Response to Scotland's Fourth Land Use Strategy Consultation

THE SCOTTISH REWILDING ALLIANCE

Contents

Introduction

The challenges facing Scotland are immense. To solve them, Scotland's government has made bold promises. By 2030, we will be a nature positive country. By 2045, we will have regenerated and restored our biodiversity.

Introduction

Rewilding offers a pathway to the large-scale recovery of nature across Scotland

As a country, how we use our nearly 8 million hectares of land is fundamental to meeting these challenges. From our land can come climate change mitigation and resilience, nature recovery, food, timber and fibre production, clean air and water, and energy provision. Land can be the lynchpin of our economy, and integral to our collective health and personal wellbeing.

But for it to serve these purposes in time to meet our targets, we must use it more efficiently and productively, through an integrated, evidence-led approach.

To set aside the transformational power of rewilding means that Scotland will never meet its promises. An ever growing body of evidence from Scotland and around the world demonstrates that rewilding is integral to the recovery and renewal of nature.

Ecological restoration and a close connection with the land have long been part of Scotland's story. Rewilding provides a new lens through which to look at Scotland's future. In the face of the climate and ecological crises, nature is our best ally. Rewilding offers a pathway to the large-scale recovery of nature across Scotland. It is inspiring. It is popular. It needs government support and government regulation in order to help us meet our ambitious climate and nature goals.

Rewilding learns from the past but looks to the future. To ensure the wellbeing of future generations, we need to reframe how we use and manage land. Ultimately, we must decide how we as a society use our land and how our government guides, enables and supports this. The development of our fourth Land Use Strategy is an important opportunity to reassess our direction of travel and begin to plan for the long term.

We are calling for 30% of Scotland to be managed for the restoration of natural processes.. We would like to see these areas support a diversified, resilient and just economic transition alongside the large-scale restoration and rewilding of nature. We will show how this will help revitalise local communities and support the Scottish Government to meet existing nature and climate commitments (30% of land and sea protected for nature by 2030 and net zero by 2045 goals respectively).

To achieve this vision we are calling for a Rewilding Nation Bill in Scotland to enshrine a legal commitment to, and framework for, the delivery of 30% nature's recovery. This reflects the broad range of policies that will need to be introduced which collectively support and enable 30% rewilding.

Tweaks to the status quo will not work. Minor shifts in direction will not work. Disengaging from difficult conversations will hold us back.

Introduction

We are pleased to see that the consultation document recognises the need for action and that "the natural world... provide[s] essential social, economic, and environmental benefits".

Competing demands mean we must make informed decisions about how we best use our land and natural resources to achieve our long-term economic, environmental and social aims.

Rewilding – the large-scale restoration of nature – across 30% of Scotland is critical if we are to respond effectively to the interconnected nature and climate emergencies and ensure sustained food, fibre and timber production. Without nature, there will be no farming and no food. We must recognise that in some areas, prioritising environmental and climate benefits is a viable, important and productive use of the land.

The Land Use Strategy has the opportunity to ensure that rewilding is central to our future land use approach. Delivering both net zero and a richer, wilder Scotland abundant in life is possible. This will create a Scotland where the large-scale restoration of natural processes, habitats and species works hand in hand with sustainable farming, forestry and leisure to the benefit of us all.

We need areas where the acknowledged primary outcomes are nature, climate and environment benefits, in line with 30by30 commitments. In these areas, the focus of management practices and restoration interventions would be reinstating natural processes such as free-flowing rivers, natural grazing patterns, habitat succession and predation, and allowing these areas to create dynamic, constantly changing habitat mosaics while helping to revitalise local rural economies and communities.

Within the 30% natural process-led land area would be:

- Semi-wild Areas, comprising 25%, with a broad and diverse range of natural process-led land uses and enterprises, generating local economic benefits while allowing nature to flourish, through, for example, high-nature-value food and timber production, ecotourism and nature-based enterprises.
- Core Rewilding Areas, comprising 5%, where nature is allowed to fully recover. These areas will focus on restoring and reinstating as wide a range of natural processes, habitats and native species as possible, forming healthy mosaics of, for example, native woodlands, peatlands, heaths, species-rich grasslands, wetlands and saltmarshes – with only low-key and sustainable human intervention.

What this would mean for our landscapes and the people who live, visit and work in them is explained and illustrated in Rewilding Britain's **Rewilding Journeys** infographic.

What is rewilding?

Rewilding is the large-scale restoration of nature until it can take care of itself – and of us – again.

Our world is threatened by biodiversity loss, habitat destruction and climate breakdown, but rewilding can replenish nature's remarkable web of life – restoring habitats, natural processesand the diversity and abundance of native species. Rewilding is a means of tackling the interconnected nature and climate emergencies and empowering people to act. It offers a wealth of economic and social benefits for all of us and for our local communities.

Rewilding can take many forms and can be delivered at different scales, depending on the extent to which nature takes the lead and on local context and culture. This connectivity provides wildlife-rich corridors from the heart of towns and cities to surrounding wilder landscapes, and provides stepping stones across intensively managed areas where needed. Our national parks and other protected areas should lead the way on this approach.

Today, 2.5% of Scotland's land is managed for rewilding. Nearly 200 rewilding projects – from community groups to farmers, from small landholdings to larger estates –are working hard for Scotland's nature.

30% natural process-led land

Prioritising natural process-led land management and the restoration of nature across 30% of the country is possible – and essential if we are to meet our national and international commitments.

We have the opportunity to live in a country rich with a diverse, inspiring mosaic of species-rich habitats that are protected, restored and rewilding. These areas can deliver an array of benefits for people – such as climate mitigation, including for severe weather events, vibrant green economies, healthier air, water and soils, nature-led production of food and timber, improved health and wellbeing, a sense of place and a closer connection to nature, and more opportunities for us all to simply enjoy wild nature. These areas will also generate economic value for, and provide connectivity through, the higher resource-use areas and built environments.

By defining land uses by their primary purpose while also recognising the value of integrated landscapes, we can transition to a nature-rich, low-carbon future and deliver local benefit.

We recommend clarity around how much of Scotland's land is used for what purpose at present – and how much land should be used for each purpose in the future. We are calling for a new land use classification of natural process led land, delivering healthier natural ecosystems, climate mitigation and adaptation as well as co-benefits and co-products, across 30% of Scotland's land. Alongside this, agricultural land, divided into arable and pasture land, will deliver food production; forestry land will deliver timber and wood products; while the built environment delivers homes and infrastructure.

This will make the direction of travel clearer, especially for land managers who are being tasked with delivering so much of Scotland's strategic vision for land use. In Table 1 we explain this proposition in comparison with the Scottish Government's outlined vision for the Fourth Land Use Strategy. Next, we explore how this transition – making space for 30% of land for nature – can take place, by proposing key actions.

To achieve 30% rewilding we are calling for a Rewilding Nation Bill in Scotland to enshrine a legal commitment to, and framework for, the delivery of 30% nature's recovery. This reflects the broad range of policies that will need to be introduced which collectively support and enable 30% rewilding.

Table 1: Proposed land use framework

Land use moving forward – area	Scottish Government commitment as of August 2025	Current area % as total of Scotland's land	Proposed key land use	Primary purpose
Forestry *1	Expanding the area of forests and woodlands by circa 18,000 hectares per annum (from 24/25) seeking an increase in forestry cover from 19% of Scotland's land to 21% by 2032.	19%	Forestry	Timber, fibre and wood products.
National Peatland Plan	Restore 250,000 hectares of peatlands by 2030 to return them to their natural functions. Enabled through 20,000 ha of peatland restoration per year.	Mainly rough grazing and forestry	Natural process-led land	Nature, climate and environment benefits with social and economic co-benefits. Food, timber, fibre and wood products are also co-products in some areas.
Scottish Biodiversity Strategy delivery	Approximately 990,000 additional hectares managed for nature, through a combination of Other Effective Area Based Conservation Measures (OECMs) and formal designations by 2030.	Overlaps all land uses		
Vision of Agriculture *2	Scotland will have a support framework that delivers high quality food production, climate mitigation and adaptation, and nature restoration to become a world leader in sustainable and regenerative agriculture.	64%	Pasture land	Food production – forage and fodder for livestock.
		8%	Arable land	Food production.
Residential and industrial construction *3	Delivering our ambition for 110,000 affordable homes by 2032, 10% of which will be in rural and island communities.	8%	Built environment	Homes and infrastructure.
Renewable energy targets	We have set an ambition to increase onshore wind capacity from just over 10 GW currently to 20 GW by 2030.	N/A		

Source

*1 Scotland's Forestry Strategy 2019-2029
*2 Scottish Agricultural Census: June 2024
*3 Environmental Standards Scotland Baseline Evidence Review – Land and Soil: September 2022

Land use transition

1. Agricultural land (arable and pasture)

Food production as primary outcome

Arable land

We depend on nature, healthy ecosystems and a stable climate for the food we eat, so large-scale nature recovery is vital for food production. To make best use of our finite land, we must focus on maximising the use of our best-quality **arable land** for human nutrition.

As the consultation document outlines, 10% of agricultural land in Scotland (8% of total land area in Scotland) is high quality and used for growing crops.[1] Despite its small relative area, this land produces 34% of agricultural economic output for all of Scotland. The best use of this land is food production.

A significant proportion of our land is used to produce livestock feed. We also import a large amount of food and animal feed, offshoring our emissions and driving intensive agriculture and land use change across the globe, including deforestation.[2]

It should be within the scope of the LUS to guide and support the land management changes that are needed for arable land, with a focus on minimising environmental harm and avoiding the further offshoring of food production. For example, by increasing the amount of arable land used to produce food for human consumption, including potatoes, other vegetables, pulses and soft fruit; reducing food waste; and investing in research and technological innovation to develop farming practices that enhance soil health, reduce carbon footprints and improve crop yields.

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1 https://www.gov.scot/binaries/content/documents/govscot/publications/consultation-paper/2025/08/scotlands-fourth-land-use-strategy-consultation/documents/scotlands-fourth-land-use-strategy-consultation/scotlands-fourth-land-use-strategy-consultation/govscot%3Adocument/scotlands-fourth-land-use-strategy-consultation.pdf

2 https://www.nourishscotland.org/wp-content/uploads/2018/08/Food-Atlas_FINAL_online.pdf

Pasture land

The majority of Scotland's land is classified as suitable for some form of agriculture. The majority of this land is classed as Less Favoured Area, which means that it is not suitable for growing crops and is of poorer quality for farming. This land is usually used for grazing, forestry and other livestock management (e.g. poultry). For some of this **pasture land**, the most productive use for the benefit of people, nature and climate is natural process-led land management.

The vast majority of Scotland's land currently classified as agriculture is reliant on government subsidies.[3] Rural economies have suffered from a decline in diversification as some economic activities have vanished.[4] The Climate Change Committee has recommended a reduction in meat (especially beef and lamb) and dairy consumption, within overall healthier diets, in order for Scotland to reach its carbon budget goals.[5] The National Good Food Nation Plan has suggested that this could be included within a future plan.[6]

By refocusing this land on natural processes and managing it accordingly, more land could be unlocked for ecosystem recovery while supporting rural economies. This management would involve some semi-wild and wild meat products, such as wild venison. This transition would have minimal impact on our food production – but huge benefits for people, nature and climate.

3 https://www.enlighten.scot/wp-content/uploads/2021/01/Land-use-briefing.docx.pdf

4 https://www.enlighten.scot/wp-content/uploads/2021/01/Land-use-briefing.docx.pdf

5 https://www.theccc.org.uk/publication/scotlands-carbon-budgets/

6 https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2024/01/national-good-food-nation-plan/documents/national-good-food-nation-plan/national-good-food-nation-plan/govscot%3Adocument/national-good-food-nation-plan.pdf

2. Forestry

Timber and fibre production as primary outcome

Trees should be abundant in the Scottish landscape, both in woodland areas but also interspersed among meadow, scrub, wetlands, bog and other habitats. Instead, remnants of our pinewoods and oakwoods are sparse. Woodland cover needs to significantly increase to meet climate targets. The majority of this increase must be resilient natural woodland, so that the biodiversity crisis is also addressed. Non-native trees and conifer plantations do not deliver the ecosystem benefits that are needed to halt or reverse species declines, while native woodland also stores more carbon than non-native plantations. There are opportunities to significantly increase native woodland cover across Scotland through rewilding, while also diversifying into forestry models which enhance nature's restoration and provide local employment.

The consultation on the LUS describes how forests and woodlands now span over 1.5 million hectares.[7] This includes both forests managed for timber as a primary output and areas managed for other purposes, including biodiversity, recreation, and/or human health and wellbeing. This distinction is not well recognised in the draft Land Use Strategy, policy making or funding decisions. Non-native trees account for two thirds of Scotland's trees.[8]

Timber producing plantation woodland largely occurs in areas with poor soil fertility which historically included sensitive heathland and bog habitats, such as the flow country. This leads to habitat loss of sensitive habitats by conversion to plantation wood and also exacerbates fragmentation within impacts on biodiversity. Clear-felling on rotation is an intensive method used to harvest timber in plantation woodlands and leads to large areas of bare earth vulnerable to erosion. Forestry on peatland, especially deep peat, has been shown to emit large quantities of carbon through drying out the soils, preventing the peatland from functioning. Over-reliance on a single tree species also reduces the resilience of our timber resource, leaving it vulnerable to extreme weather, pests and disease.

We suggest a rapid upscaling of diverse, native woodland within the 30% of land managed for nature.

To source timber sustainably in areas where nature is the primary purpose, reduced felling per hectare would take place. Though no trees would be felled in the core or non-managed woodland, 2.7 million tonnes of timber can be sustainably sourced annually from mixed and native woodlands. Modelling suggests that this would exceed the current timber produced by this area.

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7 https://www.gov.scot/binaries/content/documents/govscot/publications/consultation-paper/2025/08/scotlands-fourth-land-use-strategy-consultation/documents/scotlands-fourth-land-use-strategy-consultation/scotlands-fourth-land-use-strategy-consultation/govscot%3Adocument/scotlands-fourth-land-use-strategy-consultation.pdf

8 https://cdn.forestresearch.gov.uk/2024/10/Ch1_Woodland-WA-amendment.pdf

3. Built environment

Housing and infrastructure as primary outcome

Urban rewilding has the potential to create ecosystems that can support a wide range of species, boost human wellbeing and help deliver the Scottish Government's commitment to increasing access to nature. To maximise these benefits, the Fourth Land Use Strategy should set out clear requirements and incentives for local policy makers to help integrate urban rewilding at scale.

This could include:

- Allocating significant, connected "wilder" areas within new and redeveloped urban sites, rather than isolated plantings.
- Embedding nature-positive design standards into planning guidance so that natural processes, native species and dynamic habitats are prioritised.
- Providing funding and technical support for local governments and communities to plan, deliver and maintain urban rewilding projects.
- Ensuring equitable access so that all communities, particularly those currently nature-deprived, benefit from contact with wilder spaces close to home.

4. Natural process-led land

Healthier natural ecosystems, climate mitigation and adaptation as primary outcome plus co-benefits and co-products

The Land Use Strategy consultation's approach to nature and biodiversity is to focus on Protected Areas and Other Effective areas-based Conservation Measures (OECMs). As the consultation document points out, only 65% of natural features on protected sites are in favourable condition. These sites are often monitored for a single feature rather than for ecosystem health. OECMs will not necessarily deliver ecologically healthy areas. While Nature Networks should help connect sites and integrate them into the wider landscape, this still misses a key component of ecological recovery.

Rewilding and natural process-led approaches work to restore full ecological function to our landscapes. The primary outcome is to restore ecosystems by allowing natural processes – such as water movement, decomposition, plant succession and soil regeneration – to shape the landscape. Rewilding can happen across a gradation of approaches, and depends on the extent to which nature takes the lead.

Prioritising nature through rewilding and natural process-led management can be a highly productive use of land that helps us transition to a nature-rich, low-carbon future while delivering real, locally generated benefits. These benefits include carbon storage, climate resilience, thriving biodiversity, vibrant local economies, employment opportunities, flood mitigation, cleaner air and water, healthier soils, education and enrichment opportunities for children and adults, and improved health and wellbeing, all in support of the delivery of climate and nature targets.

Decisions around this should be determined by the local community, and are in large part dependent on both local context and culture. Nature-based enterprise and natural process-led production, for example of meat, timber and non-timber forest products, can be important co-products of rewilding and natural process-led areas. This spectrum of rewilding is described in more detail in Rewilding Britain's Rewilding Journeys infographic.

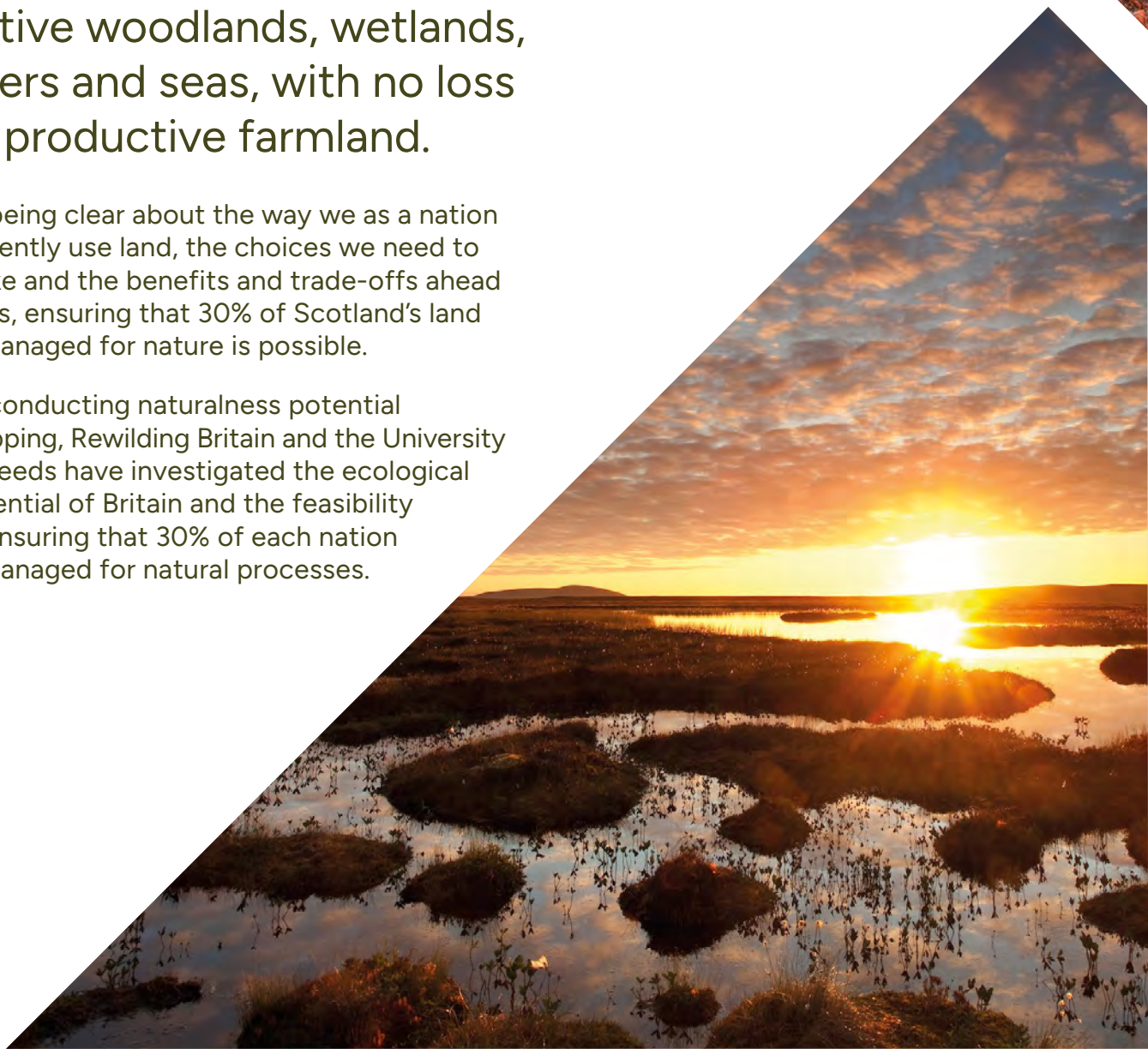
We propose that 30% of Scotland's land be classified as 'natural process led land' allowing nature lead wherever possible. The next section demonstrates how this could be achieved.

Achieving 30% for nature

Rewilding 30% of land in Scotland does not need to have any negative impact on food production. It can be achieved by restoring wild habitats including peatlands, native woodlands, wetlands, rivers and seas, with no loss of productive farmland.

By being clear about the way we as a nation currently use land, the choices we need to make and the benefits and trade-offs ahead of us, ensuring that 30% of Scotland's land is managed for nature is possible.

By conducting naturalness potential mapping, Rewilding Britain and the University of Leeds have investigated the ecological potential of Britain and the feasibility of ensuring that 30% of each nation is managed for natural processes.



30% naturalness-potential mapping and modelling undertaken by Rewilding Britain and the University of Leeds indicates that 30% for nature can be achieved by taking the following actions:

- Rewetting and restoring 1 million hectares of peatland, managed in the long-term for natural processes, with some areas transitioning to wetter woodland and transitional scrub.
- Transitioning approximately 152,000 hectares of pasture towards more species-rich mosaics of natural grassland, meadows and transitioning scrub and woodland. Natural process-led livestock management, mainly of cattle, occurs at low stocking densities.
- Increasing native woodland cover through expanding Caledonian pine forests and Atlantic oakwoods (temperate rainforest) across their natural range. Allowing the regeneration of mixed woodlands by prioritising natural regeneration wherever possible, with tree planting if needed.
- Reducing the amount of land intensively managed for driven grouse shooting, creating an increase in alternative economically and ecologically viable land uses.
- Ensuring strategic deer management across the 30% natural process-led land to bring deer numbers to sustainable levels (below 0.05 per hectare), including extending trials of community deer management and investing in a National Deer Management programme.
- Restoring rivers (e.g. riparian regeneration, naturally meandering rivers), vibrant wetlands and inland marshes slowing the flow of water, mitigating flood peaks, storing and cleaning water.
- Restoring saltmarshes, intertidal flats and estuaries buffering against flooding and coastal erosion.
- Empowering National Parks, Regional Parks and designated sites to lead the way by prioritising nature's recovery as their primary purpose, while National Parks encourage the development of nature-based economies.
- Increasing levels of community participation and ownership, alongside increased nature restoration and community benefit responsibilities for landowners.
- Reintroducing and reinforcing missing keystone native species – including lynx, boar, beaver, eagles and wild herbivores.
- Rewilding of parks and urban green areas to bring people in our towns and cities much closer to wilder nature.

Taking these actions over 30% of Scotland's land would safeguard Scotland's future by restoring ecosystems, bringing balance to our relationship with nature and increasing our resilience to climate breakdown.

What benefits will this bring?

- There will be a diverse mosaic of habitats with fully restored peatlands, species-rich grasslands and woodlands. This will halt and reverse current biodiversity declines in Scotland and help the Scottish Government meet its nature restoration targets.
- Scotland's network of restored habitats will recover more quickly and become more resilient to the impacts of climate heating. Substantially expanding habitat quality and connectivity will also allow species to disperse and migrate as climate zones move north saving wildlife from climate related species loss.
- Scotland will see an increase in net carbon sequestration of 10.5 million tonnes of carbon dioxide equivalent annually – this represents 25% of current emissions.
- Communities will be more actively involved in owning and managing land, leading to an increase in social capital and a deeper relationship with their surroundings. Urban communities will have better access to wild nature.
- Communities will also see an increase in benefits arising from restored landscapes, including intentional benefits as well as indirect socioeconomic benefits.
- Rewilding will see many land management jobs maintained with new jobs created:
  - Restoration economy (more stalkers and similar numbers of wildlife/game managers, stock managers, contractors, foresters, advisors)
  - Nature Based Enterprise jobs (guides, ecologists, tourism, local sawmilling, wild meat processing, service industries etc)
- There will be a significant increase in broadleaf, coniferous and mixed native woodland as well as transitioning scrub. Natural process-led production of timber and wood products will lead to an increase in overall timber production. Supporting local sawmilling and processing as well as training local people will boost jobs and local economies.
- Rewilding areas will have huge benefits for human wellbeing, as interacting with nature can lead to stress relief, enhanced mood, improved cognitive ability and increased social cohesion.
- More resilient landscapes will act as buffers against the adverse effects of climate breakdown, such as extreme weather events. Restored wetlands can increase the land's capacity to hold water, leading to landscapes that are better able to cope with flooding and droughts.
- Rewilding offers a holistic approach to addressing the ongoing impacts of historical land use decisions in Scotland. Large parts of Scotland have fewer people than they might once have supported, and less human infrastructure. This contributes to the high naturalness potential of these areas – but by restoring ecological integrity, we can create social, economic and cultural benefits.

Table 2: habitat changes in the 30%

Using CORINE data, this table summarises the change in habitat or land cover that could take place within the 30% of land where nature is the primary purpose. The area in hectares of each habitat is shown, both before and after any transition. This area is also expressed as a percentage of the 30% of land where nature is the primary purpose, before and after any transition.

Habitat	CURRENT		FUTURE		
	Area in hectares	Area as percentage of 30% natural process-led land	Area in hectares	Area as percentage of 30% natural process-led land	Notes
Peat bogs	1,057,439	44.96%	950,000	40.39%	Assuming that some would become transitional woodland, wet woodland or scrub – whilst some new peatbogs might also form through rewetting process
Moors and heathland	340,735	14.49%	210,000	8.93%	Assuming that some would become transitional woodland or scrub
Natural grasslands	206,724	8.79%	220,000	9.35%	Assuming that pastures would become natural grasslands with some woodland and scrub
Coniferous forest	173,526	7.38%	240,000	10.20%	Assuming large increases in native Caledonian forest, and some reduction in single species conifer plantations
Pastures	152,355	6.48%	0	0.00%	Assuming these all transition to natural grassland / woodland / scrub
Transitional woodland-shrub	61,728	2.62%	210,000	8.93%	Assuming that a large area would be transitioning from pasture, moor, grassland and some peatland
Water courses, water bodies, inland marshes	57,257	2.43%	100,000	4.25%	Increased area of inland marshes and restored water courses
Broad-leaved forest	45,485	1.93%	120,000	5.10%	Assuming large areas would transition – particularly through natural regeneration and to temperate rainforest
Non-irrigated arable land	21,174	0.90%	0	0.00%	Assuming these all transition to natural grassland, woodland and scrub

Habitat	CURRENT		FUTURE		
	Area in hectares	Area as percentage of 30% natural process-led land	Area in hectares	Area as percentage of 30% natural process-led land	Notes
Mixed forest	20,318	0.86%	80,000	3.40%	Assuming that areas would be left for mixed woodland – plus transition away from single species plantations and increase in mixed species Continuous Cover Forestry
Urban	14,199	0.60%	15,000	0.64%	Assuming each council incorporates rewilding into their urban planning
Saltmarshes, intertidal flats, coastal lagoons, estuaries	2,781	0.12%	12,000	0.51%	Assuming restoration of littoral zones and saltmarshes alongside coastal realignment where needed
Land principally occupied by agriculture, with significant areas of natural vegetation	5,467	0.23%	0	0.00%	Assuming these all transition to natural grassland, woodland and scrub
Green urban areas / sports / leisure facilities	2,844	0.12%	5,000	0.21%	Expanding and rewild green urban areas and leisure facilities wherever possible
Total	**2,162,032**		**2,162,000**		

Answers to individual questions

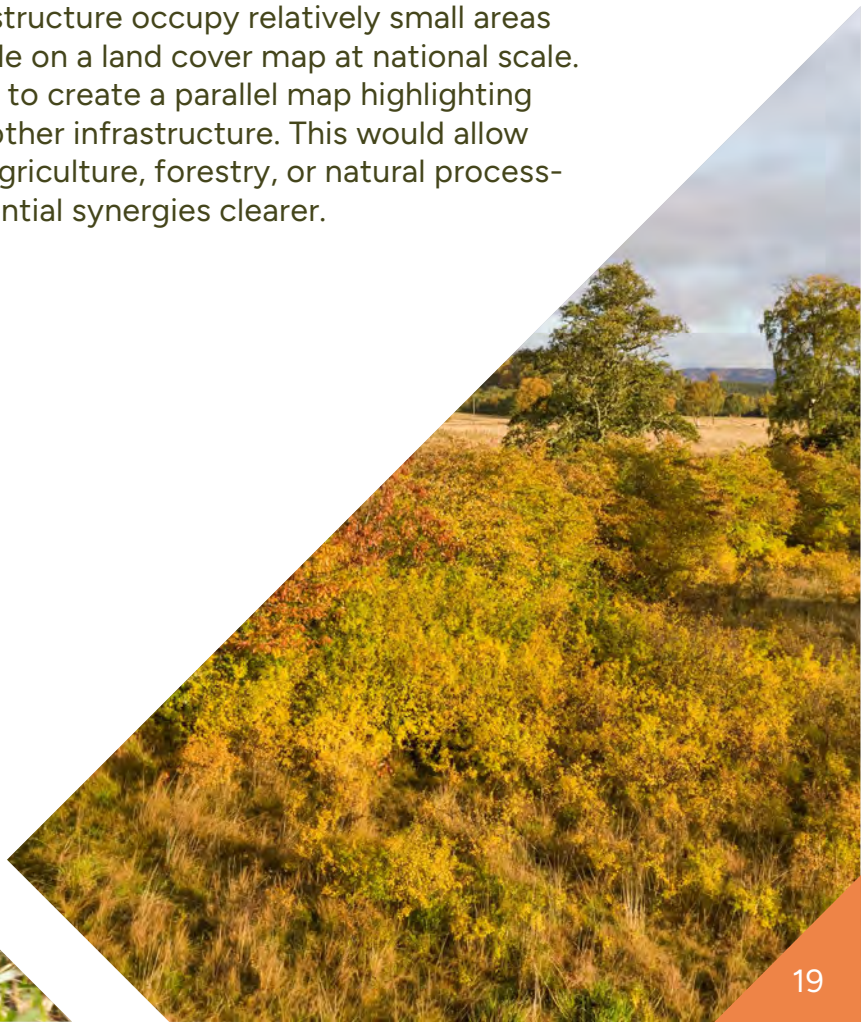
Q1. Do you find Map Figure 1 to be a helpful representation of current land cover?

No.

While the map shows land cover types, it does not indicate ecological health or the primary purpose for which land is managed. Treating woodland managed for nature and commercial forestry as equivalent, for example, creates a categorical error and can misinform decisions about land use. For land use planning to support nature recovery, it is essential to distinguish between areas managed for biodiversity, climate mitigation, or ecosystem services, and those managed primarily for production or development.

Q2. How can we most effectively represent housing and renewable energy alongside current land cover maps?

Housing and renewable energy infrastructure occupy relatively small areas nationally and are unlikely to be visible on a land cover map at national scale. A more effective approach would be to create a parallel map highlighting settlements, transport, energy, and other infrastructure. This would allow comparison with land managed for agriculture, forestry, or natural process-led uses, making trade-offs and potential synergies clearer.



Q3. What sort of information about current land use would you find useful? (and how would you use it?)

We propose the redefinition of key land uses, with their associated primary outcomes, below and as explained in our full consultation response:

1. **Agricultural land** – divided into arable and pasture land (food production as primary outcome)
2. **Forestry land** (timber and fibre production as primary outcome)
3. **Built environment** (housing and infrastructure as primary outcome)
4. **Natural process-led land** (healthier natural ecosystems, climate mitigation and adaptation as primary outcome plus co-benefits and co-products)

To achieve the scale of change proposed, we need corresponding land use-potential mapping, using up-to-date data – including soil type, climate, current biodiversity, tree growth potential, naturalness potential, carbon removal potential – to allow for an accurate assessment of the most productive use of each area of land. Local communities, farmers, foresters, businesses and public bodies then need to come together using participatory processes to develop local place-based land use plans. The nature recovery network and local nature recovery strategies being developed that underpin the network[9] are examples of useful data sources.

We also need to ensure that nature, climate and environment benefits achieved in one area are not achieved through increasing environmental harm in more intensively managed areas or by offshoring production and damage.

In relation to natural process-led land Rewilding Britain have modelled areas, working with the University of Leeds, with the highest potential for nature recovery. This considers habitat type and extent, as well as connectivity with the wider landscape (based on the potential species flow within 5km). While it is indicative only, it has been developed as a tool to encourage local prioritisation of rewilding using participatory mapping to improve its accuracy and utility.

Q4. Do you agree that these are the key areas that need to be delivered by Scotland's land?

No.

9 https://www.gov.uk/government/publications/nature-recovery-network/nature-recovery-network

Q5. Are there any important land uses that you feel are missing or underrepresented in this list?

Yes.

We need a strategy for land use change across Scotland that is guided by a focus on the primary outcomes of the land and an accurate assessment of land use potential. Prioritising natural process-led land management and the restoration of nature across 30% of the country is possible – and essential if we are to meet our national and international commitments.

We have the opportunity to live in a country rich with a diverse, inspiring mosaic of species-rich habitats that are protected, restored and rewilding. These areas can deliver an array of benefits for people – such as climate mitigation, including for severe weather events, vibrant green economies, healthier air, water and soils, nature-led production of food and timber, improved health and wellbeing, a sense of place and a closer connection to nature, and more opportunities for us all to simply enjoy wild nature. These areas will also generate economic value for, and provide connectivity through, the higher resource-use areas and built environments.

By defining land uses by their primary purpose – and creating 'natural process-led land' as a new land use classification – while recognising the value of integrated landscapes, we can transition to a nature-rich, low-carbon future and deliver local benefits.

We recommend clarity around how much of Scotland's land is used for what purpose at present – and how much land should be used for each purpose in the future.

In order to achieve 30% rewilding, we propose that land is understood in terms of its primary purpose rather than its current features. This will make the direction of travel clearer, especially for land managers who are being tasked with delivering so much of Scotland's strategic vision for land use. In Table 1 in our full consultation response, we explain this proposition in comparison with the Scottish Government's outlined vision for the Fourth Land Use Strategy. Next, we explore how this transition – making space for 30% of land for nature – can take place, by proposing key actions.

All incentives, advisory support, taxation, research, financing and technology development should be aligned in a coherent and integrated way to support the multifunctional outcomes that society is looking for. This will include supporting some land managers to transition from one primary outcome (e.g. food production) to another (e.g. natural process-led land management). This does not need to prescribe what individual landowners do on their land, but should provide guidance and steer approaches used to deliver the greatest potential while lowering trade-offs.

This scale of land use change needs to be supported by:

- Strong, sustained and reliable financial and regulatory incentives in areas that are unproductive for agricultural purposes, especially in the uplands, for farmers and land managers to support the restoration of ecosystems.
- Accessible data and information that supports land use decision-making and aligns with the land use categories proposed.
- A planning system that integrates all land uses and helps to set and guide priorities and principles for land use at the national level. Such a system needs to be integrated into a strategic vision for land and seas, connected to marine spatial plans.
- Local land use plans led by place-based organisations that are invested in the local area. These should be developed in collaboration with local communities and should lead to shared economic, social and environment benefits.
- Diversification of public, private and community ownership models that support localised decision-making.
- A fair and equitable way of settling disputes over land use.

We need increased, diversified and stable financing streams to support land use change and give practitioners and investors the confidence to make long-term investment decisions. To support a transition to 30% rewilding and natural process-led land we have laid out recommendations including the definition of a set of financing rewilding principles. Most critically, nature markets won't materialise to fund land use change on their own. The Scottish Government cannot simply rely on private finance to achieve its legally binding targets but must invest public money. Further recommendations are detailed in Rewilding Britain's **Financing Rewilding** report.

Peatland is not a land use, but a habitat that overlaps with other land uses. This can include a mix of land uses such as deer hunting, walked-up grouse shooting, agriculture and forestry.

We need an area where it is recognised that the primary outcomes are nature, climate and environment benefits with a target of 30% in line with 30by30 commitments. In these areas the focus of management practices and restoration interventions should be on reinstating natural processes wherever possible – for example free-flowing rivers, natural grazing patterns, habitat succession and predation — and allowing them to create dynamic, constantly changing habitat mosaics while helping to revitalise local economies and communities.

Across the 30% natural process-led land area this would see the creation of:

- **Semi-wild Areas**, comprising 25%, with a broad and diverse range of natural process-led land uses and enterprises, generating local economic benefits while allowing nature to flourish, through, for example, high-nature-value food and timber production, ecotourism and nature-based enterprises.

- **Core Rewilding Areas**, comprising 5%, where nature is allowed to fully recover. These areas will focus on restoring and reinstating as wide a range of natural processes, habitats and native species as possible, forming healthy mosaics of, for example, native woodlands, peatlands, heaths, species-rich grasslands, wetlands and saltmarshes — with only low-key and sustainable human impact.

What this would mean for our landscapes and the people who live, visit and work in them is explained and illustrated in Rewilding Britain's **Rewilding Journeys** infographic. We would also like these land use changes to be linked to a diversified, resilient and just economic transition led by local communities. This is explored in more detail in our **Rewilding and the Rural Economy** report, which includes the following delivery pathways:

Urban rewilding has the potential to create novel ecosystems that can support a wide range of species and boost human wellbeing. Improving ecological networks across urban areas to facilitate dispersal (e.g. riverscapes, wild corridors) also enhance ecosystem functions (e.g. pollination).

We would like to require and incentivise cities, towns, local authorities and developers to integrate urban rewilding into their plans. The work done by the **London Rewilding Taskforce** is a very good example of how rewilding principles can be integrated into highly populated urban environments. Rewilding projects such as **Wild Tolworth** in London and **Wild Ouseburn** in Newcastle are showcasing how urban areas can be transformed into wildlife havens, for the benefit of nature and urban communities. Many of these projects are located in areas with disadvantaged and minoritised communities, giving those communities access to higher-quality nature areas. **The Association for Public Service Excellence** has produced a briefing, including case studies, about local government-led rewilding initiatives.

Local authorities should also ensure there are allotment spaces, green spaces, verges and street trees, and wilder areas within new developments. Funding for councils to enforce new and existing planning decisions in this regard must be a priority.

We believe there is a need for significant investment in national and local public transport infrastructure, particularly rural bus services because these are often poorly supported outside of urban areas and can separate communities from places of employment, recreation and experiences of wilder nature. An LUS that sees increased green employment opportunities, and the expansion of natural process-led land management as we envisage, also needs government policy that supports improved and affordable access to these areas.

Planning authorities are increasingly recognising the need to influence wider land use beyond the built environment. This is evidenced by the declarations of climate and ecological emergencies made by many local councils, as well as the work of our national parks. Community-led land use plans, such as those developed by the Langholm Initiative are increasingly integrating economic regeneration, ecological restoration and carbon capture.

Within the 30% natural process-led land areas that we propose are needed to deliver the 30by30 targets, these plans should integrate nature's recovery with economic diversification to reinvigorate rural communities.

A key function of local land use plans must be to arbitrate between competing uses, whether for housing, infrastructure, agriculture, forestry, rewilding or carbon capture. Prioritising a particular outcome in certain areas – sometimes called 'zoning' – is one way of doing this. There are ways to introduce zonal planning that maintain and even extend public participation in how land is used beyond the built environment. For example, a local land use plan could invite public deliberation over where to establish new natural process-led rewilding areas, which economic activities should support this, and how to support local farmer clusters to create new catchment natural flood management schemes.

In any land use planning process it is essential to avoid looking at economic sectors in isolation and to prioritise the creation of shared value.

This requirement for a strategic vision also needs to expand beyond sectors and onto ecosystems. The LUS needs to be integrated within a vision for our land and seas, connecting planning frameworks across the various habitats. Given how connected ecosystems are and how impacts can range across habitats, the Framework needs to explicitly state how it connects with marine spatial plans.

These plans ultimately need to be locally generated, have a legally binding influence on decision-making and be supported by an equally integrated regulatory framework.

Q6. How do you think data and mapping can evolve to better support our understanding of future land use and national ambitions – including the impacts, benefits, opportunities and trade-offs of change?

We need a framework for land use change across Scotland that is guided by a land use classification system focused on the primary outcomes of the land and an accurate assessment of land use potential.

We recommend ensuring easy and open access to data that allows informed decisions on land use at national and local levels based on the most productive potential use (or combination of uses). We would like to see this align with the new land use classification system that we are proposing – including agricultural (arable and pasture), forestry, natural process-led and built environment. Across these categories we need land use-potential mapping using up-to-date data, including soil type, climate, current biodiversity data, tree growth potential, naturalness potential and carbon removal potential.

In support of natural process-led land we need to develop integrated data collection systems that ensure the quality, availability and accessible data on this land use classification.

Rewilding is an open-ended, process-led approach to repairing degraded ecosystems. With a primary focus on reinstating natural processes rather than specific species or habitats, it works alongside other nature recovery approaches to build back complex systems to support nature and people together. The absence of fixed species or habitat targets and a reduction in ongoing human intervention/management creates uncertainty of outcomes. Therefore, long-term monitoring of key indicators of change across the ecological, economic and social impacts of rewilding is critical.

While recent steps have been made to assess rewilding progress[10] [11] [12], to date there has been no guidance on appropriate and measurable metrics for monitoring rewilding progress and outcomes. Working with other experts across academic, practitioner and public sectors, Rewilding Britain responded to this challenge by developing a practical, scientifically sound monitoring framework and recommendations of standardised metrics and indicators that are comparable over time. Most importantly, this Framework recognises both the ecological metrics that are of importance for tracking ecosystem function, and the socio-economic outcomes that society needs in order for rewilding to be embedded in local landscapes and successful over the long-term.

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10 Torres, A., Fernández, N., Zu Ermgassen, S., Helmer, W., Revilla, E., Saavedra, D., Perino, A., Mimet, A., Rey-Benayas, J.M., Selva, N. and Schepers, F. (2018). Measuring rewilding progress. Philosophical Transactions of the Royal Society *B. Biological Sciences, 373* (1761), p.20170433.

11 Perino, A., Pereira, H.M., Navarro, L.M., Fernández, N., Bullock, J.M., Ceauşu, S., Cortés-Avizanda, A., van Klink, R., Kuemmerle, T., Lomba, A. and Pe'er, G. (2019). Rewilding complex ecosystems. Science, 364(6438) https://doi.org/10.1126/science.aav5570.

12 Segar, J., Pereira, H. M., Filgueiras, R., Karamanlidis, Al. A., Saavedra, D. and Fernández (2021). Expert-based assessment of rewilding indicates progress at site-level, yet challenges for upscaling. ttps://doi.org/10.1111/ecog.05836

Q7. What tools, data, or approaches would help improve this understanding over time?

We need consistent time-series data of meaningful ecological metrics relevant to restoring or maintaining natural processes (e.g. ecological connectivity and structural complexity). Greater use and publicly available high-resolution satellite imagery and LiDAR surveys using consistent metrics would support understanding of change over time.

We would also like to see a commitment to regular LiDAR surveys, and free sharing of this data, because these are a valuable resource with multiple uses and a standardised method, making future datasets comparable.

Data collected by volunteers is extremely valuable, but these data are often collected with an absence of spatial sampling structure (i.e. non-random sampling site locations) and can lead to sampling bias and over/under estimation of species occurrence. Despite this, these datasets are often held within local records centres and are routinely used in making planning decisions. Providing guidance on appropriate sampling approaches and surveys where they don't already exist may improve the long-term quality of these valuable datasets. This would support comparable long-term datasets over time.[13]

As a nation, we are asking land managers to make choices that benefit nature while continuing to produce food, timber and other resources. This requires knowledge of natural process-led land management to be a cornerstone of training and professional development. Skill provision is essential to the ability to scale up activity and outcomes to meet our nature and climate targets.

To achieve this we need to support training and professional development in natural process-led land management by:

- Fast-tracking the development and accreditation of vocational training and apprenticeships to fill skills gaps in key areas across, for example nature restoration and rewilding; natural process-led food, timber and fibre production (including skills for local abattoirs and sawmills); community engagement; and nature-based enterprise and tourism.
- Encourage the creation of green, sustainable jobs and volunteering opportunities and help drive forward local nature-based economies.
- Expanding our advisory services to support a transition to natural process-led land management approaches alongside providing support in community engagement and governance to ensure effective localised decision-making.
- Cross-government and relevant agency understanding and training provision, both of natural process-led land management and of the overall land use transition required to enable appropriate planning and delivery.

13 https://onlinelibrary.wiley.com/doi/epdf/10.1111/geb.13491?getft_integrator=readcube&src=getf-tr&utm_source=readcube

In order to deliver the scale of nature recovery required, we need to place innovation at the forefront of land use. Rewilding is one of these innovative approaches, and as such practical knowledge exchange is essential across the sector. The **Rewilding Network** and the Northwoods Rewilding Network are two examples of mechanisms for knowledge exchange – free-to-join, peer-to-peer network that hosts events and produces practical resources to share knowledge and detail approaches that have worked and that haven't.

We can also benefit from learning across devolved nations as well as within mainland Europe. We would like to see more cross-nation learning through events and joined-up practice notes, to ensure that knowledge exchange is effective and that we don't repeat studies.

In particular we would emphasise the importance of integrating the LUS within a needed wider strategic vision for Scotland's land and sea, taking into consideration ecosystem connectivity and interactions.

Q8. Do you think the description provided captures what is meant by 'integrated landscapes'?

No.

Q9. Do you agree that integrated landscapes are the most effective approach to addressing Scotland's land use ambitions?

Landscapes have always been managed to produce multiple benefits. By analysing these multiple functions and assessing their synergies and trade-offs, we can discover tools, techniques and evidence to better manage landscapes in the future.

Existing Scottish policy frameworks, reports and strategies on land use often have one or a few functions as their primary objective, while also referencing a wide variety of secondary land use functions.[14] By considering how landscapes can generate multiple products and services, while also asking which outputs can best be produced in the same place and which best separated, we can improve the productivity of land for multiple functions. This approach was recommended by the Royal Society in their Multifunctional Landscapes report. [15]

14 https://www.parliament.scot/chamber-and-committees/research-prepared-for-parliament/research-briefings/2024/7/12/one-land-many-functions-exploring-integrated-land-use/pdf

15 https://royalsociety.org/news-resources/projects/living-landscapes/multifunctional-land-use/

The description of integrated landscapes frames integration primarily as the coexistence of multiple human uses – such as agriculture, forestry, tourism, energy generation – within a single area. Integrated landscapes cannot just be about balancing human needs. Integrated landscapes rest on resilient, functioning ecosystems that support all species, and are the foundation of all land uses, including farming, forestry and energy.

We need to design our approach to land use so that we are not just balancing multiple activities, but ensuring that ecosystem health is the foundation upon which other activities sit. For example, restoring peatlands, rivers, native woodlands, and coastal habitats enhances biodiversity, locks up carbon, reduces flood risk, and creates a healthier base for sustainable farming, recreation, and local economies.

The Scottish Government should therefore strengthen the definition of integrated landscapes by:

- Structure the Fourth Land Use Strategy so that policy makers can make clear decisions about land use where there are potentially competing policy commitments
- Embedding ecosystem health and natural capital as the structuring principle of integration, rather than treating nature as one land use among many
- Ensuring integration operates at ecologically meaningful scales, such as catchments, regional landscapes or bioregions, to allow for connectivity and resilience
- Aligning land use policy frameworks (climate, biodiversity, agriculture, forestry, planning) around shared outcomes for nature recovery and just transition
- Supporting land managers, communities and Regional Land Use Partnerships to co-design integrated land use strategies that deliver for both people and nature

Q10. Have we identified the right factors influencing land use integration?

No.

Q11. Which of these factors do you feel are the most influential?

The factors identified provide a strong foundation for understanding the dynamics that shape land use integration in Scotland. The emphasis on finance, skills, cultural values, food production, and land management practices reflects the multifaceted nature of decision-making at the landscape scale.

But while the importance of the individual actions of land managers is clear, the responsibility of the government is not. Enabling policy and funding frameworks – including statutory nature restoration targets, alignment across agriculture, forestry, and climate policy, and the role of Regional Land Use Partnerships – are critical system drivers. Embedding these more explicitly would ensure that integration is supported by coherent governance as well as voluntary uptake.

Q12. Are there any important factors we have missed?

Social licence and public participation are missing. Community expectations around land use – from access to nature, to climate action, to food security – are powerful influences on land managers' choices. Integration depends on trust, transparency and inclusive decision-making, particularly through mechanisms such as Regional Land Use Partnerships and local plans.

Finally, market signals and investment flows are absent. The rapid growth of natural capital markets, alongside reforms to agricultural support, will shape land managers' incentives as strongly as cultural values or skills. If poorly designed, they risk driving fragmentation rather than integration; if aligned with ecological outcomes, they can reinforce rewilding and nature recovery at scale.

Q13. Would the inclusion of case studies help to illustrate the practical delivery of integrated land use?

Yes.

To help illustrate how rewilding land can sit alongside and benefit other land uses, we recommend including a range of rewilding case studies. Ideally this would include examples from core rewilding and semi-wild areas within the 30% of land used for natural process-led management. In order to maximise the productivity of land for nature, we need areas where nature as a land use is integrated with other land uses – and areas where it is the main purpose. [16]

16 https://royalsociety.org/-/media/policy/projects/living-landscapes/des7483_multifunctional-landscapes_policy-report-web.pdf see page 29

Case studies can illustrate the synergies between rewilding and productive land use. For example, farms where river re-meandering, wetland restoration, or woodland expansion have improved water quality and biodiversity, while also supporting resilient crop production and reducing flood risk, demonstrate how ecological restoration can complement food production rather than compete with it.

By including case studies across different landscape types and scales, from enclosed farmland to uplands and coastal areas, the Scottish Government can demonstrate the breadth of opportunity for integration – while also highlighting lessons learned and the conditions required for success.

Q14. Would the inclusion of information on ecosystem services and opportunities for increased benefits help to illustrate the wider value of integrated landscapes?

Yes.

This should be balanced with highlighting the intrinsic value of nature. Over-relying on the economic benefits of ecosystems can bring new risks if, for example, ecosystems do not deliver on what was promised for them.

Q15. Do you agree that the role of LUS4 should be to influence policy makers and regulators in order to create an enabling environment that incentivises and/or supports land managers, communities and partnerships to further integrate land use/management?

Yes – and this makes it even more essential that rewilding is included within the Fourth Land Use Strategy. Rewilding is already an important tool to address the climate and biodiversity crises, and will become increasingly important as the climate destabilises and ecosystems collapse.

Rewilding approaches highlight the need for system-level change: restoring ecosystem function and resilience across landscapes requires policy coherence that aligns agriculture, forestry, biodiversity, water, and climate objectives. At present, competing policy signals and short-term funding streams often constrain land managers' willingness to adopt nature-based approaches. LUS4 should therefore act as a strategic framework that encourages government departments and regulators to embed integration and ecological restoration consistently across policies, funding mechanisms, and regulatory regimes.

An enabling environment would:

- De-risk innovation by providing long-term funding and clear regulatory guidance for land managers trialling new forms of integrated practice (e.g. agroforestry, wetland restoration, natural flood management) and/or rewilding.
- Reward ecosystem services so that biodiversity gains, carbon sequestration, water regulation, and cultural benefits are recognised alongside food production.
- Support collective action by empowering communities, Regional Land Use Partnerships, and cross-boundary collaborations to scale rewilding and integration beyond the level of individual landholdings.
- Promote equity and participation, ensuring that smaller farmers, crofters, and community landowners are not disadvantaged by the transition, but are supported to share in the benefits.
- Ensure that LUS4 can be used by policy makers across central and local governments.
- Have a mechanism in place for communicating the vision and principles to those making land use decisions and delivering land use change.

Q16. Are there other ways in which LUS4 could support alignment and integration?

Yes.

At present, land use policy is often siloed, with agriculture, forestry, biodiversity, water and planning each operating under different frameworks. Without a binding framework, competing priorities and a lack of vision will undermine progress towards climate resilience and nature recovery. For example, existing subsidies and grants sometimes promote practices that directly conflict with biodiversity and climate goals (e.g. monoculture planting, intensive grazing) or drive land manager decisions based on short funding cycles and uncertainty rather than long-term, holistic views.

LUS4 should act as a unifying reference point that ensures these policies reinforce rather than contradict one another, with ecosystem restoration and climate resilience as shared outcomes.

LUS4 could also strengthen alignment by:

- **Providing clear spatial priorities** for where different land uses are most appropriate, to reduce conflict and maximise synergies.
- **Linking funding mechanisms** across agriculture, forestry and nature restoration to encourage integrated projects rather than single-issue interventions.
- **Embedding monitoring and evaluation frameworks** that track not only outputs (e.g. trees planted, hectares managed) but outcomes (e.g. ecosystem recovery, biodiversity indicators, community wellbeing).
- **Promoting collaborative governance models** such as Regional Land Use Partnerships, which can integrate local knowledge with national strategy and enable collective decision-making across boundaries.

LUS4 must not only encourage alignment but demand it, ensuring all land use policies work toward shared outcomes – while also acknowledging the purposes to which land is put, and the synergies and trade-offs between these purposes.

While marine-scapes are beyond the scope of this consultation, it is important that the new Land Use Strategy does not consider land in isolation. The changes we make to how we use land have far-reaching consequences, including for our marine environment. In particular, coastal marine habitats must be recognised as being potentially affected by decisions made on land.

Q17. Do you agree with the proposed approach to developing a new vision and integrated set of objectives for the Land Use Strategy?

We broadly agree with the proposed approach to developing a new vision and integrated set of objectives for LUS4. Framing land use around the three thematic areas of Nature and Climate, Jobs, Skills and the Economy, and Communities, Place, People and Equity provides a clear, structured way to articulate the connections between environmental, social, and economic priorities.

The proposed high-level vision, "Scotland's national landscape is integrated and resilient, supporting the diverse needs of a net zero, nature-positive, wellbeing economy", aligns with the ambition to restore functioning ecosystems at landscape scale, which is critical for achieving both climate and biodiversity goals.

However, we suggest that the vision and objectives could be strengthened by explicitly embedding the importance of large-scale ecological restoration as a core part of the vision and principles.

Q18. Which approach would you prefer for LUS4?

- **Removal of the land use principles**
- **Establishment of a refreshed set of principles (if this is your preference, please tell us what you think they should cover and how you envision their application)**

We strongly support the establishment of a refreshed set of land use principles for LUS4, rather than removing them. The vision on its own is not sufficient to provide clarity and guidance to policy makers.

Clear principles are essential for guiding decision-making, shaping incentives, and ensuring consistency across policy, regulation, and practice. They provide a framework to embed ecological, social, and economic considerations across Scotland's landscapes.

We suggest the following land use principles:

- **Promote multifunctional and integrated landscapes**
  Recognise that land can simultaneously provide food, timber, renewable energy, recreation, housing, and ecosystem services. Plan and manage land to balance these functions, maximising shared environmental, economic, and social benefits while minimising harm.
- **Target land use change strategically**
  Support and spatially align land use change to deliver the greatest overall benefits. Balance agricultural land (food production), forestry (timber and wood products), natural process-led land (climate mitigation, adaptation, and biodiversity), and the built environment (homes and infrastructure).
- **Prioritise nature recovery and resilience**
  Put restoration, rewilding, and biodiversity connectivity at the heart of all land use decisions to reverse nature's decline and strengthen ecosystem resilience.
- **Embed long-term ecological thinking**
  Make decisions with intergenerational impacts in mind, recognising both the instrumental and intrinsic value of healthy natural systems.
- **Ensure community participation and equity**
  Involve local communities, land managers, and stakeholders in shaping land use strategies. Ensure benefits and responsibilities are shared fairly, with open, inclusive, and local decision-making.
- **Encourage innovation and adaptive management**
  Create space for experimentation, learning, and adaptation in land use. Support sustainable financing and innovative approaches to deliver landscape-scale transformation.

Q19. To what extent do you agree that the draft indicators provide a strong basis for measuring progress toward improved outcomes under the Nature and Climate theme?

Strongly disagree.

These indicators do not capture the holistic outcomes required for integrated, nature-positive land use. Many of the proposed metrics focus on outputs - for example, hectares of woodland created or peatland restored - rather than ecological and functional outcomes, such as habitat connectivity, species recovery or ecosystem resilience.

We suggest that indicators could include:

- **Landscape-scale ecological connectivity** – indicators that track the extent to which habitats are linked across regions to support wildlife movement and adaptation.
- **Functional ecosystem services** – measures of soil health, pollination rates, water purification, flood mitigation, and carbon sequestration beyond simple land cover.
- **Biodiversity quality** – not just abundance or presence of species, but population health, genetic diversity, and resilience to climate change.
- **Nature-based climate adaptation** – the effectiveness of interventions in reducing climate risk for both communities and nature.

Q20. Are you aware of other data sources that could be used to monitor progress towards these outcomes?

Rewilding is an open-ended, process-led approach to repairing degraded ecosystems. With a primary focus of reinstating natural processes, rather than specific species or habitats, it works alongside other nature recovery approaches to build back complex systems to support nature and people together.

The absence of fixed species or habitat targets and a reduction in ongoing human intervention creates uncertainty of outcomes and therefore long-term monitoring of key indicators of change across ecological, economic and social impacts of rewilding is critical. Working with other experts across academic, practitioner and public sectors, Rewilding Britain is responding to this challenge by developing a practical, scientifically sound monitoring framework with recommendations of standardised metrics and indicators that are comparable over time.

The key themes covered by the Rewilding Monitoring Framework are:

1. Work at nature's scale: large areas, connection to other high biodiversity value sites, multi-stakeholder
2. Let nature lead: multi-taxa diversity and abundance, heterogeneity, complexity, ecosystem functions, connectivity
3. Support people and nature together: health and wellbeing, community involvement, behaviour and attitudes, community wealth
4. Create resilient local economies: local economic impacts; revenue, business and employment diversification
5. Secure benefits for the long term: diverse long-term funding streams, protected area status, conservation covenants

Other potential data sources and approaches that could strengthen monitoring include:

- Biodiversity Action Plan reporting: datasets on species recovery, habitat restoration, and protected area management.
- NatureScot's Condition Assessments: condition and connectivity of habitats in protected and non-protected areas.
- Scottish Environment Protection Agency (SEPA) datasets: for water quality, soil health, and ecosystem function monitoring.
- Remote sensing and satellite imagery: to track landscape-scale habitat connectivity, rewilding interventions, and forest or peatland health.
- Citizen science platforms: e.g., Biological Records Centre, iRecord, for real-time species and habitat monitoring.
- Ecosystem service valuation studies: to quantify benefits delivered by rewilding, agroforestry, and integrated land use interventions.

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