Nature Recovery Network: Discussion Document

Purpose of this document

The Nature Recovery Network is a major commitment in the UK Government's 25-Year Environment Plan, intended to improve, expand and connect habitats to address wildlife decline and provide wider environmental benefits for people.

This document shares the initial options from the Defra Group on the objectives, structure, development and potential partnership approaches for developing a Nature Recovery Network.

It is our intention that we develop and deliver the Network in partnership both nationally and locally, and that as a first step we explore the options of producing a shared strategic plan to establish and implement the Network.

The purpose of this document therefore is to prompt a discussion with a broad range of partners and to seek your views on options for developing the Network and the framework for planning and delivering it. Natural England will be collating views in order to inform decisions on establishing a partnership and taking forward action.

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SECTION 1. DEFRA'S APPROACH AND OFFER

1. Introduction

- 1.1. The 25-Year Environment Plan¹ sets out the UK's ambition to develop a growing and resilient network of land, water and sea that is richer in plants and wildlife. It includes a number of commitments for nature, including publishing a new strategy for nature to replace *Biodiversity 2020*.
- 1.2. The new Nature Strategy will not be published until early in 2021, so it is aligned with publication of the new international framework for the Convention on Biological Diversity in late 2020, but we are keen to accelerate work on the Nature Recovery Network.
- 1.3. Our ambition is that plans for the Nature Recovery Network should be developed, delivered and governed in partnership and that we should form that partnership in 2019.

2. The Strategy for Nature

- 2.1 The Nature Strategy will implement our international commitments for reversing biodiversity loss on land and in our freshwaters, but will link to activities in the marine environment (marine biodiversity commitments are implemented through the UK Marine Strategy).
- 2.2 As with *Biodiversity 2020*, the strategy will seek to recover nature, both because people value and are concerned about it in its own right, and because nature our ecosystems and their component species underpins many of the economic and social benefits that enrich people's lives.
- 2.3 We want our strategy to:
 - 1) Take forward the goals and commitments for nature in our 25-Year Environment Plan for the period 2021-2030.
 - 2) Fulfil our international commitments under the Convention on Biological Diversity and Sustainable Development Goal 15 (Life on Land).
 - 3) Provide an opportunity to work with our partners in shared endeavours.
 - Set out clearly the relationship and interdependencies with other relevant strategies such as those for marine, trees, pollinators, peat and invasive species.

3. The Relationship between the Nature Strategy and the Nature Recovery Network

- 3.1 We propose a model whereby the Nature Strategy itself is a high-level document, setting out the Government's overall approach and commitments, acting as an umbrella for more detailed plans and activities, and also setting out how it is linked with other Government plans and strategies for environmental outcomes. An initial draft of the contents of the Strategy is set out in Table 1 below.
- 3.2 Part of the Defra Group overall approach would be to build on existing national and local partnerships, and so sitting alongside this high-level document we propose developing a number of strategic plans, including for the Nature Recovery Network and for Pollinators. These would be developed and delivered in partnership.

¹ <u>www.gov.uk/government/publications/25-year-environment-plan.</u>

3.3 This model is set out in Figure 2 below. Partners would be involved in the development and governance of the strategic plans, but we would also envisage them having a clear role in advising on the development and implementation of the whole Nature Strategy. Natural England is reviewing the effectiveness of current governance, and we would welcome views on future options.

Table 1. Proposed contents of the Nature Strategy (to be modified as the international framework develops)					
Aims and objectives	Outcomes, incorporating voluntary commitments to the Convention on Biological Diversity				
Managing our Land, Coasts and Freshwaters	Protected sites A Nature Recovery Network Species ²				
Reducing pressures on nat resource mobilisation)	ure and mainstreaming into the wider economy (including				
Engaging people					
Building the evidence base	Monitoring and evaluation, including linking to 25-Year Environment Plan indicators				
Our approach	How we will structure ourselves to deliver our outcomes and commitments				

4. The Nature Recovery Network

- 4.1. The 25-Year Environment Plan ambition to develop a growing and resilient network for nature recovery includes the following core long-term goals and commitments:
 - Restoring 75% of terrestrial and freshwater protected sites to favourable condition;
 - Restoring or creating 500,000 ha of wildlife-rich habitat outside protected sites;
 - Taking action to recover threatened, iconic or economically important species and, where possible, to prevent human-induced extinction or loss of threatened species;
 - Planting 180,000 ha of woodland by 2042 to help increase cover to 12% by 2060³;
 - Establishing a Nature Recovery Network.
- 4.2. The commitments for a Nature Recovery Network and an additional 500,000 ha of priority habitat represent major initiatives to meet the challenge in the Lawton report to secure a step-change in conservation⁴.
- 4.3. The concept for the Nature Recovery Network is simple. Our existing protected sites constitute our best areas for wildlife and provide many other economic and social

² Including genetic diversity within species.

³ Part of which is likely to also contribute to the wildlife-rich habitat target – new broadleaved woodland, for example.

⁴ Lawton, J.H., Brotherton, P.N.M., Brown, V.K., Elphick, C., Fitter, A.H., Forshaw, J., Haddow, R.W., Hilborne, S., Leafe, R.N., Mace, G.M., Southgate, M.P., Sutherland, W.J., Tew, T.E., Varley, J., & Wynne, G.R. (2010). *Making Space for Nature: a review of England's wildlife sites and ecological network*. Report to Defra.

benefits. They should form the core of any future network. However, for nature to recover we have to also look beyond protected sites and take action to extend and link our existing sites, both to support wildlife and to recover the range of economic and social benefits that nature provides.

4.4. We want to set out more detailed outcomes for the network beyond what is in the 25-Year Environment Plan. A number of options are set out in section 2 of this document and we are keen to gather views on potential objectives, priorities, components and key actions.



Figure 1. Scope and governance for Nature Strategy

5. The Defra Group approach for delivering the Nature Recovery Network

- 5.1. Our overall approach to building the Nature Recovery Network is six-fold. This approach is set out in more detail in sections 5.2 5.7 below and will be elaborated further within the Nature Strategy. We will seek to:
 - 1) Building nature recovery into existing and planned policies;
 - Forging strong national and local partnerships, building on what is already in place;
 - 3) Working with private and public landowners to improve, expand and connect wildlife-rich habitats;
 - 4) Broadening the funding base for nature;
 - 5) Developing mapping, data and other support tools;
 - 6) Developing monitoring and reporting on progress.

There are a range of Defra Group and wider Government activities planned and underway under each of these broad headings. These are set out below together with the areas where the Defra Group has identified potential for partnership approaches. At present this is focussed on activities supporting the Nature Recovery Network rather than the wider Strategy, which will cover wider issues such as people engagement and integration of nature in other sectors of the economy.

5.2 Building the Network into existing and planned policies

Agri-environment schemes have been central to our ambitions for delivering for nature. We will continue to work with partners to support nature recovery by developing landscape-scale and local partnership approaches, aligned with Government funding streams such as Countryside Stewardship or EU LIFE Nature and Biodiversity. We want to continue to work with farmers, landowners, conservation organisations and local communities, on partnership approaches such as farmer clusters. We will develop and introduce a new Environmental Land Management system, focussed on outcomes, that will deliver the wildlife goals in the 25-Year Environment Plan and we are keen to explore, for example through Trials and Testing, how ELM could contribute to the Nature Recovery Network. We are interested therefore in your feedback on key design elements.

We are exploring how our planned tree and peat strategies can contribute to nature recovery alongside broader environmental outcomes.

An independent review of National Parks and Areas of Outstanding Natural Beauty is also underway, looking at, among other things, how to enhance the environment and biodiversity in those areas. The review may provide opportunities in relation to the Nature Recovery Network and we will want to ensure any recommendations from the review – due to report in the autumn – are considered as we develop the Network.

Our forthcoming Environment Bill will include ambitious legislative measures to take direct action to restore and enhance nature. Subject to consultation, we will legislate on biodiversity net gain to ensure that new developments have a positive effect on the environment. We will also consider proposals for conservation covenants. We want to work with partners to better understand how these new legislative measures can best support the Nature Recovery Network.

5.3 Forging strong national and local partnerships

We propose convening a national partnership involving a range of bodies, led by Natural England working closely with other Government bodies, with a view to establishing a joint National Nature Recovery project and shared strategic plan, recognising that the success of the Network will depend upon a sense of shared strategic endeavour at a national and local level.

We will continue to work with our partners to take forward our National Nature Reserve Strategy, helping wildlife to brim over into surrounding land.

We want to continue to work with local partnerships to deliver projects on the ground. Local Nature Partnerships have played an important role in coordinating action and advice to support the delivery of our biodiversity goals. We have been reviewing current local delivery arrangements to better understand the role and value of local partnerships. We would be keen to hear views on the potential role of LNPs in supporting our ambitions for the Network, so that we can take this into account as we develop our Plan.

We will seek opportunities to integrate biodiversity into river basin management plans. We will also explore opportunities to use water quality improvement and natural flood management delivery mechanisms to contribute to the Nature Recovery Network. Natural England will also promote the development of the Network in the advice it provides to government, local authorities, public bodies, landowners and managers on their policies, plans, proposals and the use of incentives.

5.4 Working with private and public landowners to improve, expand and connect wildlife-rich habitats

We are already working with major landowners to improve the condition of our protected sites and with public bodies such as the Ministry of Justice on expanding pollinator habitat. A number of major landowners such as the Forestry Commission, Ministry of Defence, Highways England, the Crown Estates and the Royal Parks already have plans in place to improve their protected sites or create habitats for pollinators and wider biodiversity. The Environment Agency is also looking at ways to better manage its estate, assets and wider operational activities for pollinators and wider biodiversity. We want to build on this engagement, capitalising on the opportunity and enthusiasm of landowners to improve, expand and connect habitats on land outside of agri-environment schemes, particularly on land owned by public bodies.

5.5 Broadening the funding base for nature

Delivering our ambitious vision for clean resilient growth in the 25-Year Environment Plan will require a step-change in current levels of investment. Actions we will take to achieve this include:

- Delivering public money for public goods through the new Environmental Land Management system and encouraging private sector investment.
- Developing a system of biodiversity net gain through the planning system stimulating habitat banking markets.
- Supporting investment in woodland creation for carbon benefits through a £50m Woodland Carbon Guarantee using the Woodland Carbon Code and building on our investment in the new Northern Forest by supporting the development of a £2.1m Partnership Innovation Fund (PIF).
- Developing proposals to leverage private investment into natural capital assets including exploring a natural environment impact fund.
- Working across government on a Green Finance Strategy for publication this spring

 enabling mainstream finance providers to step up investments in the environment,
 clean energy and climate resilience.

We have recently consulted on options for mandating net gain through the planning system as a means of halting the loss of habitats through development and supporting the recovery of nature. We are working towards incentivising the provision of compensatory habitat for net gain in a way that contributes directly to the Network. We want to work with partners to support net gain approaches and understand how they can best contribute to the network.

We want to build on the success of initiatives such as Back from Brink and secure further funding for landscape scale conservation and species recovery. The National Lottery Heritage Fund has identified landscapes and nature as one of two key priority areas of focus to inform the allocation of around £1.2 billion of investment across the UK over the next five years.

5.6 Developing mapping, data and other support tools

Mapping, data and spatial prioritisation can help to direct investment to areas where it will have the greatest benefit for wildlife, and for wider environmental outcomes.

We are already developing data and tools to improve the way that we map habitats, including the Living England Map, and a range of ecological network maps and analytical tools. We are currently exploring opportunities to expand the range of mapped data that we collect and publish as well as the advice they provide to government, local authorities, other statutory authorities, landowners and managers on their policies, plans, proposals and the use of their incentives.

We are taking a local natural capital planning approach in the Oxford – Cambridge Arc, bringing together key stakeholders to help improve spatial planning and decisionmaking, and to achieve better environmental outcome. We have committed £1.2m to supporting the local natural capital approach, and we will work closely with local stakeholders to co-design this new approach.

We know that many partners, for example in National Parks and AONBs, have also been working on local mapping approaches.

We want to explore with partners how we can work more closely on mapping and data in order to inform local delivery of the Network.

5.7 Monitoring and reporting on progress

Monitoring and reporting proposals will have to be developed over time as we agree the objectives and structure of the Network. A key element of Network delivery is to build it into existing and planned land management and environmental policies. It is therefore likely that we will have to draw on monitoring and reporting from these mechanisms. We are also likely to draw on existing and planned monitoring for key components of the network – including our protected sites monitoring, and the high-quality voluntary species surveillance networks in the UK.

The Defra Group will continue to operate a national programme of monitoring and surveillance on designated sites, on restoration of priority habitats through Countryside Stewardship, and on species recovery. Natural England is reviewing how it undertakes protected site monitoring with a view to providing more cost-effective and comprehensive future assessments.

The Joint Nature Conservation Committee will continue to support species surveillance through their monitoring partnerships.

We will explore how we can align Network reporting with the reporting for the headline indicators for the 25-Year Environment Plan, which are currently being developed. These will include protected site condition, habitat extent and connectivity, and species status. We also want to explore with partners how we can monitor the effectiveness of landscape-scale Nature Recovery Areas.

SECTION 2. A NATURE RECOVERY NETWORK: PRINCIPLES, OBJECTIVES AND STRUCTURE

This section sets out initial proposals and options for design elements of the network. These are not fixed and are intended to stimulate discussion and agreement.

6. Principles

- 6.1. The rationale for a Nature Recovery Network is set out in the UK Government's 25-Year Environment Plan. If we are to reverse past declines in wildlife populations and the extent and condition of their habitats, and if we are to secure wider economic and social benefits for people, we need not only to continue to conserve and improve our best wildlife sites, but also to expand our resource of wildlife-rich habitat outside the protected site series.
- 6.2. The rationale builds on that set out by Sir John Lawton in *Making Space for Nature*⁵: Wildlife recovery requires more, bigger, better and more joined-up habitats. A stepchange is required in the approach of nature conservation to one of large-scale habitat restoration and creation, underpinned by the re-establishment of ecological processes and ecosystem services.
- 6.3. We recognise that the challenge is to secure a natural environment where the biodiversity, functioning and resilience of ecosystems are re-established in an expanding network of spaces for nature that are sustainable into the future.
- 6.4. The over-arching commitment in the 25-Year Environment Plan⁶ to achieve "a growing and resilient network of land, water and sea that is richer in plants and wildlife", together with the ambitions for a Nature Recovery Network and an additional 500,000 ha of wildlife-rich habitat, represents a significant shift in the ambition of Government to secure the necessary step-change in conservation.
- 6.5. The restoration of habitats also helps to improve and safeguard Natural Capital assets and the flow of ecosystem services that they provide, such as water regulation, flood risk management, carbon capture and pollination.
- 6.6. We believe that the Nature Recovery Network, including identification of potential areas for restoration and creation, can act as a strategic spatial prioritisation framework for integrated planning and delivery of environmental objectives an ambition identified by the Natural Capital Committee⁷ and incorporated within the 25-Year Environment Plan.
- 6.7. As it creates more accessible green spaces, rich in wildlife, the Network can also bring multiple health, recreation and economic benefits for people and their communities.
- 6.8. With this significant potential for delivering multiple benefits for nature, people and the wider environment in mind, we suggest that the development of the Nature Recovery Network could helpfully be underpinned by a set of key principles:

⁵ Lawton, J.H., Brotherton, P.N.M., Brown, V.K., Elphick, C., Fitter, A.H., Forshaw, J., Haddow, R.W., Hilborne, S., Leafe, R.N., Mace, G.M., Southgate, M.P., Sutherland, W.J., Tew, T.E., Varley, J., & Wynne, G.R. (2010). *Making Space for Nature: a review of England's wildlife sites and ecological network*. Report to Defra.

⁶ www.gov.uk/government/publications/25-year-environment-plan.

⁷ Natural Capital Committee (2017). Advice to Government on the 25-Year Environment Plan. <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/677872/ncc-advice-on-25-year-environment-plan-180131.pdf</u>

- Integrated environmental delivery The Network's primary aim is helping to recover nature, but it could provide a strategic spatial prioritisation framework to assist integrated delivery of a range of environmental outcomes where these can benefit from changes in land use or management. The Network should also link with and complement existing strategies.
- 2) For nature and people In addition to natural environment objectives, the Network should also deliver socio-economic benefits, contributing to people's health, well-being, recreation and economic prosperity, and helping to secure greater environmental equity across communities. It therefore needs to be both an urban and a rural network.
- 3) A shared endeavour The success of the Network will depend on the degree to which we work with partners in a spirit of shared endeavour. For the Network to be widely supported and recognised as the primary framework for planning and delivering nature recovery, it will need to be developed in partnership from the outset.
- 4) **Built locally** Local land managers, communities and organisations are bestplaced to understand local priorities for nature recovery and for identifying opportunities to improve and extend the Network. The Network will need to be developed with local partnerships from the 'bottom-up' with the active participation of a range of stakeholders. We will support this 'Ecosystem Approach' to building the network in partnership, helping to convene local partnerships and providing strategic guidance, data and mapping. The Network should represent a strategic framework that is locally owned, and linked with local partnerships.
- 5) **Sustainable long-term** To be sustainable in the face of climate change and other impacts, and to make a sustained contribution to nature recovery and climate change mitigation and adaptation, the integrity of the network needs to be maintained over time. The different components of the network will be variously safeguarded, for example, by legal protections or by planning policy. It will need to respond to a range of pressures and change and adapt. But we suggest that the ongoing planning and management of the network will need to ensure that its essential integrity an ecologically-coherent network supporting nature recovery remains intact.

7. Objectives

7.1. We want to work with partners to agree objectives for the Nature Recovery Network and, in due course, set these out in a shared strategic plan for a national Nature Recovery Network project. In the interim, we would suggest that the following objectives could have a potential role in guiding the development of the network.

7.2. Delivering strategic goals for nature

- 7.3. Creating an expanding network of wildlife-rich areas would contribute to a number of biodiversity and natural environment outcomes framed in law or Government policy, including:
 - The Convention on Biological Diversity targets and UN Sustainable Development Goals. The UK is committed internationally to restoring ecosystems and to developing effective area-based conservation measures outside the protected sites series.

- Securing favourable condition for Sites of Special Scientific Interest.
- Achieving Favourable Conservation Status for priority habitats and species across their range, both within protected sites and across the wider landscape.
- Creating or restoring 500,000 ha of wildlife-rich habitat outside the protected site network, focusing on priority habitats as part of a wider set of land management changes providing extensive benefits.
- Supporting species recovery and the reintroduction of species.
- Increasing woodland in England in line with the aspiration of 12% cover by 2060 by planting 180,000 hectares by the end of 2042.
- Delivering landscape objectives, such as the purposes of National Parks and Areas of Outstanding Natural Beauty and supporting improved habitat connectivity within and between protected landscapes.

7.4. Strategic spatial planning

- 7.5. A Nature Recovery Network could add value, through mapping of areas of potential development, to help prioritise and target spatially the efficient investment of resources in nature recovery and to identify opportunities for delivery of multiple objectives. The Network could potentially act as a strategic spatial prioritisation framework to:
 - Enable government, business, conservation bodies, communities, and land managers to coordinate action for the natural environment more effectively at local and national levels and help identify the optimal areas for investment in nature recovery.
 - Support the planning and delivery of wider environmental objectives such as climate change mitigation, Natural Flood Management, reduced diffuse water pollution and increased woodland cover – that require changes in land use or management.
 - Provide a means of informing local decisions on built infrastructure or on the development of public green space so that they take account of the natural environment.
 - Improve the quality of people's lives in both urban and rural settings by enhancing access to local greenspace and the wider countryside and bringing proven benefits for better health, well-being and education. The Network could make a meaningful contribution to greater environmental equity across communities.

7.6. Implementing the Lawton principles

- 7.7. Our ambition is for the Network to help achieve a natural environment where the biodiversity, functioning and resilience of ecosystems are restored in an expanding network of spaces for nature that are sustainable into the future.
- 7.8. Providing a spatial prioritisation framework, the Network will help enhance, extend and connect habitat areas and target nature recovery efforts by identifying the optimal or priority locations for potential habitat restoration and creation.
- 7.9. It needs to be a national network comprising nested regional and local networks that connect spatially or functionally habitats and green and blue spaces to allow species movement, decrease the risk of local extinctions, and increase genetic exchange.

- 7.10. The Network should facilitate:
 - Landscape connectivity improving species mobility at landscape, regional and national scales through large-scale habitat restoration and creation.
 - **Habitat connectivity** facilitating species movement between larger habitat areas through habitat extension, corridors and stepping stones.
 - Ecological or functional connectivity providing feeding, shelter, resting and breeding areas to support the lifecycles of species.
 - **Evolutionary connectivity** allowing evolutionary change and genetic exchange between populations.
- 7.11. These connectivity requirements mean that the Network needs to be coherent, function at a range of spatial scales and promote habitat restoration at a landscape or catchment scale. We would also like to explore how to integrate the terrestrial, coastal and freshwater network in England with the marine network and, in due course, developing ecological networks in Scotland and Wales.

8. Measuring success

- 8.1. Metrics and reporting methods are needed for monitoring the physical development of the network and its achievement of objectives. Our approach would be to:
 - Make use of existing time series datasets and current monitoring programmes, such as those for the England Biodiversity Indicators and protected sites;
 - Link to the developing 25-Year Environment Plan metrics based on indices for species status and habitat extent, condition, connectivity and supporting ecosystem processes;
 - Incorporate over time an evaluation of network health using Favourable Conservation Status criteria for priority habitats and species.
- 8.2. We want to consult with partners on an appropriate suite of metrics, but these could include:
 - Changes in extent and condition of the network and contributions to the 500,000 ha target for habitat creation and restoration;
 - Contribution to achieving favourable condition for Sites of Special Scientific Interest;
 - Increases in habitat connectivity;
 - Changes in species' abundance, range and migration/dispersal potential;
 - Number and extent of Nature Recovery Areas at different spatial scales and intensities;
 - Achievement of the objectives of local networks and individual landscape or catchment scale nature recovery areas;
 - People engagement.
- 8.3. More difficult to capture is the Network's contribution to ecosystem recovery and wider benefits, such as greater public enjoyment, pollination, carbon capture, flood risk management, and resilience to climate change. But natural capital indicators, which focus on improvements to these assets through Network development, may help to achieve this.

9. Network structure

- 9.1. We believe the Nature Recovery Network should broadly reflect the elements of an effective ecological network as described in the Lawton report, whilst also taking account of the need to deliver wider environmental outcomes and bring those benefits to people. It will need to build from the bottom-up, supporting and enabling individuals and organisations to play their part in the Network. It also has to be a coherent national network comprising regional and local networks that can make a significant contribution to sustained nature recovery through greater landscape, habitat and ecological connectivity. We therefore want to explore with partners how incentives, advice, data and tools can support this coherent approach.
- 9.2. It is suggested that, as a strategic spatial prioritisation framework for the natural environment, the network is likely to include the following broad components:
 - Core areas of existing wildlife-rich habitat, including protected sites;
 - Potential areas where habitat restoration and creation is prioritised;

In addition we will develop a series of Nature Recovery Areas – zones of focused activity where management is targeted to strengthen the network at landscape or catchment scale. We would also work to improve connectivity elsewhere.

9.3. We propose that criteria are developed with partners to better define these Network components, but our initial suggestions for their attributes are set out below:

9.4. Core areas

- 9.5. Existing areas of wildlife-rich, semi-natural habitat including priority habitats both within and outside the protected sites series or areas important to the integrity of the Network should form the core:
 - Sites of Special Scientific Interest, Special Areas of Conservation, Special Protection Areas, National Nature Reserves, Local Nature Reserves and Local Wildlife Sites.
 - Areas of habitat outside of protected sites that are important for wildlife. These would include areas classified as priority habitat or other locally-important, wildlife-rich sites.
 - Areas with high concentrations of species that can act as the source of species dispersals to other parts of the Network.
 - Green spaces that are not necessarily classed as priority habitat, but provide important local wildlife sites or ecological connectivity as 'stepping stones' or 'corridors' for wildlife. These areas might include woodlands, commons, urban and peri-urban green spaces, and linear infrastructure, such as roadside verges, canals, railways and flood banks.
 - Areas of habitat important for the provision of regulating ecosystem services, such as water quality, flood attenuation or pollination.
- 9.6. The focus in the core Network is on improving the condition of habitats, restoring natural ecosystem function and, where appropriate, expanding the area of sites.

9.7. Potential areas

9.8. For the Network to fulfil its objectives to enhance, extend and connect habitat areas and to spatially target nature recovery efforts, it will be important to identify the optimal

or priority locations for potential habitat restoration and creation. For example, mapping of potential areas could potentially inform the Environmental Land Management System and support biodiversity net gain through the planning system.

- 9.9. Lawton describes these as 'restoration areas' where measures are planned to restore or create habitat to extend the Network, and to restore species populations and ecological function. The intention is that that these should become core areas after restoration or creation measures are underway.
- 9.10. We suggest that criteria will need to be developed with partners for identifying priority potential areas for extending the network, which will then need to be applied and mapped at local level. For example, the division of potential areas into high, medium and low-priority categories might assist decision-making.

9.11. Nature Recovery Areas

- 9.12. We are proposing that Nature Recovery Areas are identified as zones of focused activity and investment to improve and extend the Nature Recovery Network. They are targeted network 'development areas'. The broad boundary and objectives of a Nature Recovery Area would be defined by the partners involved, but might include a number of elements:
 - Existing core areas of the network;
 - Identified areas of potential habitat restoration and creation;
 - Areas where there are projects or actions to create:
 - a) **New habitat** that extends or connects existing core areas or provides corridors and stepping stones;
 - b) **Buffer zones** to protect areas from environmental impacts or to target measures restoring ecosystem function, such as hydrological processes;
 - c) **Sustainable-use areas** where agriculture and other economic activities have a focus on the sustainable use of natural resources, the maintenance of ecosystem services and the creation of landscapes that are wildlife-friendly and permeable for species⁸.
- 9.13. Each Nature Recovery Area will have a unique combination of objectives that contribute variously to the objectives of the wider network. We would like to explore how the achievement of objectives would be evaluated and then collated for the network nationally.
- 9.14. Nature Recovery Areas could vary significantly in size and 'depth', that is to say, the extent to which they comprise semi-natural habitats. An initial characterisation of this gradient is set out in Figure 2 below, ranging from whole-farm approaches to landscape or catchment-scale approaches across multiple landowners covering thousands of hectares.

⁸ These 'design features' are given as examples but broadly reflect the structure of UNESCO Biosphere Reserves.

		Increasing area		
		Local scale	Landscape scale	
l density of ral habitat	Deep	Whole-farm scale or small farm clusters entirely or primarily consisting of natural and semi- natural habitats. e.g. Knepp Wildland, Elmley	Whole landscapes or catchments consisting of natural and semi- natural habitats. e.g. Wild Ennerdale, Heart of England Forest.	
Increasing semi-natu	Broad and shallow	Whole-farm scale or small farm clusters with wildlife habitat patches integrated into conventional farm and woodland management.	Whole landscapes or catchments in conventional farm and forest management e.g. Martin Down Farmer Cluster, North Devon Biosphere Reserve	

Figure 2. Characteristics of Nature Recovery Areas.

- 9.15. The 25-Year Environment Plan contains a commitment to investigate the establishment of landscape or catchment-scale Nature Recovery Areas "to significantly expand wildlife habitat". We want to explore with partners in more detail the criteria for these larger-scale nature recovery areas, but it is suggested that they might exhibit the following attributes:
 - The identification of a landscape-scale Nature Recovery Area signals that it is a broad zone of activity focused on large-scale development of the network over longer time frames;
 - Habitat restoration and creation and the recovery of species, including reintroductions where appropriate, are planned and delivered at a large landscape or catchment scale, with clear recovery objectives set at the outset;
 - Habitat restoration within the area will make a significant contribution to the
 overall development of the regional or national network. Some areas might
 provide a focus on landscapes with a concentration of core, high-value nature
 areas that are a priority. Others might focus on landscapes with a small and
 highly-fragmented habitat resource, but that are nonetheless a priority for filling
 gaps in the Network.
- 9.16. It is not proposed that there should be a rigid minimum area requirement, either for the Nature Recovery Area as a whole the broad zone of activity or for the actual area of habitat to be created and restored. The scale of the area will reflect the requirements of the Network locally and the network potential.
- 9.17. A quick review of some conservation landscapes indicates the challenges in setting prescriptive minimum areas. The Lake District National Park is 236,000 ha in extent; Dartmoor National Park 95,400 ha; the New Forest 56,600 ha; Thetford Forest 19,000 ha; the Great Fen Project about 1,500 ha with an ambition to eventually create an "enveloping landscape" of 3,700 ha around the existing National Nature Reserves.
- 9.18. National Parks and Areas of Outstanding Natural Beauty are well-placed to act as large-scale Nature Recovery Areas. Protected landscapes cover 24% of England and hold important areas of surviving semi-natural habitat. For example, National Parks

contain almost 40% of the land in England that is of international importance for wildlife. Protected landscape authorities already work extensively with a wide range of partners to deliver biodiversity and ecosystem outcomes, and so are strategically-placed to help co-ordinate the development of the network within their boundaries.

- 9.19. Projects such as Wild Ennerdale, where grazing and land management has been reduced over a large area, also point to the potential for landscape-scale nature recovery areas to demonstrate innovative, extensive land management approaches to nature recovery and the restoration of ecosystem function through the creation of wilder areas.
- 9.20. In developing proposals for large-scale nature recovery areas we want to engage with partners to harvest the lessons-learned from existing landscape-scale initiatives, such as Nature Improvement Areas, RSPB Futurescapes, the Wildlife Trusts Living Landscapes and the Wildlife Estates initiative. We would also like to explore the development of catchment-scale nature recovery areas with bodies such as Catchment Partnerships, Rivers Trusts, and Internal Drainage Boards. The UK's Biosphere Reserves will also provide a valuable learning resource, particularly in regard to developing partnerships at the catchment scale to deliver sustainable outcomes for the environment.

SECTION 3. BUILDING A NETWORK IN PARTNERSHIP

10. Building a Network in partnership

- 10.1. The Nature Recovery Network at all its levels will need to be developed, planned, mapped and implemented in partnership. We believe that there is a broad consensus that working in partnership from the outset will help establish networks that are relevant, valued and supported. The Network will need to help deliver national-level, strategic outcomes for nature recovery, but it is recognised that the effort to achieve this can only be planned and mobilised at local level.
- 10.2. This suggests that it will be essential to establish a framework for national and local network partnerships and to provide an appropriate toolkit of criteria, guidance, data and mapping to support local network development.
- 10.3. We propose that a Nature Recovery Network national partnership is established to involve a wide range of organisations in the development and implementation of a Nature Recovery Network project. Natural England, working with the Environment Agency and Forestry Commission, is well-placed to lead and co-ordinate this effort, working closely with a wide range of external partners to establish a national project and develop a strategic delivery plan. We want to work with partners to agree:
 - Principles and objectives for the network;
 - The structure of the Network, including the criteria for its key components;
 - A framework for setting up and supporting local network partnerships;
 - A toolkit of criteria, guidance, data and mapping for developing the network at local level;
 - Metrics and reporting methods for monitoring the development of the network;
 - A process for identifying landscape and catchment-scale nature recovery areas.
- 10.4. The framework for establishing local network partnerships will be particularly important for effective securing participation and support, and we want to gather the views of stakeholders on how this can best be achieved.
- 10.5. We suggest it would be preferable for local network partnerships to be based on existing arrangements where they are fit for purpose. There are many long-standing stakeholder partnerships for nature conservation and for landscape or environmental improvement, and a number of government partnership initiatives, such as Local Nature Partnerships and Catchment Partnerships. In addition, we need to consider the role and contribution of local planning authorities, which already have responsibilities in relation to ecological networks under the National Planning Policy Framework.
- 10.6. Through discussion with partners, we want to develop a better understanding of the arrangements that would be most effective bearing in mind that these might look different in different places and at what spatial scale they should operate. There can be a tension, for example, between the ideal ecological spatial scale and operational administrative boundaries, such as those of local planning authorities.
- 10.7. Importantly, we also need to understand how the Nature Recovery Network and its spatial framework can help lay the foundations for Local Natural Capital Plans (i.e. integrated environmental planning for areas designed to deliver 25-Year Environment Plan commitments), also in development. There is clearly potential for local nature recovery networks to make a significant contribution to these plans.

- 10.8. Our sense is that the Network needs to be more than just a geographical map. It needs to represent a living, national network of people and places for nature. We would like to explore how it might support networks of people and communities linking together to help wildlife. The over-arching Nature Recovery Network could act as the locus for 'mini-networks', helping to link together people working across the country to recover targeted places, habitats or species. Many of these already exist, such as the voluntary networks for conservation of grey partridges and swifts. Other networks of this sort could be encouraged, such as villages or towns that want to act as the hub of a local network promoting nature recovery.
- 10.9. These are not part of the geographical Nature Recovery Network as such, but networks of wildlife champions farmers, local naturalists, community volunteers, citizen scientists whose commitment will be vital if the geographical network is to thrive and grow.

11. Establishing an NRN partnership

- 11.1. Setting up the right governance arrangements for the future Nature Strategy will be critical to securing buy-in from partners. Our ongoing review of the current *Biodiversity* 2020 governance suggests that both we and our partners want to see:
 - Strong national leadership for nature recovery and an effective local framework for planning and delivering key objectives on the ground;
 - Clear accountability and responsibility for a variety of roles for example, policy, advisory, delivery – and at both national strategic and local delivery levels;
 - Shared development and delivery of plans and strategies;
 - Strong links to key delivery mechanisms, including agri-environment, and relevant environmental programmes, such as flood and coastal risk management and water resources;
 - Effective escalation of policy and resource barriers to effective delivery.
- 11.2. We want to explore options for stakeholder engagement on the Nature Strategy more fully with partners as it develops. However, our immediate challenge is to agree national governance for the proposed Nature Recovery Network project and we are seeking views from partners on the following proposals to establish:
 - A national Nature Recovery Network partnership project with a national steering group representing a range of interests, but including the Defra Group, protected landscape bodies, conservation organisations, landowner groups and local authorities. The steering group members would act as network 'champions' within these organisations. We envisage agreeing with key partners a Nature Recovery Network 'founding document'. This would set out proposed membership and ways of working, alongside the likely vision and objectives for the proposed strategic plan for the Network, and represent a first step towards establishing the national project.
 - A Nature Recovery Network strategic plan, developed, agreed and implemented in partnership by the national steering group. In order to foster our ambition for a shared-endeavour approach, it will be important for the steering group to establish Terms of Reference that set out consensual ways of working and a process for resolving issues.

- A Nature Recovery Network project team that manages workstreams to develop and implement the network, and that reports to the national steering group. It is envisaged that Natural England will provide the core of this resource, but hopefully it can become a broader 'virtual' team, including other network-dedicated staff resource from the Defra Group and other partners.
- 11.3. Members of the national 'steering group' would collectively oversee the development and implementation of the plan but would also report progress to their respective organisations. We would then need to review or align the roles of current *Biodiversity 2020* governance groups, such as Terrestrial Biodiversity Group and the Defra Biodiversity Programme Board and we are keen to seek views on how these groups might evolve.
- 11.4. We are keen to get views on whether to extend the range of stakeholders engaged with the partnership. For example, we are keen to explore how to better engage with partners working in the urban environment, with academics and with those other groups working on other strategies and plans such as peat, trees and pollinators and marine.
- 11.5. In the longer term, we see potential for the above Nature Recovery Network governance model, including partnership steering groups and shared strategic delivery plans, to be mirrored for other Nature Strategy workstreams, such as for species recovery and protected sites.
- 11.6. Local partnerships will be crucial to the development of a Nature Recovery Network, and we are keen to gather views on what structures might be needed and how the Defra Group can support them. However, proposals set out the in the Government's 25-Year Environment Plan for Local Integrated Delivery and the development of Local Natural Capital Plans (LNCPs) are developing separately, and so we will work with those teams to align development with the proposed approach to national governance for the Nature Recovery Network.
- 11.7. Although the wider Nature Strategy is not the main focus of the proposed stakeholder engagement plan, we are keen that partners remain engaged and to capture views on how this might best be achieved.

12. Criteria and guidance

- 12.1. Initial discussions with partners have supported the development of criteria for identifying the components of the Network and guidance for applying these criteria locally to objective-setting and spatial prioritisation.
- 12.2. The criteria will need to be sufficiently broad to apply in a range of settings: upland and lowland, rural and urban. And while ecological objectives will be central, the criteria would also need to reflect the over-arching objectives of the network, for example, by incorporating consideration of ecosystem service provision, climate change adaptation and mitigation, and recreation and access.
- 12.3. Identification of potential habitat creation areas will inevitably require consideration of competing priorities for land-use in a given location and so decision-support tools will be needed for evaluating the optimal combination of objectives.

13. Data and mapping

- 13.1. Developing mapping to support the development of the Network will be a complex challenge and we will need to work with partners on the appropriate data to use and how a mapping framework should be constructed.
- 13.2. It is our assumption that local partnerships will want to develop local network maps. Maps produced nationally and using predominantly national datasets, would benefit from addition of local data and intelligence about priorities and opportunities. This would also allow input by relevant local communities and landowners.
- 13.3. A key requirement is that the datasets for producing network maps should be readilyavailable, accessible and easy to use for partnerships, although a lead organisation may be identified to undertake technical mapping work.
- 13.4. Any network maps will need to be practical for a range of potential purposes, including:
 - Generating new habitat and species projects;
 - Prioritisation of environmental land management outcomes;
 - Locating biodiversity net gain compensation; and
 - Supporting planning functions as set out in the National Planning Policy Framework.
- 13.5. Collating available datasets and designing a mapping framework for local use will clearly be technically challenging and require a dedicated resource. Natural England is keen to explore the appetite for a national mapping working group to be established at an early stage to undertake this and to announce a mapping call-for-evidence. Any such group would need to link with what is going on in other initiatives such as catchment management or Environmental Land Management.
- 13.6. There is a wealth of data and mapping resources held by Government and partners that could be used to develop the network and some examples are listed below:
 - Habitat Networks Mapping Natural England maps identifying current priority habitat networks and indicating potential areas for extending and linking areas through habitat creation and restoration. Associated Climate Change Vulnerability Maps for habitats can inform consideration of network resilience and sustainability.
 - Favourable Conservation Status analysis Statements in development setting out the required minimum extent and spatial configuration for priority habitats and species at national and local levels.
 - Species 'Big Wins' analysis and habitat/population connectivity modelling Resources identifying, respectively, areas of landscape-scale habitat restoration that are optimal for supporting the recovery of groups of priority species, and optimal migration routes for species across the landscape via suitable habitat networks.
 - **Biodiversity priorities** Habitat restoration and creation hotspots mapping by the Landscape Partnership (National Trust, RSPB, Wildlife Trusts and Woodland Trust). Also, Plantlife's Important Plant Areas and Important Freshwater Areas mapped by the Freshwater Habitats Trust.
 - Woodlands and water Forestry Commission mapping identifying opportunities for woodland creation, habitat networks and for afforestation to improve water quality and flood attenuation. The Environment Agency's land-use mapping indicating priority areas for changes in land management and use to deliver

integrated environmental improvements, including for habitats, water quality, and flood risk management.