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Department
for Environment
Food & Rural Affairs

Policy paper

The government's response to the Natural Capital Committee's State of Natural Capital Report 2020

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1. Opening remarks

The government is extremely grateful for the expert advice the Natural Capital Committee (NCC) has provided in its seventh annual report. We appreciate in particular how the NCC has supported a better understanding of England's natural assets and the benefits we get from nature, and helped to ensure that natural capital is integrated into government policy.

As a result of the NCC's work, we:

- recognise that the environmental assets that provide our clean air and water, opportunities for recreation, and our food and fibre, are an essential component of our nation's infrastructure
- are able to make better decisions about how we interact with and manage our natural environment to ensure its health and resilience

- published the 25 Year Environment Plan (25 YEP) in 2018 - the second annual report of progress against the ten goals in the plan will be published alongside this response to the NCC's report

We agree with the Committee that in order to achieve the goals set out in the plan and meet the objective set in 2011 to be the first generation to improve the environment, substantive action is now urgent.

2. Implementing the legislative framework for the 25 YEP

2.1 The Environment Bill

The Committee makes a number of recommendations relating to the Environment Bill, including on the need for a general duty to protect and enhance the natural environment, and on legally binding targets for the 25 YEP goals.

We have designed each governance mechanism in Part 1 of the Environment Bill with guiding objectives. These will ensure that targets and Environmental Improvement Plans (EIPs); the environmental principles; and the Office for Environmental Protection (OEP) work in harmony to protect and enhance our natural environment. The Environment Bill places our flagship 25 Year Environment Plan (25 YEP) on a statutory footing. The 25 YEP will be adopted as the first EIP.

Both targets and EIPs have the objective of delivering significant improvement in the natural environment. This objective provides certainty as to the direction of travel, and allows us to set targets to establish what end states the government must achieve. The government must periodically review its targets, to consider whether meeting them, collectively, would significantly improve the natural environment in England. If not, the government must set out how it intends to use its target setting power to rectify this. In addition, the EIP is defined as a “plan for significantly improving the natural environment”.

With regards to environmental principles, clause 16(4) will ensure that the policy statement on environmental principles contributes to the

improvement of environmental protection and sustainable development. Similarly, Clause 22 sets a principal objective for the OEP, and will ensure that the OEP contributes to environmental protection and the improvement of the natural environment in exercising its functions.

The Environment Bill will amend the Natural Environment and Rural Communities Act 2006 to strengthen the existing general duty to conserve biodiversity, replacing it with a revised general duty on public bodies to consider how to further the conservation and enhancement of biodiversity, when determining how they will exercise their functions.

There is a legal requirement to set at least one long-term legally-binding target in each of the four priority areas set out in the Bill: air quality, biodiversity, water, waste reduction and resource efficiency. These priority areas were derived from the goals of the 25 YEP and reflect the areas where we believe targets will drive long-lasting, significant improvement in the natural environment. The targets will complement actions taken in each of these areas under their respective chapters in the Environment Bill and facilitate the delivery of comprehensive measures across the natural environment.

The power to set long-term legally-binding targets is not limited to these four priority areas. Targets can be set on any aspect of the natural environment, or people's enjoyment of it.

The Committee notes that the Environment Bill should explicitly include natural capital of the marine environment, with targets for fisheries extraction set within the targets framework of the Bill. The Environment Bill's definition of the natural environment is drafted to be broad enough to encompass all elements of the natural environment, including the marine environment. The definition covers 'water' which includes seawater, and 'land', which includes the sea bed. Therefore, the provisions for the OEP, the environmental principles, EIPs and long-term legally binding targets will all extend to the marine environment.

There is a power to set targets in respect of any matter that relates to the natural environment, including the marine environment. This means we can set long-term, legally binding targets that can help to improve the marine environment.

The Bill requires the government to set at least one target in the four priority areas of air quality, biodiversity, water, and waste reduction and resource efficiency. The initial round of targets may include targets that include the marine environment, for example as part of a biodiversity target. Any marine related targets will need to complement and avoid duplication with the existing suite of targets set at a UK level under the UK Marine Strategy Regulations which cover, for example, species, habitats and resource use. The UK Marine Strategy already includes specific targets on the state of fish populations and commercial fisheries, so there is no need to replicate them in the Environment Bill.

The Secretary of State will consider expected environmental improvement across all aspects, both terrestrial and marine, of England's natural environment when conducting the significant improvement test. This involves assessing whether the natural environment as a whole, including the marine environment, will improve significantly.

The Fisheries Bill and Environment Bill will work hand in hand and complement existing legislation to protect and recover our precious coastline, seas and ocean, and the complex, often fragile ecosystems they support.

2.2 The Office for Environmental Protection

The Environment Bill provides for the establishment of a new independent body, the Office for Environmental Protection (OEP). The OEP has been designed to suit the UK's specific context and help government resolve the environmental challenges that we face. The OEP will be a Non-Departmental Public Body (NDPB), a model that delivers value for money and independence from government.

The Committee proposes the National Audit Office, a body that reports directly to Parliament, as a possible model for the OEP. The government's view is that it would be unprecedented and constitutionally inappropriate for an emanation of Parliament to have the power to take enforcement action against government. Parliament has never taken action against the government through the courts before, and holds government to account through parliamentary scrutiny rather than legal proceedings.

The Office for National Statistics (ONS), also mentioned in the NCC's report as a possible precedent for the OEP, is the executive office of a non-ministerial department. This model would also be inappropriate for the OEP, as it would mean that the OEP were part of the Crown (like government departments). This would greatly complicate its enforcement function, as the Crown could not take action against itself.

The OEP's functions have been designed to be complementary. The scrutiny and advice functions enable the new body to identify issues early on and invest in constructive dialogue and advise government on remedial measures. If the OEP were to consider the response to its advice inadequate, and a potentially serious breach of environmental law occurs, the OEP could take action through its enforcement function.

The OEP will hold government to account on the implementation of environmental law as defined in the Environment Bill. All climate change legislation, including carbon budgets, will be within scope of the enforcement function of the OEP. The OEP's remit also extends to all targets provisions of the Bill, including setting, revising and reviewing targets. The OEP can also advise on changes to environmental law, including long-term targets (which are to be set by secondary legislation). Amending or revoking a long-term target would be a change to environmental law and would therefore fall within the OEP's remit for the provision of advice. The OEP does not have a role in approving such changes, as it is not intended to be a policy-maker, and this could result in a conflict of interest if it were later called on to investigate complaints, or take enforcement action, regarding those targets.

The OEP will have the power to hold all public authorities to account for their compliance with environmental law. Private companies and landowners are already regulated by existing bodies such as the Environment Agency (EA) and Natural England (NE). The OEP's role will include monitoring the implementation of environmental law by public authorities such as these and considering complaints about their compliance, with powers to take action in serious cases if they fail in their duties to do so.

The OEP will be able to investigate and resolve alleged breaches of environmental law in a more targeted and timely manner than the

European Commission. The Committee refers to the role that fines play in the EU infraction process. It is important to note that it is only because the Court of Justice of the European Union is unable to compel a Member State into a specific course of action through a court order that fines are necessary in this process. In contrast, the power of our national courts to grant remedies in environmental and judicial review (including mandatory and quashing orders), and the strict requirement for compliance with court orders backed up by the possibility of contempt of court proceedings, dispenses with the need for a specific system of fines.

Combining all regulation of the environment into a single agency as the Committee suggests, would be a significant undertaking and would go beyond the scope of the current Environment Bill and envisaged OEP. It would turn the single agency into a delivery body responsible for implementing environmental law in its own right, rather than one responsible for providing independent scrutiny and advice and if necessary taking action to enforce compliance with environmental law by public authorities. Such a single agency would also be unable to credibly monitor and enforce its own compliance with environmental law.

2.3 Environmental Net Gain

In the 25 YEP, the government committed to embedding the principle of 'net environmental gain' for development. Our first step was to formally consult on mandating a biodiversity net gain (BNG) requirement in the planning system, which is now being taken forward through the Environment Bill. The approach to BNG includes strict adherence to a mitigation hierarchy and use of an updated biodiversity metric. The government believes that further work and engagement with industry and conservation bodies is required before establishing approaches to BNG for both marine and nationally significant infrastructure projects, which can have fundamentally different characteristics to other development types. Government will continue to work on exploring potential net gain approaches for these types of development.

The 25 YEP also committed us to expand net gain approaches to include wider natural capital benefits. We remain committed to delivering a wider environmental net gain (ENG) policy for

development, building on the BNG requirements and drawing on NCC's helpful response to our commission to provide further ENG advice. We agree with the NCC's recommendations that offsite remediation for development impacts should be funded by developers and prioritised close to development sites.

Work on potential ENG metrics is also progressing. The emerging Eco-metric tool will enable comparison of the impacts of different development options on the supply of ecosystem services. This represents a first step towards enabling better consideration of the losses and gains in ecosystem services from development, to help deliver wider benefits for people and nature.

While it is too soon to legislate for ENG, it is important to recognise that mandatory BNG will often deliver wider environmental benefits (e.g. recreation opportunities, flood risk reduction, improved water and air quality) by contributing to the creation and enhancement natural capital assets.

2.4 The Agriculture Bill

We welcome the Committee's emphasis on agriculture's role in delivering environmental public goods. Clause 1 of the Agriculture Bill sets out a list of purposes for which the Secretary of State may provide funding. These include managing land or water in a way that protects or improves the environment, or prevents, reduces or protects from environmental hazards. The government will publish a plan setting out its priorities for financial assistance. This will provide an opportunity for scrutiny of our plans to deliver environmental improvements through our farming sector.

The government has committed to match the current cash total in funding for each year of this Parliament. There is good evidence to suggest that environmental stewardship schemes have been beneficial to habitats and species, landscape character and water quality, with at least £3.20 of public goods returned for every £1 put in.¹ Maintaining the current level of funding will enable government to invest in schemes which are beneficial to the general public.

We thank the Committee for drawing attention to the important links between productivity and environmental enhancement. Our recently published policy update 'Farming for the future' describes our

intentions to support productivity improvements in a way that goes hand-in-hand with improving the environment and enhancing natural capital. We do not intend to offer financial assistance for productivity in a way that would undermine our environmental goals. We will support farmers to focus on more efficient production methods so that they can use less inputs, reduce emissions, and cut waste. Our package of support for innovation and research and development will also support the transition to low-carbon farming methods and contribute to delivery of the net-zero carbon target.

The Environment Bill includes the 'polluter pays principle' as one of the core principles that will be addressed in the Principles Policy Statement. This will include the making of any policy related to agriculture and farming which has an environmental impact, and as such it is not necessary to embed the polluter pays principle in the Agriculture Bill.

On the Committee's recommendation to include a duty on public money for public goods in the Agriculture Bill, we have set out our intention to move towards a system based on payment for delivering goods which benefit the public. However, one of the major benefits of moving away from a bureaucratic system such as the Common Agricultural Policy is the freedom to set our own flexibly. Adding significant levels of detail on payment systems and mechanisms to the face of the Bill would risk recreating some of the flaws of the CAP. There is a well-established process to decide funding for farming, including regular Spending Reviews and yearly Budgets and estimates, which is essential to ensure that government is always spending public money in the most effective way. We do not want to disrupt this cycle.

2.5 Environmental Land Management

We note the Committee's recommendation that funding should be targeted at desired environmental outcomes, and we are exploring the extent to which we can move towards results-based payments. This includes the potential to offer top-up payments for delivery of additional results, where indicators of the results delivered can be tested and proven to be feasible. We are exploring the move towards pure results-based payments for certain outputs over the longer term, where land manager experience and confidence has been established

and results-based payments have been tested and proven to be feasible.

We have been engaging in a trial managed by Natural England and the Yorkshire Dales National Park. This compares the effectiveness of the Payments by Results approach on grassland in the Yorkshire Dales and arable land in East Anglia. The trial has been running since September 2018 and involves over 30 farmers. Early results have been positive, however further work, through the ELM Tests and Trials and National Pilot, is needed to test the feasibility of this approach at a national level.

We agree with the Committee that ELM baselining data will need to be closely aligned with the environmental census. Defra analysts are exploring how the environmental census could support and complement ELM baseline requirements and vice versa. ELM baseline and monitoring requirements are under development and will be included in the scope of the initial assessment for the environmental census. ELM baseline and monitoring requirements are under development.

We can reassure the Committee that the ELM scheme will apply new thinking to assess the value of public goods. ELM will take account of trade-offs and co-benefits between public goods and the commitments that we aim to contribute towards. Modelling challenges include the fact that different public goods do not all deliver equal value. The extent of environmental benefit and value differs spatially according to local challenges and opportunities. These complexities will be factored into our analysis.

We are considering a range of ways to calculate payments for ELM, and the 'ELM Policy discussion document'² was published to share our initial thinking on this. Options identified include administrative price setting, and market-based price setting. Through our Tests and Trials we are exploring the potential role of innovative approaches such as reverse auctions.

We agree with the Committee that soil is an essential natural asset and its careful management can contribute towards the delivery of many of the public goods that will be supported through ELM. In recognition of this, protecting or improving the quality of soil is listed a purpose for which financial assistance may be provided in the

Agriculture Bill. Where land management actions to protect or improve soil quality contribute towards the public goods supported through ELM they may be funded. ELM is being designed to deliver against our targets and commitments at both at the national and local level. We will monitor progress against these targets and commitments and review priorities accordingly.

In regard to the marine environment, ELM will incentivise a wide variety of land managers, including those in coastal areas and those that impact on coastal and marine natural capital, to deliver environmental public goods. Such land management under consideration includes actions to conserve and restore coastal habitats, including to maintain and enhance GHG storage, to reduce concentrations of faecal bacteria in coastal systems, and to enhance resilience of coastal habitats to climate change.

2.6 The Fisheries Bill and the marine environment

We welcome the Committee's continued engagement and interest in the marine environment. The UK Marine Strategy provides a holistic framework that allows us to assess, monitor and put in place measures to achieve or maintain Good Environmental Status (GES) in UK seas. It effectively takes a natural capital approach by addressing those adverse human pressures that impact the assets (habitats, species and physical environment) and reduce the services. The government published the updated UK Marine Strategy Part 1 in October last year, which sets out an assessment of the status of UK seas, and objectives, targets and indicators for GES. The marine environment will also be in scope of the Environment Bill with its Environmental Improvement Plan and the new targets framework, with marine environmental legislation falling within the remit of the OEP.

The Committee made a number of recommendations pertaining to the original Fisheries Bill. The sustainability provisions in the latest version of the Fisheries Bill have been strengthened to introduce a requirement to produce fisheries management plans which will set out how government will restore and maintain fish stocks at sustainable levels. Many of our fish stocks are shared with other coastal states and we will continue to work with them to agree sustainable

management levels in line with our obligations under the UN Convention on the Law of the Sea. As such, we cannot unilaterally impose targets for restoring those stocks to Maximum Sustainable Yield as management of the stocks is subject to international negotiation.

Turning to the Committee's recommendations on ensuring the principle of net gain applies in the marine environment, the recent marine plans for North East, North West, South East and South West England have included provision for natural capital approaches in decision making. Marine planning enables the increasing and, at times, competing demands for use of the marine area to be balanced and managed in an integrated way; that protects the marine environment whilst supporting sustainable development. Additionally, Cefas and JNCC have produced the first iteration of natural capital accounts for the UK's marine environment as part of the wider UK Environmental Accounts, led by the ONS.

One of the recommendations from the Committee was the introduction into the planning system of the concept of Net Gain, which was in turn picked up by the 25 Year Environment Plan. The current terrestrial approach is to focus on biodiversity net gain before moving to wider environmental metrics. The Environment Bill proposes to amend the Town and Country Planning Act, which applies down to the low tide mark, to include biodiversity net gain. Marine Net Gain is following the terrestrial developments, with the aim to first introduce marine biodiversity net gain using a similar methodology to the approach used terrestrial. Options to go beyond marine biodiversity net gain are being considered, and could include aspects of Good Environmental Status from the Marine Strategy.

Defra's marine evidence team have set up a Marine Natural Capital Coordination Group in order to ensure a collaborative approach is taken towards marine natural capital evidence development. We are in the process of identifying policy areas where natural capital approach can be applied practically, such as domestic fisheries management, future funding and offshore wind farm development. We continue to work with the ONS on refining our marine and coastal natural capital accounts; our ambition is to include an update in the next UK Environmental Accounts.

2.7 Net zero

Last year, the UK became the first major economy in the world to set a legally binding target to achieve net zero greenhouse gas (GHG) emissions from across the UK economy by 2050. We agree that a coherent and integrated approach across government is necessary to achieve this target. The new Climate Action Strategy Committee, chaired by the Prime Minister, brings together ministers responsible for domestic and international climate policy, covering both climate mitigation and adaptation. This Committee is playing a leading role in co-ordinating our strategy for delivering net zero across the UK economy.

We recognise the need for an approach to delivering our net zero ambition which respects and enhances our natural environment and restores degraded carbon stocks, such as peatlands. Nature-based solutions (NBS) are a key part of tackling climate change and averting its impacts. The UK government is already deploying such solutions to improve our natural environment, such as creating or restoring 500,000 hectares of wildlife-rich habitat in England through the Nature Recovery Network, and we are looking at opportunities to go even further with NBS.

We agree that we need to take a systems approach to any nature-based interventions to ensure that we identify the complex trade-offs and synergies between multiple pressures, interventions and outcomes and to allow us to highlight any emerging risks and opportunities. We are already taking this holistic approach to enable us to detect potential unintended consequences whilst also maximising benefits for biodiversity, societal wellbeing and climate adaptation and mitigation.

The UK is leading by example domestically in adopting a natural capital approach and our commitment to this approach is also reflected on the international stage. For example, the UK is seeking ambitious global targets to integrate the diverse values of biodiversity and achieve the full potential of NBS within the post-2020 framework under the Convention on Biological Diversity.

The UK will also be hosting the 26th Conference of Parties (COP26) to the UN Framework Convention on Climate Change (UNFCCC), in

partnership with Italy. UNFCCC Parties are due to submit an updated five-year emissions target and action plan and we will be encouraging countries to use these plans to show increased ambition, and to follow the UK's lead to adopt a net zero target as soon as possible. Nature will be a critical element of our COP26 approach, and as hosts, we will work with countries to secure tangible commitments to protect and restore crucial habitats and ecosystems.

We will bring forward decarbonisation plans across many key sectors of the economy in order to reach net zero in the UK and lay the foundations for a successful COP26 summit in Glasgow, now postponed until 2021. The Bureau of the Conference of the Parties to the UNFCCC, with the UK and its Italian partners, have recently agreed new dates for the COP26 UN climate conference, which will now take place between 1 and 12 November 2021 in Glasgow.

The pathway to net zero is highly challenging, and we want to decarbonise in a way that recognises the public goods and ecosystem services that nature provides.

Defra recognises the scale of change required from the agriculture sector to reach our net zero and climate change goals. We are looking at ways to reduce agricultural emissions controlled directly within the farm boundary, considering a broad range of measures including improvements in on-farm efficiency and increasing agricultural productivity. Agricultural emissions also have close ties to wider land use, in particular in relation to stores of carbon in the form of trees, peatlands and permanent pasture.

Soil is one of our greatest natural assets, underpinning a range of incredibly valuable benefits. The ability of soil to perform these benefits is reduced when in a degraded condition. This is why the Agriculture Bill specifically refers to soil, making it clear we can help farmers to protect and improve soil health; and the Environment Bill that gives us the power to set legally binding long-term targets on any aspect of the natural environment, including soils, as well ELM (see above), which could be used to incentivise soil protection and enhancement.

The UK holds robust data on soil carbon sequestration through long-term observations from a number of locations; including the Broadbalk cropland experiment running since 1843. Research shows that the

potential for carbon sequestration to soil by agricultural interventions is limited by our soil type, climate and agricultural systems. In some cases it is negated over time by changes in the emissions of other GHG. Evidence also suggests any carbon sequestration can be impermanent and potentially go into reverse as a result of changes in land management or climate impacts.

There are, however, a small number of agricultural land management practices where we have a reasonable degree of confidence that they deliver soil carbon benefits for GHG mitigation. This includes (i) land use change to woodlands, (ii) taking areas of arable land out of production in conservation orientated field margins, (iii) integrating grass or herbal leys into crop rotations without increasing overall ruminant populations, (iv) liming of agricultural soils to maintain optimal pH, and (v) making use of cover crops. While these measures will have GHG benefits, also deliver greater benefits for agronomy and other ecosystem services.

3. Assessing progress towards the 10 25 YEP goals

3.1 NCC's high level assessment of progress

The Committee comments that the first report on progress against 25 YEP ambition is a long list of actions, with little evidence of improvements. However, it is important to note that environmental change can take several years to be detected and robustly demonstrated. There is often a time lag between data collection, analysis and publication. As such, many of the trends presented in the 25 YEP Outcome Indicator Framework and used in the Progress Report show data which is pre-publication of the 25 YEP. Therefore, it is necessary at this stage to be careful in drawing conclusions from the indicator trends in relation to the delivery of the 25 YEP. However, the trends can be used effectively to show how the environment is changing and how we expect our interventions to show impact over the coming years.

In regard to an environmental baseline, we agree with the NCC that there are gaps in our knowledge and monitoring systems for some natural capital assets and welcome their advice on addressing this through an appropriate form of baseline census.

As we develop these we will use best-practice on matters such as spatial scale, sampling frequency, and data storage, discoverability, access and openness, and, where pragmatic, we will utilise and build on existing monitoring programmes and data sources.

We note that the Committee advocates that the baseline census commences in 2020. It was already challenging to do much this year, but Covid-19 has resulted in reduced resource availability. We are considering our options.

We agree that a baseline is important to be able to assess progress, but do not agree that all data needs to be collected at the same time. It instead needs to take account of the variety of the environmental systems being monitored and the availability of historic data which can add to the understanding of the change. We also believe that any census should have a broader focus than assets, as this can bring greater efficiencies to any expenditure. Finally, we see merit in some appropriate form of coordinating governance.

The Committee recommends that Defra develop natural capital related metrics, rather than relying on existing metrics. The 25 YEP Outcome Indicator Framework was published in 2019, following extensive stakeholder engagement. This framework will be used to evaluate progress towards the long-term vision of the 25 YEP. The Framework is made up of 66 indicators. The 2019 report included trend data for 27 of these indicators. In the 2020 update we expect to publish trend data for 11 more, with the remainder added over the next few years as the indicators are developed. This development will involve drawing on new sources of data (e.g. Earth Observation) or using existing data sources in different and innovative ways. In addition, as the Framework develops over time there will also be the potential to improve methods of measuring environmental change by incorporating new technologies.

As the state of our natural capital stocks is an important indication of progress, we agree with the NCC advice that we should have a set of indicators that can be assessed to describe the condition of our natural capital stock, aligned with the accounting methods developed by the ONS. We propose that we will do this by enhancing the Outcome Indicator Framework. The Committee has provided valuable advice on how to fill some gaps in the indicators for natural capital stock which will be considered when developing the Framework.

The government recognises that soils are one of our greatest natural assets, and we agree that developing a soil indicator is of high priority. A soil indicator would contribute to our ambition to ensure the sustainable management of soils by 2030, as outlined in the 25 Year Environment Plan. This is a complex system to monitor and we want to develop a robust indicator to understand soil health. We are prioritising this action, and we are using the findings of recently completed Defra-funded research into the development of an innovative soil monitoring scheme to inform our next steps.'

Finally, we agree on the importance of marine indicators. The Outcome Indicators Framework includes 11 marine indicators which will allow us to understand the extent and condition of marine habitats, as recommended by the NCC. Data will be included for some these in the 2020 report, with others following in 2021. There are however gaps in the data that an appropriate baseline census would also address.

4. Embedding a natural capital approach

The government agrees and in fact has specifically designed the Nature Recovery Network (NRN) and Local Nature Recovery Strategies (LNRSSs) to be aligned and to provide a broader platform for informing decisions on land use and management. The NRN is a key policy commitment in the government's 25 YEP and will create expanded, improved and better-connected places for nature to support recovery of our wildlife and deliver other environmental benefits, including contributing to net zero.

To deliver the NRN we are taking action in three areas:

- i. Developing clear spatial planning approaches to inform investment and action for nature, specifically through Local Nature Recovery Strategies (LNRSSs).
- ii. Forging strong partnerships at the national and local level to support national and local planning and prioritisation, and to facilitate action on the ground.

iii. Integrating nature into our incentives and land management actions including Environmental Land Management (ELM), net gain and carbon finance. Local Nature Recovery Strategies (LNRS) are an important part of the delivery approach to creating an NRN. They are designed to identify opportunities for enhancing land for biodiversity and for wider natural capital benefits and therefore a key approach delivering the goals of the 25 YEP.

The North Devon Landscape Pioneer and the Cumbria Catchment Pioneer are both hosting Tests & Trials for the new Environmental Land Management (ELM) scheme. These Tests & Trials will continue beyond the end of the Pioneers themselves, feeding into ELM scheme design. Experience from across the four Pioneers has fed directly into the development of LNRSs with key officials working on both initiatives. Each of the Pioneers has put in place local plans for how work can continue following the Pioneer's formal conclusion. ELM Tests & Trials are an example of this.

4.1 Local Nature Recovery Strategies and Nature Recovery Networks

The Environment Bill sets out the legal framework for the creation of LNRSs. LNRSs have been designed to work closely with other new flagship measures in the Bill, including biodiversity net gain. The Bill also allows for regulations to set out how each LNRS must be prepared and agreed and statutory guidance to provide greater detail on what they must contain. These regulatory mechanisms will go into greater detail than the framework set out in primary legislation, and help create consistency. Defra intends to work closely with key stakeholders when developing these regulations. This will include different approaches to capturing the condition of environmental assets.

The government agrees that the NRN will require a degree of national coordination, but considers that this should be to inform and guide local decision-making. The Environment Bill provisions on LNRSs require the Secretary of State to publish locations of nationally important conservation sites and other areas of particular importance for biodiversity. It also requires that the Secretary of State makes available information on areas that:

a) could be of greater importance for biodiversity, or is an area where the recovery or enhancement of biodiversity could make a contribution to other environmental benefits, and

b) could contribute to the establishment of a network of areas across England for the recovery and enhancement of biodiversity in England as a whole.

This information on areas of existing and potential value, together will provide a national strategic framework to guide the production of LNRs. We are discussing with our delivery bodies how best to establish this coordination and oversight.

The government agrees that planning for the NRN should take account of how biodiversity and ecosystems are linked at a landscape or catchment scale. For example, any woodland planting for biodiversity, net zero and flood protection, would have to consider where in a catchment new woodland should be located for maximum benefit. This is not the same as saying local strategies themselves should necessarily be produced at this scale, as they will need to align with the administrative boundaries of those organisations producing and implementing them.

4.2 Corporate Natural Capital Accounts

The Committee recommends that we consider production of Corporate Natural Capital Accounts (CNCA) for organisations and landowners responsible for significant amounts of natural capital. The British Standards Institution (BSI) is working to produce a standard for natural capital accounting that will support organisations who want to account for their impact and dependencies on natural capital in a systematic way. The BSI's work aims to provide organisations with 'what good looks like' when it comes to reporting their natural capital accounts. The standard is due to be published at the end of 2020. The government expects the standard to encourage voluntary production of CNCA once it is published.

In addition, government continues to support the United Nation's work on how natural capital accounting in general could encourage an integrated approach to achieving the Sustainable Development Goals.

The Committee also advocates the creation of a valuation framework for such organisations to value natural capital assets consistently. On 22 January 2020, Defra's Environment Analysis Unit published *Enabling a Natural Capital Approach (ENCA)* to support better environmental decision-making through a better understanding of the value and evidence on 'natural capital'.

For the first time, a comprehensive and integrated set of evidence and guidance about UK natural capital is now accessible from one place. It is intended to help policy makers, businesses, landowners and public sector organisations make better planning decisions in order to protect and to boost natural capital. As such, ENCA will support more consistent valuation, although there are gaps in the evidence base. Further versions will be developed, recognising that the valuation evidence base is constantly evolving and improving.

The government is grateful to the NCC for its recent endorsement of ENCA, whilst recognising that more work needs to be done to develop valuation evidence for decision-making.

The Committee suggests that incentives for uptake of the framework should be increased. Work continues to incorporate elements of the corporate accounting template produced by the NCC into natural capital accounting practice, and we are grateful for the NCC's work on this to date. Alongside this, the BSI's work on its new standard will enable replicable and consistent ways to report natural capital accounts, and this can support good decision-making within organisations.

The NCC's 'How to do it Workbook' figures prominently within Defra's recently published on-line natural capital resource, 'Enabling a Natural Capital Approach' as mentioned above. ENCA incorporates and builds on the data sources set out in the NCC's Workbook, and signposts other relevant guidance. We will be updating ENCA on a regular basis as the evidence base develops and following feedback from stakeholders and users.

4.3 National natural capital accounts

The ONS, working closely with Defra, has made good progress in developing national level natural capital accounts, and is on track to establish a comprehensive set of accounts by 2020. There will still be

areas where further development work is needed, and further work is planned in order to apply more standardised methodologies for the valuation of ecosystem services and natural capital assets. As the accounts cover the whole of the United Kingdom, the degree to which any results from the proposed environmental baseline census are incorporated into the accounts will depend on the degree of consistency between the census data and other relevant datasets. Once the accounts are more stable and consistent, it is expected that the accounts will feed into a range of policy documents, including those managed by HM Treasury.

4.4 National Food Strategy

Defra commissioned Henry Dimbleby, its lead Non-Executive Director, to conduct an independent review of the food system, with a view to developing a National Food Strategy to address the negative environmental and health impacts of our diets. The review adopts a system-wide approach: it considers the entire food journey from farm to fork, and consults broadly, from consumers to food producers, environmental activists, non-governmental organisations and the industry, among others. We recognise that, as noted by the NCC, the environment, and indeed diets, are systemic in nature and that any changes introduced to one part without due consideration given to other parts will inevitably have unforeseen consequences on the entire network.

The government has committed to responding to the independent review in a White paper, within six months of its publication, and has asked the independent reviewer to assess progress against the commitments made in the White Paper after another twelve months. Although it is too early to comment on the specific recommendations that will be made by the independent review, it actively investigates novel solutions, including ‘scientific’ farming and its potential benefits, as well as negative impacts, on livelihoods, diets and the environment. The review is absolutely committed to the principles stated in its terms of reference, and its vision for a food system that “restores and enhances the natural environment for the next generation in this country” aligns with the NCC’s recommendation.

We agree with the NCC that approaching any changes to the food system along sound economic principles is essential. The review

considers food as an integral part of the economy. We will collaborate with the Institute for Fiscal Studies to evaluate the review's final recommendations for any fiscal measures. In response to the Covid-19 pandemic, work on the review has been temporarily paused and the review team has been redeployed to bolster Defra's efforts to ensure that food gets to the most vulnerable people in society over the coming weeks. The National Food Strategy remains a priority for this government, and the review team will be returning to their work with renewed vigour as soon as they are able to do so.

4.5 The landscapes review

England's National Parks and Areas of Outstanding Natural Beauty (AONBs) are home to some of our most important species, around 60% of England's remaining deep peat, and over 50% of SSSIs – making them vital places for nature. Recognising the significance of these landscapes to the health of our natural environment, the government commissioned an independent review of designated landscapes. The Review, led by Julian Glover, affirms that our National Parks and AONBs can do more for nature, more people, animated by a greater sense of national mission. The government has welcomed the review – we will respond in more detail to its recommendations in due course.

The Review recognises the significance of National Parks and AONBs for natural capital and urges more to be done to recover nature. AONB groups and National Park Authorities – together with the farmers and land managers who look after the landscape – should be at the frontline of delivering the Nature Recovery Network. Both NPAs and AONBs are part of the National Partnership for Nature Recovery, which will be led by Natural England.

The Committee recommends new designations, including urban and marine national parks. Designation – while an important tool for promoting and protecting some of our most iconic and important areas – it is not the only means of achieving environmental outcomes. The Landscapes Review has made recommendations on sites for new National Parks and AONBs, and acknowledged the value of other non-statutory designations. As the statutory adviser on designations, Natural England is currently undertaking an assessment of the value of new designations.

The overarching recommendation of the Review is that more can be achieved in our designated landscapes – for people, for nature - through better leadership and better collective working, including NPAs and AONB organisations working beyond their boundaries. Addressing these issues – including through the Review’s flagship proposal for a new National Landscapes Service – is being actively explored by government.

4.6 National Infrastructure Commission

The National Infrastructure Commission provides the government with impartial, expert advice on major long term infrastructure challenges. Its remit is set by government and covers all sectors of economic infrastructure: energy, transport, water and wastewater (drainage and sewerage), waste, flood risk management and digital communications. The Commission’s objectives are to support sustainable economic growth across all regions of the UK, improve competitiveness, and improve quality of life. While the Commission considers the potential interactions between its infrastructure recommendations and housing supply, housing itself is not in its remit. Also out of the scope of the Commission are social infrastructure, such as schools, hospitals or prisons, agriculture, and land use.

5. Looking forward

The government would like to express its appreciation to the NCC Chair, Professor Dieter Helm and all Committee members for their continued commitment and enthusiasm for this important topic. We have received world class independent advice on developing and implementing the 25 YEP and integrating a natural capital approach, which resonates across government and beyond.

1. Department for Environment Food & Rural Affairs and Government Statistical Service, '[The Future Farming and Environment Evidence Compendium \(September 2019 – update\)](#)'. p.115 ↩
2. Department for Environment Food & Rural Affairs (2020) [Environmental Land Management: Policy Discussion](#) ↩