review it at least every 5 years;
- (2) The government must report on progress towards achieving targets every year; and
- (3) The OEP will hold us to account on progress towards achieving targets and every year can recommend how we can make better progress.

What is critical is that we achieve our long-term targets to deliver significant environmental improvement, and this framework provides strong assurance that we will do so.

3. We recommend that the Government introduce mechanisms to ensure that each Government department and non-departmental public body is required, by their policies and actions, to contribute to reaching the targets set out above. The Office for Environmental Protection should be responsible for ensuring their enforcement. (Paragraph 62)

We are committed to cross-departmental action on targets. During the target development process, we are engaging government departments on how their policies will play a part in achieving targets.

The duty to achieve targets rests with central government, but public authorities, including regulators, will have a role to play. Through their functions relating to waste collection, air quality and planning, they will have a major impact on whether we achieve our ambitions or not. We would expect future Environmental Improvement Plan reviews, when considering progress and further measures needed towards targets, to highlight if we can do more to enable public authorities to contribute to achieving targets.

The requirement to meet long term targets, as with other aspects of the Bill's targets framework, will form part of environmental law and will therefore fall within the Office for Environmental Protection's remit. The OEP will have the power to bring legal proceedings if government breaches its environmental law duties, including its duty to achieve long-term targets.

Furthermore, we will set out further detail shortly on actions other government departments and their partner organisations will take through the Greening Government Commitments, to reduce their impacts on the environment in the period 2021 to 2025, including specific actions for nature recovery.

4. *We strongly recommend that Ministers urgently review the recommendations of the Committee's report on Invasive Species made in October 2019 and implement them without further delay. This includes increasing the proportion of biosecurity funding directed at countering invasive species to at least £3 million a year.* (Paragraph 69)

The Government's response to the EAC Inquiry on Invasive Species was published in May 2020. Our subsequent action includes initial work this year to scope and pilot the potential role of an inspectorate to step up our response to prevent and control the spread of invasive non-native species, with funding of £300,000 from Defra, and additional contributions from the Welsh Government of £40,000 and the Scottish Government of £20,000. In total, this year the Government is spending over £1 million on biosecurity for invasive non-native species in Great Britain.

We have recently let a new contract to Centre for Agriculture and Biosciences International, to continue their work to develop cost-effective, long-term, and species-specific biocontrol methods for floating pennywort, Japanese knotweed, Himalayan Balsam and Australian swamp stonecrop.

As we announced in the England Trees Action Plan, we will also provide funding to support UK public and private sector nurseries and seed suppliers to enhance the quantity, quality, diversity and biosecurity of domestic tree production. This will include capital grants and support to augment investment and stimulate innovation. We will also support and promote the Plant Healthy Certification Scheme, encouraging more UK growers to become members. Furthermore, we will publish a new GB Plant Biosecurity Strategy by 2022 and drive higher international standards of biosecurity. All these measures will contribute to improved biosecurity within the UK.

Following our departure from the EU we have retained the Invasive Alien Species Regulation in domestic law, put in place a GB Invasive Non-Native Species Committee to

advise Ministers of all 3 GB administrations, and expanded the GB invasive non-native species Programme Board to be UK wide to improve coordination and collaboration with Northern Ireland.

We have also commissioned a review of our GB Invasive Non-Native Species Strategy and will be refreshing the strategy in 2022.

Measuring biodiversity (recommendations 5-10)

5. *We recommend that Ministers make a material increase in levels of investment in training and skills for chartered ecology and associated disciplines. This ought to form an element of the Government's promised investment in Green Jobs.* (Paragraph 81)

The Government recognises the importance of investing in green skills and job opportunities as part of a green recovery from coronavirus, and we know that having the right skills on the ground is crucial to delivering our environmental goals. We are working with the sector to understand skills and capacity needs, and our previous assessment estimated a need for approximately 200 FTE ecologist resource in local planning authorities in England to implement new measures in Biodiversity Net Gain (BNG) and Local Nature Recovery Strategies. The government has committed to funding new burdens on local authorities arising from the Environment Bill in the usual way.

Earlier this year, Defra commissioned the Association of Local Government Ecologists (ALGE) and the Association of Directors of Environment, Planning & Transport (ADEPT) to undertake a survey of local planning authorities in England. This was aimed at securing a better understanding of the existing capacity, skills and preparedness of local authorities with respect to BNG and wider Environment Bill measures, including access to ecologist resource. The outcomes of the report are informing work, working with sector skills bodies, to develop a skills competency framework for BNG. The final survey report will be published in full in due course.

The government will work with local authorities and professional organisations to make sure that planning authorities have access to the right training, ecological expertise and systems required to deliver biodiversity net gain (BNG). We have contracted the Planning Advisory Service to support local planners to embed BNG. We will also work with industry bodies to make sure that training, expertise and systems that are fully compatible with government policy are made available.

The planning and ecology industries are also providing training and good practice guidance on biodiversity net gain and there are already several examples of implementation of biodiversity net gain approaches in local areas. We recognise the need to make sure those implementing a mandatory approach have the right skills and can share best practice.

As part of the Government's response to the Dasgupta Review earlier this year, the Government outlined its commitment to enhancing the training, knowledge and understanding on offer within the Civil Service.

The Government Office for Science has committed to champion nature and biodiversity knowledge and understanding across Government through the Government Science and Engineering profession and networks. It also committed to strengthen future capability on these issues through encouraging departmental placements for the Science and Engineering Fast Stream, setting the example for other fast stream schemes.

The Government Economic Service (GES) also committed to incorporate the economics of biodiversity and climate change within its revised GES Technical Framework, which defines the professional skills expected of GES members. Regular training will be offered to promote understanding and application of natural capital analysis, including through application of the Green Book.

In addition, FCDO have launched a cross-Government International Nature Learning Journey. Designed initially to support the COP26 Nature Campaign, the initiative is building the capacities of our diplomatic and development network on nature, its relationship to climate change, our economies, livelihoods and wellbeing.

6. *We recommend a formal mechanism be established to review and act on the information provided in the Environmental Accounts.* (Paragraph 83)

In formulating this recommendation, the EAC considered other indicators and metrics on biodiversity and wider natural capital beyond the information provided in the Environmental Accounts. We have therefore taken a consistent interpretation in our response.

In England, through the Environment Bill, the government is introducing a statutory cycle of monitoring, planning and reporting on Environmental Improvement Plans (EIPs). The cycle comprises annual reports by government to Parliament on progress, regular scrutiny by the Office for Environmental Protection, and five-yearly reviews of the EIP. The OEP will scrutinise the government's annual report, and may recommend how progress could be improved, to which government must respond.

The Outcome Indicator Framework provides one method of reporting on the progress of the EIP. The Framework presents an authoritative way to measure changes to our environment. It draws together a comprehensive suite of measures which collectively describe environmental change as it relates to the ten goals of the 25 YEP (which will become the first EIP).

The framework was developed using the concept of natural capital. It focuses on the natural capital outcomes and goals that we have set out to achieve, grouped as:

- (1) Reducing pressures on natural capital assets (e.g. pollution or plant disease);
- (2) Improving the state of natural capital assets (including air, water, land and seas);
and
- (3) Increasing the benefits that we get from those assets.

7. *The Government's new species abundance target for 2030 provides a potential mechanism for the measurement of progress on addressing biodiversity loss, and a driver for consequent actions. We recommend that once the target is established, regular, formal reviews of progress against the target should be required to be made, to feed into*

decision-making at senior levels in all Government departments. Ministers should also report regularly to Parliament on projected and current performance against the target and associated biodiversity outcome measurements on species distribution, extinction risk, habitat extent and condition. (Paragraph 84)

Tackling the long-term decline of nature will be challenging but through our requirement to set a new species abundance target we are committing ourselves to that objective. A domestic 2030 species target will not only benefit our species but the actions necessary will also help to drive wider environmental improvements.

Government has an explicit duty to ensure that the 2030 species abundance target is met, alongside our wider suite of legally binding Environment Bill targets which will be brought forward by 31 October 2022; including at least one additional target related to biodiversity. The Bill's statutory cycle of monitoring, planning and reporting ensures that government will take early, regular steps to achieve its targets, and is held to account with regular scrutiny from the Office for Environmental Protection (OEP) and Parliament.

8. *We recommend that the Government implement a preferred approach to data management and monitoring, to strengthen a consistent evidence base on the UK's natural capital. The Government should also make greater use of earth observation data as a cost-effective means of filling gaps in the data obtained from terrestrial monitoring.* (Paragraph 86)

The 25 Year Environment Plan Outcome Indicator Framework presents an authoritative way to measure changes to our environment in England. It draws together a comprehensive suite of measures which collectively describe environmental change as it relates to the ten goals of the 25 Year Environment Plan.

The framework was developed using the concept of natural capital and focuses on the natural capital outcomes and goals that we have set out to achieve. It has been developed by technical, policy and delivery experts from across government, working with a range of other experts and stakeholders.

It builds on the wealth of environmental data collected in England but was designed to remain dynamic in also considering where new sources of data (such as earth observation) might fill in gaps in our knowledge about our changing environment.

Earth observation is used by Defra to support innovation and science in policy development and delivery. While still a developing field, it has the potential to transform how our landscape—across England and the UK—is monitored and managed. It has already enabled time and resources to be saved in a number of policy areas, increasing efficiency and exploring new ways to understand our environment.

The use of earth observation is critical in our ambitions for long term monitoring of the environment and is one of the pillars of our Natural Capital and Ecosystem Assessment (NCEA) for England, in particular for repeatable measures of the extent of habitat. The NCEA pilot is working across the Defra group to develop a programme that will improve our natural capital, habitat and ecosystem evidence and so inform and evaluate multiple policies. It includes work to produce 'Living England', a new comprehensive map of England's habitats, produced from interpretation of satellite data, which we will be able to update on a regular basis.

In the NCEA, earth observation, professional sample survey and citizen science form a strong trinity of mutually supporting data collection approaches which together will tell us the location, extent, condition and change trends of our ecosystems and their natural assets at multiple scales; something that no two approaches alone could do.

Other examples of where Defra is actively using earth observation across the UK include rural payment validation; detection of flood risk areas; monitoring fishing activity; and monitoring the change in air pollutant emissions caused by the response to the Covid-19 pandemic.

The Earth Observation Centre of Excellence (EOCoE) was established in 2015 to bring together expertise on such workstreams from across Defra and its agencies. It works closely with the National Centre for Earth Observation (NCEO), UK Space Agency and the Devolved Administrations, as well as Defra's policy teams to explore future potential for earth observation going forward.

As part of the Government's response to the Dasgupta Review earlier this year, the Government also committed to providing further funding to the Office for National Statistics to improve its natural capital estimates and maximise their policy relevance.

9. *We reiterate the conclusions and recommendations of our predecessor Committee's 2019 inquiry into Sustainable Seas.*

- a) ***Ministers must urgently set out a timetable to put management plans and monitoring in place for all MPAs.***
- b) ***Different categories of destructive bottom trawling should be banned or restricted in all MPAs, and more MPAs should be established as 'no-take' zones with benefits for the local fishing industry and for marine biodiversity.***
- c) ***MPAs established by the Blue Belt programme need to meet international best practice guideless, set by the International Union for Conservation of Nature for designation.***
- d) ***MPAs need to be monitored to deter illegal activity and to establish if species and habitats are recovering, to inform future designations and adaptive management decisions.***
- e) ***The Government should make better use of data from automatic identification systems installed in vessels operating in MPAs to understand the activity in these areas; the operators of vessels with these systems installed ought to be under an obligation to keep the systems active when in areas requiring monitoring.***
- f) ***The Government should establish a fully integrated monitoring and surveillance regime for satellite tracking of illegal, unreported and unregulated fishing in UK territorial waters.*** (Paragraph 97)

(9a)

The UK is at the forefront of marine protection and, in England, 40% of our waters are protected in 178 Marine Protected Areas (MPAs). We are now making sure this

comprehensive network of MPAs is protected properly. Natural England and the Joint Nature Conservation Committee (JNCC) are responsible for assessing the condition of MPAs in England and this is achieved through condition monitoring (surveys) and evaluation of evidence.

(9b)

All sites are protected through the planning and licensing regimes that regulate activities such as dredging for aggregates and constructing offshore wind farms. In terms of fishing activity, 98 sites in our inshore waters now have management measures in place to protect sensitive features from bottom towed fishing gears.

In England's offshore waters, a new byelaw power introduced by the Fisheries Act 2020 allows the Marine Management Organisation (MMO) to protect MPAs from any fishing activity that could prevent them achieving their conservation objectives, such as trawling on the seabed. Work on implementing this has already begun.

The MMO has conducted a formal consultation on proposals to manage activity in four of England's offshore MPAs and is now reviewing responses. The aim is for byelaws for these sites to be in place later in 2021. The MMO is also developing an ambitious three-year programme for assessing sites and implementing byelaws, where necessary, to manage fishing activity in all other English offshore MPAs.

We will manage fishing within existing, sustainable-use MPAs to ensure recovery of the features to a good, healthy condition. However, protection does not always mean closure to fishing. Regulators use a range of tools to manage, and where necessary restrict, fishing to meet the conservation objectives of a site. Management is always based on the best available scientific evidence and, if the evidence is uncertain or limited, Defra expects regulators to take precautionary preventative action. Regulators monitor marine activities to make sure management measures are being followed and will prosecute non-compliance.

The government published its response to the Benyon Review into Highly Protected Marine Areas (HPMAs) on World Ocean Day 2021, accepting the central recommendation that we should take forward some pilot sites. HPMAs are areas of the sea that allow the protection and recovery of marine ecosystems to a more natural state. They prohibit extractive, destructive, and depositional uses, allowing only non-damaging levels of other activities to the extent permitted by international law. The Government has committed to designate a number of HPMAs in English waters by the end of 2022 and Defra and its Arms-Length Bodies are currently working to identify potential sites. On 5th July 2021, Defra, in collaboration with the JNCC and Natural England, published the ecological criteria we will be using to identify potential HPMAs, and we have invited stakeholders to submit proposals that meet them.

We will then apply social and economic criteria to minimise any potential impact and maximise potential benefits on sea users. We intend to consult on proposed sites in Spring 2022 and will engage with stakeholders through the identification and designation process.

(9c)

All of the UK Overseas Territories within the Blue Belt Programme have large-scale MPAs or marine protection zones (MPZs) in place. All of these protected areas have the primary

goal of conserving nature, but decisions on the specific measures in place under each MPA/MPZ are for the Overseas Territories to make. All the MPA/MPZs have been formally designated through local legislation and either have published management plans or have management plans that are currently being finalised and will be published soon. These plans set out how any human activities will be managed so that they are compatible with the MPA/MPZ's conservation objectives and include provisions for long-term monitoring of marine habitats and species.

The Blue Belt Programme is currently assisting the Territories to assess the management effectiveness of their MPA/MPZ using the IUCN Protected Area Management Effectiveness (PAME) framework. This assesses the extent to which all of the necessary systems and processes are in place within the protected area and identifies areas for improvement. The Blue Belt Programme is also working with them to develop a suite of associated indicators for consideration which will enable the appropriate information to be gathered.

(9d)

Control and enforcement is a devolved matter. Defra, the Scottish Government, Welsh Government and Northern Ireland Executive continue to work together to share information and ensure a coordinated approach to monitoring, compliance and enforcement across UK waters.

In terms of monitoring fishing activity, there is an existing requirement for all fishing vessels over 12 metres in length to have a Vessel Monitoring System (VMS) device onboard and transmit their location every 2 hours via satellite whilst in UK waters. VMS provides data securely to relevant UK fisheries enforcement authorities only and devices are tamper proof, guaranteeing reliable and regular positional data. In England, the Government is looking to build upon existing VMS requirements in future, to obtain a comprehensive picture of fishing activity within English waters.

(9e & 9f)

We vehemently condemn any illegal fishing taking place in English waters. In England, we have put in place a significant increase in the number of personnel and surveillance assets dedicated to fisheries protection, including offshore patrol vessels for at-sea surveillance, and planes for aerial surveillance. This strong presence will deter against fisheries infringements, while also enabling our agencies to take robust action where they may occur. We continue to engage with our EU counterparts to develop ways to prevent illegal, unregulated, and unreported fishing.

The MMO's approach to control and enforcement is risk-based and intelligence led, with inspections being carried out at ports, commercial premises and on fishing vessels. Surface patrol vessels provide physical presence, deterrence and inspection capability. Surveillance is undertaken using a combination of monitoring systems such as VMS and Electronic Reporting and Data systems, as well as other methods such as aerial and radar surveillance.

10. We support the recommendations of the Natural Capital Committee that the development of soil indicators should be fast-tracked; that a shadow target for soil health should be established urgently; and that a legally-binding target for soil health

ought to be established as soon as monitoring data allows. Healthy soils should be a priority outcome for the Environmental Land Management Schemes, so as to encourage farmers to adopt beneficial agri-environmental practices. (Paragraph 105)

The Government recognises that healthy soil underpins a range of environmental, economic and societal benefits, including, food production, biodiversity, carbon storage and flood mitigation. Protecting and improving soil is essential for supporting these benefits and preventing the negative impacts caused by its degradation.

We agree that healthy soils should be a priority outcome for our new environmental land management schemes in England, and to help achieve our 25YEP commitment to sustainably managed soils by 2030, we are considering several urgent actions to support land managers and farmers to achieve sustainable soil management. To demonstrate this priority, two of our first standards under the Sustainable Farming Incentive scheme focus on soils (the Improved Grassland Soils; and Arable and Horticultural Soils). Actions include sustainable farming approaches to improve soil health for which farmers will be rewarded, for example the introduction of herbal leys and the use of grass-legume mixtures and cover crops.

It makes sense to start the early roll out of the Sustainable Farming Incentive with these soils standards because healthy soils are the foundation of sustainable farming and underpin a range of environmental benefits, as well as production. The soil standards will be widely applicable and will therefore provide opportunity for a large number of farmers to be rewarded for sustainable soil management. The standards and the overall scheme are designed to support a range of farmers; including those who are beginning to adopt sustainable practices as well as those who are already experienced in these, who will be rewarded for increasing the ambition of their land management.

We are currently testing these standards in the Sustainable Farming Incentive pilot and released further information on our plans for the Sustainable Farming Incentive on gov.uk in March 2021 ([Sustainable Farming Incentive: Defra's plans for piloting and launching the scheme](#)).

We are also identifying soil health metrics to inform the development of a healthy soils indicator as set out in the 25YEP. These metrics will represent the diverse functions and ecosystem services that soils provide across all land-use and soil types. We are also considering options for a baseline assessment of soil health against which change and any potential future soil health targets can be measured. The metrics and indicator work will combine current understanding of soil systems with new soil data. This will allow us to monitor improvements in soil health and to highlight the state of soil health throughout England.

We will work with farmers and land managers to develop the means of measuring and monitoring soil structure to enable them to carry out visual assessments across all land uses and soil types. This will complement the healthy soils indicator and a future soil health monitoring scheme by providing a straight-forward measure of long-term trends. The data collected would then provide a baseline that would enable an informal soil structure target to be developed for achieving sustainably managed soils in England by 2030. The soil structure data will also feed into future soil health monitoring.

Together, these actions will help land managers and farmers to track the health of their soil and the impact of their management practices, over time. These actions will also enable us to produce robust data to monitor improvements in soil health, map trends and make informed policy decisions.

Funding for biodiversity (recommendations 11-14)

11. We recommend that the Government urgently review the funding allocated to bodies with responsibility for monitoring, protecting and increasing levels of biodiversity in England, consistent with its goals for nature recovery under the 25 Year Environment Plan. In the next Spending Review the Chancellor of the Exchequer must back the Government's ambition for nature recovery with a funding settlement for Natural England which properly reflects its statutory responsibilities and the tasks it is expected to perform. (Paragraph 121)

There are a number of bodies responsible for monitoring biodiversity, and this includes an extensive range of species surveillance schemes and Earth Observation services operated as partnership programmes by the Joint Nature Conservation Committee (JNCC). We value the support and expertise provided by these bodies, whose performance is regularly reviewed by Ministers and senior officials.

Natural England recently received a significant increase of 47% to their Grant in Aid budget, in order to support the delivery of their statutory duties. In addition, there has been increasing focus on Defra ALBs generating income through cost recovery and commercial activities as appropriate. In this case, Natural England have increased their external income by more than 90% since 2013. Grant in aid now represents 76% of their gross income, down from more than 90% in 2010.

12. We support the recommendations of the Public Accounts Committee and the National Audit Office made in their work on Achieving government's long-term environmental goals. The Government must provide a comprehensive, consistent, and time-bound record of funding for the 25 Year Environment Plan. In its response to this report, the Government must set out in detail the funding committed to biodiversity since the announcement of the 25 Year Environment Plan; how much has been announced or otherwise promised to date; and how much has in fact been spent. (Paragraph 123)

The Government accepts that monitoring costs and spend is important and have agreed, as part of the Spending Review 2020 settlement, a set of priority outcomes against which Defra group will report progress. This includes a cross-cutting environment goal. The governance of the 25 Year Environment Plan within Defra will track the effectiveness of spend as part of our performance reporting.

The government does, however, already publish data on biodiversity expenditure in the UK and England as part of its annual biodiversity indicator publications, which were last published in October 2020. In England, public sector funding for biodiversity shows a fall between 2013/14 and 2017/18 but rose to an estimated £335m in 2018/19. We have introduced or announced significant new funding for nature in England which is not yet included in the biodiversity indicators, for example our £640m Nature for Climate and £80m Green Recovery Challenge funds.

The indicators will next be updated in the autumn and Defra is currently supporting new research to review and update our assessments.

The government also knows that while public expenditure has a significant role to play, it alone will not be enough to tackle biodiversity loss. Defra has therefore been working on a range of measures to leverage in greater levels of private finance, for example through the upcoming biodiversity net gain measure and through schemes such as the Natural Environment Investment Readiness Fund.

13. *In the next multi-annual spending review, we recommend that Natural England receive a materially greater contribution in annual funding, in line with its 2020 Comprehensive Spending Review bid.* (Paragraph 126)

See recommendation 11. Government spending plans have not been set beyond the end of 2021-22. Plans for the next business planning period will be agreed as part of this year's Spending Review (SR21).

14. *We recommend the Government commission a review of the operation of 'perverse subsidies' in the UK economy. This must entail the identification, assessment and tracking of public expenditure harmful to biodiversity, and the publication of data on the extent of such subsidies. Once such subsidies have been identified, Ministers must act to readdress the balance, removing harmful subsidies and re-directing money to nature conservation and recovery.* (Paragraph 135)

In his independent review on the Economics of Biodiversity, Professor Sir Partha Dasgupta found a conservative estimate of the cost of subsidies that damage nature—for example, in agriculture, water abstraction, fossil fuels and fisheries—of around 4 to 6 trillion US dollars per year.

That is why the UK is supporting the negotiation of an ambitious international agreement under the Convention on Biological Diversity that looks to reform or eliminate these subsidies worldwide. The UK also co-led the negotiation of the ambitious Leaders' Pledge for Nature, together with the European Commission and Costa Rica, which commits to 'eliminating or repurposing subsidies and other incentives that are harmful to nature, biodiversity and climate while increasing significantly the incentives with positive or neutral impact for biodiversity across all productive sectors'.

Government is also acting at home. In 2012, Defra commissioned a study of both positive and negative subsidies. The study identified agriculture and fisheries as key priorities for reform, but also identified energy subsidies as potentially significant.²

Our Agriculture Act represents one of the most important environmental reforms for many years, replacing the inefficient EU Common Agricultural Policy with new schemes to improve environmental land management, which will reward farmers for the work they do to safeguard our environment and help us meet crucial goals on mitigating and adapting to climate change and protecting biodiversity.

The UK government is opposed to harmful subsidies in fisheries, including their application domestically. The Fisheries Act's objectives commit the UK Administrations to sustainable fisheries and reducing environmental impact of fisheries.

2 GHK, IEEP (2012) [Incentive Measures and Biodiversity – A Rapid Review and Guidance Development](#)

The Government's Subsidy Control Bill contains safeguards in relation to the giving of energy and environmental subsidies, including the option of incentivising the beneficiary to increase the level of environmental protection compared to level that would be achieved in the absence of the subsidy.

We will continue to work across government to strengthen the delivery of our international biodiversity commitments.

Domestic biodiversity and legislation (recommendations 15-23)

15. *The Government must urgently establish a baseline for the Outcome Indicator Framework. Defra's planned Natural Capital and Ecosystem Assessment pilot, and any subsequent baseline exercise, must focus on measuring a clear set of representative natural capital assets across England. The Treasury should ensure the baseline assessment is properly funded at the next Spending Review.* (Paragraph 153)

The Outcome Indicator Framework is designed to objectively describe environmental change in England. Where possible, a baseline near to 2018 (to align with the publication of the 25 Year Environment Plan) will be used as a reference point to assess change. Longer-term (historic) trends will also be presented for comparison where these data are available.

Where suitable time series are available, we will assess both long-term (greater than 5 years) and recent (latest 5 year) trends. We expect the majority of outcome indicators will require long-term reporting before we can be confident they show a significant response to policy and other actions, because data series of less than five years are likely to show year-to-year fluctuations; and there will be time lags in the environmental response to interventions.

We are working to develop all indicators by 2024, ensuring appropriate time is taken for quality, novel research to deliver the required environmental insights. Development of the indicators will also be informed by relevant government plans and policy to ensure the most useful and sustainable indicators are created.

The Outcome Indicator Framework will be kept under regular review so that it continues to be relevant and provide the best and most cost-effective ways of assessing progress. The framework will be reviewed at a minimum every 5 years.

In November 2020, a further £20 million of investment was announced to develop the Natural Capital and Ecosystem Assessment (NCEA). The NCEA is in a pilot phase, testing approaches and developing a transformative programme to understand the extent, condition and change over time of environmental assets across England's land and water environments. The pilot is exploring a systems approach to ensure all elements of our natural capital are produced to the same time, quality and spatial scale.

16. *In all future progress reports on the 25 Year Environment Plan, information provided should relate to the Plan's ten goals. Priority actions must be assessed year on year, as must local delivery of the plan through arm's length bodies. From 2022 onwards the Government should set out indicators for how the Environmental Land Management Scheme and Local Nature Recovery Strategies will be assessed to measure how these policies are delivering the aims of the Plan.* (Paragraph 155)

We will continue to develop our public reporting of progress in accordance with the Environment Bill once it comes into force and legally binding targets are established. In the interim, we will continue to monitor progress in achieving 25 Year Environment Plan ambitions against the existing targets and indicators that the government is working towards, which would include policies and programmes such as Local Nature Recovery Strategies and Environmental Land Management schemes. Longer-term statutory reporting will be guided by the requirements for Environmental Improvement Plans through the Bill.

The Outcome Indicator Framework incorporates the breadth of best available technical expertise across the Defra group and beyond. The department plans to report on over 40 indicators in the 2021 update. The development of indicators requires innovative and entirely new scientific research and development in complex areas. The department is aiming to finalise all 66 indicators by 2024, however, adequate lead-in times are required to ensure sufficient high-quality data are available for transparent and robust analysis.

17. *The Government must address how it will set long-term objectives for all ten of the Plan's goals. As agreed to in 2018, the Government must publish how these goals and objectives relate to pre-existing national and international environmental targets. We reiterate our recommendation that the Office for Environmental Protection's powers, budget and staffing reflect its responsibility to monitor the Government's delivery of the 25 Year Environment Plan and its enforcement of environmental law.* (Paragraph 157)

Our 25 Year Environment Plan, the Environment Bill's first statutory Environmental Improvement Plan, sets out steps the government will take to manage and protect our natural world for environmental improvement. It sets out clear commitments in the key areas of resource efficiency and waste reduction, air quality, water and biodiversity. The Bill creates a power to set long-term, legally-binding environmental targets. At least every five years, the government must assess whether meeting such targets set under the Bill's framework, alongside any other statutory environmental targets, would significantly improve the natural environment in England.

When developing targets, we will consider any relevant international best practice and commitments, such as new international biodiversity targets to be developed under the Convention on Biological Diversity, and their relevance to our domestic environmental agenda.

The government is committed to establishing the Office for Environmental Protection (OEP) as soon as possible after Royal Assent with sufficient funding to fulfil its statutory advice, scrutiny, and enforcement functions. The intention, subject to finalising parliamentary passage, is to provide the OEP with a five year indicative budget, with a ring-fenced budget for each spending review period. Defra have agreed this approach with HM Treasury to give the OEP the greatest possible certainty over its finances for the coming years. The OEP will then be required to report annually on whether it has sufficient funding to carry out its functions, and we will share this information with Parliament.

18. *The Government should not count its wins early: protected areas should only be reckoned to contribute to the 30 by 30 pledge if they are effectively managed and improved. We recommend the Treasury ensure that all bodies involved in the monitoring of 30 per cent of the UK's land and seas receive funding allocations sufficient to allow*

comprehensive monitoring to be undertaken. We note it is far less expensive to conserve nature than to restore damaged or degraded resources and the costs involved are small compared to the financial and wider health and well-being benefits. (Paragraph 165)

We are clear that meeting the 30 by 30 target requires we extend our protected areas and ensure they are managed effectively to drive up their value for biodiversity. As we develop our roadmap to meeting the 30 by 30 target on land in England we want to find an approach that strengthens and extends our existing network of protected areas and enhances the links between them.

We are already bringing forward new designations and have introduced new funding, such as the Farming in Protected Landscapes scheme, for which applications opened on the 1 July. The programme provides funding for farmers and land managers in England's National Parks and Areas of Outstanding Natural Beauty to deliver projects that support nature recovery, mitigate the impacts of climate change, provide opportunities for people to access these landscapes, and that support nature-friendly, sustainable farm businesses. It will run to March 2024.

In English waters there are 178 sustainable-use Marine Protected Areas protecting 40% of our seas and we have recently committed to piloting Highly Protected Marine Areas in English waters to boost biodiversity recovery.

Later this year we will publish a Nature Recovery Green Paper, which will set out more detail on our approach to delivering this important commitment in England. Funding for bodies involved in monitoring of land and sea is considered under recommendation 11.

19. *The Government should provide a full response to the Glover Review before the 2021 summer recess.* (Paragraph 166)

On 24th June, the Secretary of State laid a Written Ministerial Statement on the Government's response to the Landscapes Review, setting out support for the independent Landscapes Review's recommendations to improve nature recovery and public access in protected landscapes, ahead of a consultation on draft proposals due later this year.

20. *To allow the biodiversity net gain policy to fulfil its transformative potential within the UK's built environment we recommend that:*

- a) ***The Government should explain how and when it will move to embedding environmental net gain in the planning system, with clear actions and milestones provided to achieve this goal.***
- b) ***Mandatory gains should endure, rather than only being maintained for the stated 30 year minimum.***
- c) ***The Government should strengthen local authority capacity and enforcement mechanisms to deliver biodiversity net gain and developers should demonstrate their environmental performance and implementation of mitigation measures as part of good Environmental, Social and Corporate Governance.***
- d) ***The National Planning Policy Framework should be reviewed to ensure reforms strengthen biodiversity restoration and protection and any proposals which undermine biodiversity be addressed.*** (Paragraph 197)

The coverage of the policies outlined in this recommendation, and therefore this response, relates to England only.

(20a)

The Environment Bill provides for a strengthened biodiversity duty on public authorities to have regard to the conservation of biodiversity, including a requirement to have regard to relevant Local Nature Recovery Strategies (LNRS). It is proposed that Biodiversity Net Gain (BNG) will become mandatory two years after Royal Assent of the Environment Bill, although an increasing number of Local Planning Authorities (LPAs) are already delivering BNG through local planning policy in preparation for the Bill's requirement. Mandatory BNG will be required for new development, except for a limited number of exemptions, by a mandatory planning condition. We want to capitalise on the potential of LNRS and BNG to improve environmental outcomes and make the planning system clearer. Further detail will be set out in the government's response to the Planning for the Future consultation, which will be published shortly.

Mandatory BNG will lead to wider environmental benefits and protection for our natural capital. We are also already working to embed wider environmental net gain beyond BNG, including the launch and refinement of a number of tools that allow us to understand and enhance our natural capital through strategic and local plans and decisions. These include:

- a) The Green Infrastructure Standards Framework, included in the National Model Design Code released this year and the full Standards are expected in 2022;
- b) The Environmental Benefits of Nature Tool (EBNT), which was released this year and pilots are planned for 2021-2022 to develop this tool further; and
- c) The Enabling a Natural Capital Approach (ENCA) resources (released 2020), and the Natural Capital Evidence Handbook and associated Atlas and Register (released 2021), which will help decision makers to incorporate the wider benefits of the environment into planning from the local to the national scale.

High-quality evidence that supports and evaluates our environmental decisions is essential to ensure we take the right approach. That is why we have continued the pilot of the Natural Capital and Ecosystem Assessment Programme (NCEA) this year, to fill many of the gaps in our data, information and knowledge on ecosystems and their natural capital assets that the Natural Capital Committee identified in its last annual report, and so transform our decision-making.

We are further pioneering these approaches through our work in the Oxford-Cambridge Arc, as an exemplar of a natural capital approach to planning and decision-making. The OxCam Spatial Framework, developed by Government and local partners and spanning the five ceremonial counties of Oxfordshire, Northamptonshire, Buckinghamshire, Bedfordshire and Cambridgeshire will ensure environmental net gain considerations are fully embedded as part of an integrated approach to housing, transport, infrastructure, sustainable land management, and climate change resilience. The Spatial Framework will support long-term, coordinated action across local administrative boundaries to develop a spatial vision for implementing biodiversity—and environmental—net gain outcomes, and capitalise on strategic opportunities for nature expansion, recovery and reconnection.

The ongoing development of, and learning from, these measures, tools and real-world approaches, will help us move towards embedding environmental net gain in the planning system, for which we will set out a clear timetable in due course.

(20b)

The minimum 30-year period for biodiversity gains, as part of biodiversity net gain, has been selected to mirror current good practice. This minimum duration will help to ensure habitats are secured for the long term, but also avoid deterring landowners, who might be unsure about imposing restrictions on their land for longer periods, from offering land for conservation in key strategic areas.

The government intends to encourage longer agreements in cases where this is acceptable to the landowner and is likely to result in better environmental outcomes and will initially do this through guidance.

Even where agreements are only binding for 30 years, the government does not expect habitats to be lost after this time. There are a range of existing protections and management incentives for habitats that could apply to biodiversity gain sites after a 30-year requirement has expired, and we can only speculate at the range of incentives that might be available in the 2050s. For example, the landowner may wish to further enhance the habitat's value to wildlife for biodiversity gain units or look at environmental land management schemes.

Although we are confident that 30 years is the right duration at present, the government has listened to both sides of this debate and recognises the right answer to this question might change in the future following evaluation of the policy in practice or be different for major infrastructure. We have therefore created a duty and power through the Environment Bill to allow the Secretary of State to review, and increase if appropriate, the minimum duration for which new biodiversity gain sites must be secured. This will allow this important aspect of the policy to be reviewed after government has evaluated the early years of mandatory BNG practice.

We have left the issue of agreement duration as it pertains to major infrastructure open to further consultation. In simple terms, we have not prescribed on the face of the Bill that net gain agreements for major infrastructure must be 30 years.

(20c)

The government will work with local authorities and professional organisations to make sure that planning authorities have access to the right training, ecological expertise and systems required to deliver BNG. We are working with the Planning Advisory Service to support local planners to embed BNG. We will also work with industry bodies to make sure that training, expertise and systems that are fully compatible with government policy are made available.

The clauses in the Environment Bill will embed a mandatory BNG approach into the planning system. The government does not propose to introduce new enforcement mechanisms for BNG; enforcement will be through the planning system and existing mechanisms such as conservation covenants and planning obligations. Mechanisms such as the biodiversity gain site register and biodiversity gain plans will help to ensure that biodiversity gains are transparent and open to monitoring.

Planning application data is routinely published by local authorities and will provide a first level of data about how new developments will achieve BNG. More generally, the Environment Bill will strengthen the existing reporting duty on local planning authorities to report on actions taken for BNG. The government will work with local authorities to make sure that any reporting mechanisms align with existing processes as far as possible, and that guidance and support are available.

The government will make clear the criteria which compensatory habitats need to meet to be considered legitimate sources of biodiversity units. Clear net gain assessments that detail what habitats should be present on site, and the mandatory net gain planning condition attached to planning permission, will ensure compliance and allow for enforcement where necessary. We are exploring how we will make compensation data accessible for local communities so that they can see the benefits delivered by net gain and raise their concerns when promised enhancements have not been delivered.

Conservation covenants, which the government is legislating for in the Environment Bill, offer an alternative way to secure habitats in the long term. Where habitats are secured by conservation covenants, responsibility for monitoring and enforcement would sit with the organisation that holds the covenant.

Developers' voluntary reporting of their performance as part of good Environmental, Social and Corporate Governance, should be to their discretion.

(20d)

The National Planning Policy Framework (NPPF) is already clear that the planning system should contribute to and enhance the natural and local environment by providing net gains where possible, asking local authorities to set out in their development plans a positive strategy for the conservation of the national environment. It also states that local authorities should refuse planning permissions that result in significant harm to biodiversity unless the harm can be avoided, mitigated, or as a last resort, compensated for.

The government published the revised NPPF on 20 July. Our changes improve biodiversity and access to nature through design and ask for new streets to be tree-lined. The new framework enables local authorities and communities to shape and deliver beautiful places to live and work, with a greater emphasis on design quality and the environment than ever before. This will be strengthened through new national development management policies that ensure environmental considerations are fully embedded as part of the planning and development process.

21.

- a) ***To include harder-to-reach farmers and land managers, rural broadband connectivity must be addressed as a matter of urgency, as recommended by the Environment, Food and Rural Affairs Committee in 2019.***
- b) ***Defra should also make provision for tailored, farm-specific advice, farm visits, demonstration farms, and other knowledge-sharing activities that support the achievement of biodiversity goals. Defra should identify 'win-wins' that deliver production and environmental benefits to encourage early buy-in***

from farmers to the scheme. The scheme should include sufficient flexibility to allow for alternative land-uses, such as using land for storing carbon, helping to prevent floods, and maintaining beautiful landscapes for people to enjoy and reconnect with nature. The introduction of ELMS should be used as an opportunity to encourage monitoring of on farm biodiversity, with funded audits of soil health, carbon sequestration and wildlife species prevalence forming a routine element of compliance and reporting. (Paragraph 205)

(21a)

The Government is committed to making sure that no one is left behind by the connectivity revolution and to delivering nationwide gigabit connectivity as soon as possible. Today, over 40% of premises can access gigabit-capable networks, up from just one in ten in November 2019. By the end of the year, 60% will have access.

Rural broadband connectivity is a priority for the Government. We are investing £5 billion in Project Gigabit to provide high speed broadband connections in remote and rural areas and deliver a minimum of 85% gigabit-capable coverage by 2025. Phase One of the Project Gigabit delivery plan was launched in March 2021. In August, we announced that up to 1,850,000 additional premises across 26 English counties will get access to gigabit speed internet, bringing the current total number of premises in scope for government funded coverage to 2.2 million. This is in addition to the tens of millions of premises that are being connected through commercial rollout.

Project Gigabit also includes up to £210 million in vouchers to help hard to reach communities with the cost of connecting to gigabit, and up to £110 million to turn remote public buildings into 'gigahubs' bringing fibre cables to the heart of hard to reach communities off which suppliers can build. We are also determined to explore all possible options for improving broadband connectivity for the very hardest to reach premises in the UK and are reviewing all responses to our call for evidence, *'Improving connectivity for Very Hard to Reach premises'*.

We are also working with industry to deliver improved mobile coverage in rural areas. In March 2020 we announced that we had agreed a £1bn deal with the Mobile Network Operators to deliver improved mobile phone coverage via the Shared Rural Network (SRN). This will see operators collectively increase geographical mobile phone coverage throughout the UK to 95% by the end of programme in 2025, underpinned by legally binding coverage commitments. This will level up the country by improving mobile coverage for an extra 280,000 premises and 16,000km of roads—giving the UK the world-class digital infrastructure it deserves.

In June we announced further details on how the SRN will improve 4G connectivity across the UK to enable rural businesses and communities to thrive. The SRN will help businesses connect better, often helping reduce traditional operating costs; and the increased availability of mobile connectivity on the move via the SRN will allow outdoor rural businesses to work more efficiently.

(21b)

Defra is committed to working directly with farmers and land managers to understand their views, actively involving them in the design and development of policy and solutions

to ensure that the outcomes respond to their needs. Defra runs a regular series of visits to a diverse range of farms across England. Since the Covid-19 pandemic these have taken place through a series of virtual farm visits. This has allowed a significantly wider audience of both Defra staff and members of the industry to attend and benefit from the mutual sharing of information and insights. We have recently started returning to physical farm visits in line with easing restrictions on Covid-19 and are also maintaining the virtual visits.

We are continuing our work to ensure that the design of our future schemes reflects the full diversity of agricultural techniques that are already producing environmental benefits. Soil health is a key potential 'win win' area, where improving it can both enhance farming productivity and provide environmental benefits, which is why two of our first standards under the Sustainable Farming Incentive focus on soils. Further information on the detail of the Environmental Land Management schemes can be found in the ATP update (www.gov.uk/government/publications/agricultural-transition-plan-2021-to-2024).

We continue to progress test and trials and pilot activity under environmental land management. As of the 26 August we have 43 live tests and trials and a further 13 proposals in development with stakeholders, filling identified gaps. 39 tests and trials have already finished. These have actively involved 3000 farmers and members of the industry in testing and shaping our full range of solutions.

We intend that the Sustainable Farming Incentive scheme will be sufficiently straightforward for farmers to make applications and implement agreements, using guidance that will be available on GOV.UK—without the need for expert advice (for example, from a land agent, adviser, agronomist or similar) in most cases. The GOV.UK guidance provides practical, step by step explanations of how to do what is needed and what good looks like. These participants (and their advisers, if applicable) were also recently invited to one of six live information sessions. Delivery Partners (Natural England, Rural Payments Agency, Forestry Commission and the Environment Agency) will support applicants with advice on statutory responsibilities and assisting regulatory permissions where they are required.

We expect the existing wide range of private sector advisers to be well placed to be the primary providers of advice where that is sought. An important point of piloting will be to test whether this is true in practice, and we will adjust the scheme based on what we learn.

The Local Nature Recovery and Landscape Recovery schemes are likely to require a greater level of advisory support. This is because they can reward outcomes that require more significant and complex changes in land use and management, requiring more detailed planning of activities (some of which may go beyond normal farming or forestry practice). They may also be more suitable for land that requires bespoke management for environmental outcomes that needs greater advisory support. We are still exploring the likely needs for advice in these schemes and who is best placed to provide it.

22. *To address these concerns we recommend that:*

- a) ***Defra updates its Nature Recovery Network Policy Paper by the end of the year, explaining how LNRS will be co-ordinated into a national Nature Recovery Network and how local authorities should link LNRS to the NRN.***

- b) *Government should establish a Nature Recovery Zone category which would enable local authorities to choose to designate areas where planning permission would in principle be granted for environmental investments and discourage new hard infrastructure at scale. LNRS should designate these zones to be incorporated into local plans.*
- c) *LNRS should be used as the spatial planning tool to join up biodiversity net gain, ELMS and the planning system. LNRS could provide information for the planning system's new land zoning proposal and provide the basis for prioritising the delivery of funds from ELMS and net gain.*
- d) *The Nature Strategy should set out specifically how the Government proposes to link environmental and planning policies into one coherent policy approach designed to realise the 25 Year Environment Plan's goal to improve the environment within a generation.*
- e) *Amid concerns that some local authorities do not have the capacity to deliver Biodiversity Net Gain and Local Nature Recovery Strategies, we recommend that the Government makes a formal assessment of capacity of local authorities to undertake this work, with a view to ensuring that all local authorities have the capacity to meet these important obligations.* (Paragraph 226)

Planning policy is devolved in the UK and the question and answer below relates to policies in England.

(22a)

Establishing a Nature Recovery Network (NRN)—an expanded and better connected network of places that are richer in wildlife, more resilient to climate change and provide a range of benefits for people—is a major commitment in the government's 25 Year Environment Plan.

Local Nature Recovery Strategies (LNRS) have been designed from the start to support the establishment of a NRN. They will identify priorities and opportunities for nature recovery and help drive investment and action to expand, improve and connect habitats.

LNRSs will work in conjunction with other policies and funding streams, such as biodiversity net gain, and will be supported by the NRN Partnership to help bring people and organisations together to affect change on the ground.

Defra is intending to produce regulations on the process that must be followed in preparing a LNRS and statutory guidance on what one must contain after Royal Assent of the Environment Bill. It is these two documents that will, between them, help to explain in more detail how LNRS' will support the NRN.

Once these documents have been published Government will review the existing documentation to see what amendments might be necessary for clear communication of our policy intent.

(22b)

Our planning reforms are being developed in accordance with the principles in the Environment Bill to ensure that development results in environmental improvement rather than merely preventing harm. We will further embed this approach through updates to national planning policy, to ensure that environmental considerations feature fully in all planning decision making.

We are clear that we want to capitalise on the potential of LNRS as we seek to improve environmental outcomes and make the planning system clearer, by ensuring that LNRS will input to plan-making. Further detail will be set out in the government's response to the *Planning for the Future* consultation which will be published shortly.

(22c)

We agree with the Committee's vision for the role that LNRSs will play in joining up biodiversity net gain, the planning system and future schemes that reward the delivery of environmental benefits.

To this list of key measures we would add a range of other activity to use 'nature-based solutions' to address wider environmental challenges, such as tree planting to sequester carbon and wetland creation to improve water quality, mitigate flood risk and help adaptation to climate change.

The duty on all public authorities to "have regard" to relevant LNRSs will also be an important new driver of activity. We have amended the Environment Bill to include statutory guidance for local planning authorities to explain how they should have regard to LNRSs, to embed strategies for the environment and nature's recovery into their planning systems.

Government's vision is that, by drawing together this range of activity for nature and the use of nature-based solutions, the public, private and voluntary sectors can work together to greatly increase the effectiveness and efficiency of the action that we take on the ground.

The role that LNRSs will play in biodiversity net gain is via the biodiversity metric. The metric provides an uplift of 15% to the calculation of units generated by habitat creation in locations identified by LNRSs. This will provide an incentive for habitat creation in these locations but without precluding developers from pursuing other approaches. LNRSs will also guide funding provided through the Local Nature Recovery scheme under our future farming programme.

Proposals for planning reform and future schemes that reward the delivery of environmental benefits are both areas of active policy development. The government has committed publicly to aligning LNRSs with both policies, and is developing the detail of how this will work in practice.

(22d)

The government's planning reforms are being developed in accordance with the principles in the Environment Bill to ensure that development results in environmental improvement rather than merely preventing harm. Defra and MHCLG will continue to

work closely to ensure that environmental and planning policies work together to improve the environment within a generation, on which further detail will be set out shortly in the government's response to the Planning for the Future consultation.

We will also continue to update our plans and strategies for meeting our wider domestic and international environmental commitments, including publishing a Nature Recovery Green Paper later this year.

(22e)

See response to recommendation 5 and 20c.

23. To realise the benefits of nature-based solutions to climate change, we recommend that:

- a) *The UK adopt a clear definition of NbS and consider using the IUCN definition alongside the IUCN Global Standard for NbS.*
- b) *The Government prioritise protection and maintenance of the ecosystems we already have over the creation of new ecosystems. This must include greater efforts to preserve ecosystems found outside of protected areas.*
- c) *The proposed ban on the production and sale of horticultural peat be brought forward, as soon as possible before 2023.*
- d) *Tree planting should not occur on peat soils and floodplains would be better used for restoring floodplain meadows rather than afforestation projects.*
- e) *Tax incentives be given to investors in NbS schemes who have ambitious and credible net zero plans and are working to remove biodiversity loss from their supply chains.* (Paragraph 260)

(23a)

The challenges of climate change and biodiversity loss require a global response, to which all countries need to contribute. This means that there needs to be a mix of measures that address a wide range of issues and geographical variations. We believe that nature-based solutions (NbS) are a critical part of the global response as they:

- Facilitate a greater range of interventions and choices in approach.
- Tackle climate, environmental and societal challenges in a synergistic way, delivering multiple outcomes simultaneously.
- Operate at a scale required to meet the level of our collective ambitions.
- Have been shown to be cost effective in mitigating and adapting to the effects of climate change.

We recognise that having a universally recognised NbS definition could be beneficial in helping to avoid the risk of unintended consequences or trade-offs in approaches and

to deliver on the scale of our ambitions, both domestically and internationally. There are a range of definitions and standards on NbS, including inter alia IUCN's, which the Government is currently assessing.

We are also clear that processes to agree a definition should not hold back positive action. The UK is continuing to invest in NbSs to tackle biodiversity loss and climate change and to benefit people through access to nature and securing green jobs. Internationally, by making 'nature' a key focus of COP26 in Glasgow, we hope to demonstrate that NbS can deliver multiple benefits for climate, biodiversity, and people, and can therefore play a critical role in tackling these interrelated crises in an integrated way.

(23b)

It is the Government's view that we need to both protect and maintain existing ecosystems as well as create new ecosystems. We want not only to stem the tide of this loss, but to turn it around and leave the environment in a better state than we found it.

The Environment Bill now requires a new, historic legally binding target to be set to halt the decline in species abundance by 2030. To recover species, we will need to work on habitats both within protected sites and in the wider countryside, meaning a single target for 2030 will drive wide-ranging improvements to the state of nature.

We are committed to improving the management of our protected sites and to bringing 75% of the area into favourable condition. Natural England is working with landowners and managers and others to improve the condition of our protected sites.

However, we agree that we cannot rely solely on our designated sites to achieve nature recovery on the scale we need to meet our biodiversity and net zero goals. We also need to invest in nature recovery more widely as we establish a Nature Recovery Network and protect 30% of our land and sea by 2030.

For example, on peat, we are committed to protecting and restoring vulnerable peatlands in England. We published the England Peat Action Plan in May 2021, which sets out the government's long-term vision for the management, protection, and restoration of our peatlands, including ramping up current levels of peatland restoration through the Nature for Climate Fund, which will provide funding for the restoration of at least 35,000 hectares of peatland by 2025.

(23c)

We have always been clear of the need to end the use of peat in horticultural products in England. While there has been some progress, our voluntary target to phase out the use of peat in horticulture by 2020, set in 2011, has not succeeded.

In the England Peat Action Plan, we have therefore committed to publishing a full consultation in 2021 on banning the sale of peat and peat containing products in the amateur sector by the end of this Parliament. As outlined in the Action Plan, we are committed to working with the industry to understand the implications of our proposals, identify blockages and to working with the private sector to develop and enact solutions.

(23d)

Within our England Tree and Peat action plans we recognise woodlands and peatlands are two of our largest natural climate regulating ecosystem types; our climate change and biodiversity obligations require us to manage them both sustainably. Plans to expand woodland cover and to restore peatland need to work hand in hand, which is why we have announced in the England Tree Action Plan that we will publish guidance for England that will help determine when afforested peat should be restored to bog, and to minimise impacts on peaty soils from tree planting.

There are 242,262km of watercourses in England, forming a natural network linking up the country. This is enough space for habitat corridors that encompass a range of ecosystems, including floodplain meadows and multifunctional woodland buffers, sometimes sitting within re-naturalised floodplains.

Funding of up to £500 per hectare is available for floodplain grassland creation through our Countryside Stewardship scheme, and floodplain grassland is a priority in many of our Stewardship targeting statements recognising high rates of historic loss of these grasslands and the need to recover the rare and declining species or plants and animals associated with these.

The UK Forestry Standard and Environmental Impact Assessment Regulations provide a well-established framework within which we protect valuable semi-natural habitats. Better informed targeting maps will be critical to delivering the right trees in the right places and help identify where planting can provide particular natural capital benefits whilst being sensitive to environmental and social constraints. This why the England Tree Action Plan committed to:

- Improve the Forestry Commission's woodland creation map to better show low-risk areas for woodland creation incorporating additional sensitivities as new information becomes available;
- Develop new mapping products and spatial datasets so land managers have more clarity on site sensitivities and opportunities for woodland establishment and management;

(23e)

Tax policy is the responsibility of HM Treasury and HMRC. The Exchequer departments work closely with other government departments, such as Defra, in considering and formulating tax policy that relates to environmental objectives. The government keeps all tax policy under review and tax policy changes are announced by the Chancellor at fiscal events.

Defra recognises that more needs to be done to encourage private investment in nature restoration to help us to meet our 25YEP ambitions. That is why we are working with industry leaders from business, finance, land management and environment sectors through the Financing UK Nature Recovery Coalition to understand how to scale up private finance into environmental markets. A recommendations report is anticipated in Autumn 2021.

We are also continuing to test new models and build project pipelines through our Natural Environment Readiness Fund (NEIRF) and a planned Impact Fund. The NEIRF will provide technical assistance and capacity-building to stimulate pipelines and provide a return on investment by capturing the value of ecosystem services and natural capital assets. Evidence from these innovative approaches will be key to understanding what does and doesn't work for attracting private investment in environmental outcomes. The first round of projects will be awarded this summer.

Economics of biodiversity (recommendations 24-31)

24. We recommend the Government start the process of setting an environmental footprint target by launching a consultation ahead of COP15 on how to model the overseas environmental impact of UK consumption. This could feed into Defra's work on international indicators within the Outcome Indicator Framework. (Paragraph 272)

We have commissioned the Joint Nature Conservation Committee to develop a global environmental footprint indicator to help us understand the UK's global footprint. This work is commissioned as part of indicator K1 in the Outcome Indicators Framework (OIF) for the 25 Year Environment Plan in England and exists in the context of Defra's international commitments and ambitions, as well as alongside the other international indicators in the OIF. We will publish updates from this work in the OIF in line with established indicator reporting requirements.

The first phase of this work was published in May 2021, with further development currently underway. The outcomes of this work will help inform our future thinking on the most appropriate approach to drive change in this area.

25. In response to this report, the Foreign, Commonwealth and Development Office should set out the extent to which the announced cuts to the UK's aid budget will affect overseas development assistance for family planning and reproductive healthcare. We recommend that ODA for family planning and reproductive healthcare be protected: at the very least the percentage allocated to both these areas should be equal or higher than 2019 levels. (Paragraph 282)

Supporting people in their reproductive choices, including through the provision of voluntary family planning, may have a positive impact on the conservation of nature over the long term given the role this plays in empowering women and lowering fertility rates. In this context, it is important to note that it is high income countries that have the greatest impact on the biosphere. The UK is a proud defender of sexual and reproductive health and rights, and between 2015 and 2020 reached an average of 25.3 million women and girls with modern methods of family planning per year. In 2019, the UK spent £402 million on Family Planning and Reproductive Healthcare bilateral programmes and provided £20 million of core support to UNFPA.

In the Government's response to the Dasgupta Review on the Economics of Biodiversity, we committed to use aid spending and diplomacy to support the empowerment of women, as one of the smartest investments we can make to lift people out of poverty, increase prosperity and ensure that women benefit from the transition to a nature positive future. The Government has also committed to supporting the launch of FP2030, the new global partnership to accelerate country leadership on voluntary family planning, in 2021.

The Government has had to make difficult funding decisions to deal with the financial impact of the pandemic, but despite this FCDO will spend £1,305m on global health in 2021/22 and will continue to fund a broad range of programmes that support sexual and reproductive health and rights (including family planning). FCDO spend by sector is calculated using OECD-DAC sector codes. Details of FCDO spend by sector code for 2021 will be available in the Statistics on International Development publication in Autumn 2022 and details of FCDO spend for 2022 will be available in the Statistics on International Development publication in Autumn 2023. FCDO programme sector codes are available on DevTracker.

26. *The Government should detail how it intends to move beyond GDP as the primary measure of economic activity, towards a concept of inclusive wealth, which includes consideration of the UK's produced, human, and natural capital.* (Paragraph 298)

Gross Domestic Product (GDP) remains one of our most important economic indicators. GDP has tended to be closely correlated with employment, incomes and tax receipts making it useful for the government and Bank of England when setting economic policy and managing the public finances.

However, the Government recognises that GDP has its limitations and should not be seen as an all-encompassing measure of welfare—something it was never designed to be. Sir Charles Bean's 2016 Independent Review of Economic Statistics acknowledged some of these limitations. The Government fully supported the recommendations of the Bean Review and, to date, has provided the Office for National Statistics (ONS) with an additional £25m to help implement those recommendations. As a result of this work, the UK has developed world leading Natural Capital Accounts and, last year, the UK became one of the first countries to publish natural capital accounts as part of its National Accounts (The Blue Book). These accounts are consistent with the UN System of Environmental-Economic Accounting Central Framework, and System of Environmental-Economic Accounting Ecosystem Accounting. Additionally, the ONS has published human capital estimates for 2004-2018 as part of their wellbeing measures.

The Dasgupta Review sets out how a broader measure of 'inclusive wealth', comprising natural, human and produced capital, can provide insights into a nation's sustainable economic progress over time. In response to the Review, the Government will go further to deliver a nature positive economy, including by working with ONS to improve the way nature is incorporated into our national accounts. HM Treasury will provide further funding to the ONS to improve its natural capital estimates. This will improve their relevance for policy making and ensure continued consideration of a broader measure of economic activity than just GDP.

27. *The UK should work with countries at COP15, COP26 and through the G7 to construct an internationally agreed way to integrate natural capital accounts into core national accounts. This aligns with two of the Government's COP26 presidency goals: finance and collaboration. The UK should also use its leverage within the IMF, to call for the incorporation of natural capital accounts in macroeconomic surveillance undertaken by IMF.* (Paragraph 300)

The UK is already demonstrating global leadership in driving forward natural capital approaches as a means to transition to a nature-positive economy and was pleased to use its recent role as G7 President to secure international agreements in this space.

For instance, G7 Climate and Environment Ministers agreed an ambitious Communiqué which included commitments to work with businesses and other stakeholders in developing standardised natural capital accounting practices. They agreed to work collaboratively to build on the Dasgupta Review insights and to support efforts so that economic and financial decision-making properly takes account for the value of nature. They also welcomed the work being done by the UN Statistical Commission to continue updating the SEEA ecosystem accounting system.

G7 Finance Ministers and Central Bank Governors also committed to embed climate change and biodiversity loss considerations into economic and financial decision-making, looking forward to the establishment of the Taskforce on Nature-related Financial Disclosures (TNFD), and welcoming the Dasgupta Review on the Economics of Biodiversity and the related OECD Policy Guide on Biodiversity in their Communiqué.

G7 Leaders further endorsed these commitments in the 2030 Nature Compact. This document recognised that decisions must take into account the true value of goods and services we derive from nature, and tasked Finance and other relevant Ministries to identify ways to account for nature in economic and financial planning and decision-making. Leaders also called on Multilateral Development Banks (MDBs), International Finance Institutions and Development Finance Institutions to embed nature into their analysis, policy dialogue and operations. They further called on MDBs to sign a Joint Statement committing them to mainstream nature across their operations as appropriate.

The UK looks forward to furthering these ambitious commitments through COPs 15 and 26, and other multilateral forums, including the IMF.

The UN guidance on ecosystem accounting was approved by the UN Statistical Commission in March 2021, establishing an international standard for the measurement of ecosystem assets and their services. The guidance includes important advice on the valuation of ecosystem services and the approach towards integrating the values into the national accounts framework, although because of some dissenting views the Commission decided that further work was needed before the specific sections on valuation could be regarded as an international standard.

The publication of the guidance has been widely welcomed as a major step forward. Defra provided funding to the UN Statistical Division for the development of the guidance and was also a leading member of the Technical Committee which oversaw the development of the standard. We are still working with the UN Statistical Division to finalise the White Cover version and will be working further on the items on the research agenda.

28. We support the recommendation of the Public Accounts Committee that the Treasury's next Comprehensive Spending Review should set out how the full value of environmental impacts has been taken into account, and the impact of spending decisions on meeting government's long-term environmental goals. To achieve this, every department needs to account for the costs and benefits to nature when appraising

projects and policies. We reiterate the recommendation of the 2017–19 Committee that general taxation and spending should not be exempt from the Environmental Principles. (Paragraph 316)

As set out in the government response to the PAC, at spending reviews, departments are required to assess the costs and benefits of their proposals—including climate and environmental impacts—following the framework set out in the Green Book. Treasury spending teams consider these impacts when assessing the value for money of any proposal. HM Treasury continuously improves the Green Book. For example, in 2018, the Green Book and its supplementary guidance were revised with support from the Natural Capital Committee to require more comprehensive appraisal of environmental impacts following a natural capital approach (Defra's 'Enabling a Natural Capital Approach' (ENCA) provides further data, guidance and tools to support policymakers). HM Treasury has also convened a group of experts, including academic economists and scientists as well as practitioners, to produce supplementary guidance on Biodiversity Valuation for the Green Book, in addition to the guidance on natural capital. This world-leading guidance will complement the Environment Bill's biodiversity net gain provisions in supporting better consideration of biodiversity in decision-making.

With regards to the Environmental Principles Policy Statement, the exemption on the 'allocation of resources' refers to central spending decisions only individual policies that require spending will still need to consider the policy statement. At fiscal events and Spending Reviews, decisions must be taken with consideration to a wide range of policy priorities. These include sustainable economic growth, macroeconomic and financial stability, and sustainable levels of debt. These issues are too remote from the environmental principles for them to be directly applicable.

Taxation, including environmental taxes, raises the revenue that allow us to deliver vital public services. Taxation is excluded from the remit of the principles to provide for maximum flexibility in respect of the nation's finances. As part of considering tax changes, where appropriate HM Treasury already uses environmental data including that from other government departments and third parties, to assess environmental impacts. At Spring Budget 2021, the government published an assessment of the environmental impact of relevant tax measures—for example in the Tax Information and Impact Note for Plastic Packaging Tax which set out that the tax was estimated to lead to around 40% more recycled plastic being used in 2022- 23, saving nearly 200,000 tonnes of carbon dioxide.

29. The Government should include a Net Zero test of the 2021 Budget in its Net Zero Review. Net Zero tests should be refined for future fiscal events to assess the climate impacts of taxation, spending and resource decisions. The Government should develop nature tests to ensure spending packages are aligned with the Post-2020 Biodiversity Framework. A new fiscal rule should be added to the fiscal framework which focuses on balancing our demands on nature with nature's supply. (Paragraph 318)

The Green Book already mandates the consideration of climate and environmental impacts in spending. Policies are developed and assessed against how well they deliver on the Government's policy aims such as levelling-up and Net Zero. To ensure spending packages are aligned with government priorities such as Net Zero, HM Treasury is currently reviewing the learning from previous fiscal events to assess how it can better

support the government's environmental objectives. More detail on the government's approach to embedding net zero in all policy decisions will be set out in the Net Zero Strategy.

The Treasury's Net Zero Review Final Report will be an analytical report that uses existing data to explore the key issues and trade-offs as the UK decarbonises. Against a backdrop of significant uncertainty on technology and costs, as well as changes to the economy over the next 30 years, it will focus on the potential exposure of households, sectors and regions to the transition, and highlight factors to be taken into account in designing policy that will allocate costs over this time horizon. The Net Zero Review will not seek to retrospectively assess or apply new tests to previous government policy as this is beyond the terms of reference for the review.

With regards to biodiversity, the UK is committed to playing a leading role in developing an ambitious post-2020 global framework for biodiversity to be adopted at COP15 of the Convention on Biological Diversity (CBD) next year. The UK's overarching ambition for the Post-2020 Global Biodiversity Framework is that it should spur global action and the transformative change needed for halting and reversing global biodiversity loss; and be supported by implementation mechanisms that are commensurate with the scale of the challenge.

In 2020 the Government announced a review of the UK's fiscal framework to ensure it remains appropriate for the macroeconomic context, while ensuring the sustainability of the public finances. It remains under review and we intend to publish a new framework later this year, provided uncertainty recedes further.

In line with IMF guidance and international best practice, HM Treasury is considering adopting fiscal rules related to controllable fiscal metrics. That said, unmitigated climate change and the continued degradation of the natural environment is a significant fiscal risk and the government acknowledges that we must act urgently to avoid these environmental and economic risks. Therefore we are: supporting further work by the ONS and the OBR to accurately measure and forecast broader balance sheet metrics to improve fiscal decision making, including reviewing the public sector balance sheet and risk exposures in the context of climate change and the shift to a nature positive economy; providing further funding to the ONS to improve its natural capital estimates and maximise their policy relevance; incorporating expenditures relating to biodiversity into the UK Government's Green Financing Framework; and participating in the OECD Paris Collaborative on green budgeting, an initiative to encourage governments to incorporate climate and environmental considerations into their financial and fiscal decisions.

30. *To provide the signals needed for the financial system to manage biodiversity risks, we recommend that:*

- a) ***The Government commit to legislate for mandatory disclosure of nature-related financial risks once the TNFD framework is ready.***
- b) ***The Government explore how a corporate natural capital accounting system could be set-up to require organisations to measure the impact of operations on natural capital.***

- c) *The Bank of England conduct an exploratory exercise into stress testing biodiversity loss.*
- d) *The Government should also ensure the National Infrastructure Bank has a mandate for net zero and includes a focus on nature and biodiversity for investment in its objectives.*
- e) *The Government commission a review into the Law Commission's 2014 report on the Fiduciary Duties of Investment Intermediaries, given the developments in the understanding of climate and nature-related risks since the report's publication.* (Paragraph 329)

(30a)

The Task Force on Nature-related Financial Disclosures (TNFD) framework is scheduled to be ready for launch and uptake by the end of 2023. The framework won't just focus on disclosures, but rather, as a critical first step, empower and enable institutions to understand, act and report on their evolving nature related risks. The government will work with the TNFD and will carefully review their recommendations and potential policy/regulatory responses when they are available. This includes ensuring there are links to the CBD Post 2020 Global Biodiversity Framework, requirements in the Environment Bill on biodiversity net gain, and the UK green taxonomy in order to signpost to the private sector the financial and environmental imperative of incorporating nature-related risks into risk analysis and decision making.

(30b)

The Government is committed to ensuring the private sector plays a significant role in the delivery of the UK's net zero target and ambition to leave the natural environment protected and enhanced for the future. In line with this ambition, and in response to the Dasgupta Review, the Government has committed to delivering a 'nature positive' future and to including a requirement in the Environment Bill to set a new legally-binding target to halt the decline in species abundance by 2030.

The Chancellor used his Mansion House speech 2021 to announce new economy-wide Sustainability Disclosure Requirements (SDR) for real-economy corporates, financial services firms, and pension schemes to disclose their impact on the climate and the environment - and the risks and opportunities these pose to their business. A key component of this will be disclosures against the UK green taxonomy, which will establish a common and transparent definition for which economic activities count as environmentally sustainable.

The Government supports the development of global sustainability disclosure standards, including the work of the International Financial Reporting Standards Foundation to create a global baseline corporate reporting standard for sustainability. In recognition of rising private sector interest and action on the financial materiality of nature-related considerations, in its 2019 Green Finance Strategy, the Government committed to working with international partners to catalyse a market-led coalition on nature-related financial risks and reporting. Supported by the Government from its inception, TNFD will provide

a framework for corporates and financial institutions to report and act on evolving nature-related risks in order to support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes

(30c)

As set out in the Bank of England's recent response (<https://www.bankofengland.co.uk/letter/2021/july/remit-for-the-fpc-2021>) to the updated remit and recommendations of the Financial Policy Committee (FPC), the FPC will explore the potential relevance of other environmental risks to its primary objective. This work will consider whether environmental risks beyond those related directly to climate change can create financial risks that, left unaddressed, could pose a threat to UK financial stability. It will also take into account evidence from existing literature such as The Dasgupta Review.

(30d)

The government agrees that net zero should be an important component of the mandate for the UK Infrastructure Bank. The government announced in the Policy Design document at Spring Budget 2021 that the Bank's core objectives are to help tackle climate change, particularly meeting our net zero emissions target by 2050, and to support regional and local economic growth through better connectedness, opportunities for new jobs and higher levels of productivity. The government has also committed to reviewing the case for broadening the Bank's environmental objectives, such as improving the UK's natural capital, before bringing forward legislation to put the Bank on a statutory footing.

(30e)

Government does not intend to request a further review from the Law Commission.

Following extensive consideration of trust law concepts and case law and public consultation with academics, law firms and investors, the Law Commission reached the conclusion in their 2014 report that investment fiduciaries have a duty to consider all financially material risks and opportunities, whatever their source. They considered the subject again as part of their review of Pension Funds and Social Investment in 2017 and their conclusions were unchanged. We are aware of no subsequent case law since that date which would lead the Law Commission to a different outcome.

Whilst the Law Commission did not opine on the materiality of financial risks relating to climate change or to nature, we believe biodiversity will typically be a financially material risk to most if not all investment portfolios, just as climate change is.

As the Committee itself acknowledged, the financial system has undergone a transformation to integrate climate-related financial risks, and it has done so within the existing fiduciary duty framework.

Government has already put the first steps in place to making biodiversity and nature-related risks more visible to investors and integrated into decision-making. This is through its commitment, announced at the Chancellor's Mansion House speech, to developing common and transparent definitions of sustainable activities and investments, and requiring disclosure of the risks and opportunities from, and impact on, the climate and the environment through integrated Sustainability Disclosures Requirements (SDR)—covering real-economy corporates, financial services firms, and pension schemes.

The Government will publish a Roadmap setting out its approach to green finance regulation ahead of COP26.

Education and biodiversity

31. To increase education on biodiversity we:

- a) ***Support the establishment of a Natural History GCSE;***
- b) ***Recommend the Department for Education re-evaluate the opportunities for nature visits and teaching outside, as part of its support to schools recovering from the education impacts of covid-19;***
- c) ***Recommend the Department for Education and Defra work together to get school children involved in the Government's afforestation project;***
- d) ***Recommend Government emphasise its leadership in increasing knowledge and recognition of the importance and value of nature by requiring every Permanent Secretary across Government and every civil servant and Minister in the HM Treasury to undertake a basic ecology briefing as part of mandatory induction;***
- e) ***Recommend the Government explore setting up a biodiversity education charter to increase knowledge of biodiversity risk within the finance sector.***
(Paragraph 342)

(31a)

The Department for Education (DfE) is exploring the option of introducing a new GCSE in Natural History after receiving a proposal from exam board OCR. Initial discussions with OCR have taken place. DfE, and Ofqual, will determine whether the proposal meets all the necessary conditions to sit alongside our rigorous suite of reformed GCSE qualifications. We have made no commitment to introduce the GCSE at this stage. In the immediate future the qualifications team at DfE and colleagues at Ofqual are focusing their efforts on ensuring that all students are able to be assessed fairly this summer and on planning for a return to exams in 2022.

(31b)

DfE recognises the significant benefits that learning outside the classroom can have for children's mental health and wellbeing, as well as their educational and social development. We are committed to ensuring that no child or young person loses out because of the pandemic.

We have worked to ensure that our outdoor education centres were included as part of the lifting of restrictions so that children are now able to access those outdoor education centres residentially as well as for day visits.

Enrichment activities that give pupils the opportunity to develop their intellectual, emotional, personal, and social skills can support well-being and success both in and outside of the classroom, nurturing a feeling of belonging and sense of purpose. The Government's support for education recovery targets both academic and extra-curricular activities.

Since June 2020, we have announced more than £3bn to support education recovery—this will have a material impact in addressing the impact of the pandemic.

Activities available through our education recovery initiatives, such as summer schools, are aimed at supporting emotional, physical and social well-being, giving pupils the opportunity to develop resilience, understand healthy eating and good exercise habits and participate in socialisation.

(31c)

The Children and Nature Programme aims to support children from disadvantaged backgrounds to have better access to natural environments. It consists of three delivery projects and a separate independent evaluation project, to demonstrate and improve understanding of the effectiveness of interventions in nature, particularly for schools with the highest proportions of disadvantaged pupils in England. DfE, Natural England, and Defra have worked together to develop the programme and now oversee its delivery. Natural England is responsible for overseeing the three delivery projects and Defra is overseeing the independent evaluation.

One of the delivery projects is the Community Forest and Woodland Outreach Project. This is a project to increase and help sustain community forest and woodland outreach activities being delivered to school children, particularly those in disadvantaged areas, to benefit their mental health and wellbeing, engagement with school and other programme outcomes.

The programme was funded until March 2021 by DfE. Defra and DfE have now committed jointly to funding a reduced version of the programme until March 2022.

(31d)

Induction of Permanent Secretaries focuses on enabling people to successfully make the transition to the most senior leadership positions in their department—usually Directors General on promotion but sometimes non-civil servants.

Induction is tailored to the individual and informed by the outputs from the extensive assessment exercises that candidates undergo as part of the selection process.

More generally, DfE has recently established a Sustainability and Climate Change Unit to co-ordinate and drive activity across the department. The strategic aims of this new unit – including connecting citizens with the natural environment—will be set out in a Sustainability and Climate Change Strategy in due course.

(31e)

In our 2019 Green Finance Strategy the government committed to transforming the frameworks for financial decision making. This includes supporting the finance sector to develop the tools and skills to price climate and biodiversity risk into financial models.

As part of the strategy, we set a clear expectation for the finance sector to implement the recommendations of the global Taskforce on Climate related Finance Disclosures, to ensure that risks are properly understood. We also committed to catalyse international action on nature-related financial disclosures.

Since the publication of the Strategy, we have increased our ambition and accelerated the pace including the Chancellor's announcement in November 2020 setting a timetable for climate disclosures to become mandatory by 2024 and through the launch of a global market-led Taskforce on Nature Related Disclosures in June 2021 which is expected to deliver a draft framework by December 2021. The Chancellor also announced plans to legislate to create a Green Taxonomy, to provide clear guidelines to investors on the sectors, technologies and activities that can be considered compatible with the transition to a nature-positive economy in line with our long-term environmental policies.

As part of the Green Finance Strategy we also set up in partnership with the City of London a Green Finance Institute to support and leverage the skills in our world leading financial sector.