



South Lanarkshire Biodiversity Strategy 2024 - 2030

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Executive Summary

The fourth Biodiversity Strategy sets out a partnership approach to guide the conservation and enhancement of biodiversity in South Lanarkshire to 2030, to ensure a focus on being nature positive. The main aims of our strategy are focused on how protecting our local biodiversity can contribute to national and global priorities, to help us to promote the protection, enhancement, and creation of habitats, and to facilitate a wider understanding of locally important habitats and species.

We are facing a climate and nature emergency. Biodiversity has declined dramatically in recent decades and strong and bold action is now required to bring about the transformative change needed to halt this loss. The Intergovernmental Platform on Biodiversity and Ecosystems Services (IPBES) [2019 Global Assessment](#) identified land and sea use change, in part driven by five key drivers: direct exploitation, development, pollution, climate change and invasive non-native species. It is important that all society's activities, not only avoids further damage and loss of nature, but helps to protect, monitor, and restore it.

Centuries of habitat loss, over exploitation, intensification of farming, development, invasive species and persecution means Scotland is one of the most nature depleted countries in the world. The [Natural History Museum Biodiversity indicators](#) ranks Scotland 28th from the bottom out of more than 240 countries and territories in term of the biodiversity it has remaining.

The [State of Nature Report](#) 2023 provides compelling evidence that Scotland's wildlife continues to decline. The report reveals one in nine species are threatened with national extinction, with a 15% decline in average species abundance across closely monitored wildlife since 1994. In the last decade alone 43% of the species have declined strongly. Lichens, bryophytes and flowering plants have suffered massive declines in distribution since 1970, showing the importance of restoring key ecosystems, expanding native woodlands in tackling climate change and helping wildlife withstand its effects.

Species are the building blocks of our ecosystems. Every time we allow a species to go into decline, we progressively undermine the health and functions of our ecosystems. We must not forget that these ecosystems are not only a fundamental part of the natural world but also provide us with the essential basics of life: our food, water and the air we that we breathe.

A new set of international biodiversity targets has been agreed under the UN Convention on Biological Diversity through the Global Biodiversity Framework 2022. To support the delivery of these, the Scottish Government has committed to a national biodiversity strategy, a Nature Restoration Fund and to putting in place legally binding targets to restore nature, these aim to halt and reverse long-standing national declines in biodiversity.

Guidance from the Scottish Government states that we need to be [nature positive](#) by 2030, where there is more nature than there is today, and by 2045 Scotland's nature is well on its way to full recovery. [Net zero](#) and nature positive can and must be achieved together: restoring nature can be a huge part of the climate solution, as restoring our peatlands, native woodland, and grasslands to a healthy state will help lock up carbon, as well as helping our wildlife to thrive.

It is becoming increasingly clear that action on a landscape scale is required to achieve the national outcomes and targets for 2045 and beyond, we all need to work together to protect and restore nature. To regenerate our ecosystems, to protect our most important nature sites and create wider nature networks so nature thrives everywhere.

Chapter 1: Introduction

Biodiversity, short for biological diversity, is the variety of life which inhabits planet Earth. It is every species of plant, animal, fungi and microbe, their genetic variation, and the habitats upon which all living things depend. This includes diversity within species, between species and across ecosystems. It encompasses the whole of the natural world, not just the rare or endangered and includes people.

Biodiversity is a key component of life. It provides us with all the ecosystem services we need to survive, including the clean air that we breathe, water, food, shelter, and medicine. It provides employment, recreational, leisure and learning opportunities and helps us to both mitigate and adapt to climatic change. It reinforces a sense of place and our cultural identity.

We are at a critical juncture. The global climate emergency and the nature emergency are twin reinforcing crises: our failure to address biodiversity loss and climate change is already impacting on our economy, society, and wider wellbeing. There is now an indisputable body of evidence that biodiversity, both globally and in Scotland, is in real trouble, our natural environment has been heavily degraded, with continued declines across much of our land and seascapes. Our efforts to address the crisis to date have generated some successes, but we urgently need to accelerate and scale up those efforts to drive a landscape scale recovery. No one can tackle these emergencies alone, so we need to have an inclusive nature positive approach that engages with communities, businesses, landowners, managers and decision makers, recognises the fundamental importance of our natural environment and to reverse biodiversity loss by 2030.

This strategy will sit alongside [South Lanarkshire Sustainable Development and Climate Strategy](#) (2022-2027) and through developing and driving investment in nature-based solutions, will play a significant role in delivering our commitment to Net Zero and accelerate the restoration and regeneration of biodiversity. The Biodiversity Strategy sets out how we aim to protect and enhance biodiversity to ensure the sustainable flow of ecosystem services on which we all depend.

South Lanarkshire

The natural environment is an asset which can contribute to the economic growth of South Lanarkshire if it is managed and used in a sustainable manner. Many of our growth sectors, such as tourism and food production rely on the provision of ecosystem services from a high-quality natural environment. There are many other less tangible ways in which nature sustains us, contributing to our health, wellbeing, enjoyment, sense of place and cultural identity. We have a duty to ensure that biodiversity is conserved, maintained, and indeed improved for future generations.

The distribution and diversity of the ecological resources within South Lanarkshire is influenced by the variety in the geography and topography of the area. There are a series of distinct landscape character areas, each with varied and valuable biodiversity assets. Some of these assets are internationally important, with others of national or local significance. Although the area is mainly agricultural land, there are pockets of natural and semi natural habitats, including ancient woodland, peatland and upland moorland. The urban greenspace such as public parks, rivers, allotments and sporting areas, make a significant contribution to urban biodiversity and our quality of life and can contribute to improving physical and mental health and wellbeing.

In South Lanarkshire, the main environmental pressures having an adverse effect on biodiversity include fragmentation of habitats affecting connectivity of systems, invasive non-native species and the inappropriate location of urban development or development that is insensitive to the local natural environment. Arguably, the greatest potential pressure on

ecosystem function is climate change, with habitat fragmentation restricting the movement of species in response to this.

Society and biodiversity are interdependent. Sustainable development, therefore, requires the protection of biodiversity to occur. Taking an integrated approach to conservation through the ecosystem approach may help to take forward sustainable development and sustainable use of resources for the protection of biodiversity and in mitigating the harmful effects of climate change and pollution as well as assisting with climate adaptation. The biodiversity and environment of South Lanarkshire is a valuable asset, providing the basis for services which are of direct benefit to our economy and communities.

The South Lanarkshire Biodiversity Partnership

South Lanarkshire Biodiversity Partnership (SLBP) was formed in 1997.

The work of the group is based on six broad aims:

- Co-ordinate biodiversity related activity and identify gaps in delivery.
- Bring together expertise and resources, enabling innovation and project delivery.
- Create links between sectors and bring together those working on the ground with policy and decision makers.
- Create new partnerships and explore new opportunities.
- Raise awareness and promote biodiversity.
- Biodiversity is enhanced and better connected – working together to improve nature networks on a landscape scale.

The Biodiversity partnership is governed through our Climate Change and Sustainability Committee (CCS), which has decision making powers to help to accelerate the pace and scale of action needed in response to the climate and nature emergencies and meeting challenging national targets.

Members of the partnership include:

- Butterfly Conservation Scotland (BC)
- Clyde River Foundation (CRF)
- Froglife (FL)
- Forestry and Land Scotland (FLS)
- Glasgow and Clyde Valley Green Network (GCV)
- NatureScot (NS)
- Royal Society for the Protection of Birds (RSPB)
- Scottish Environment Protection Agency (SEPA)
- South Lanarkshire Council (SLC)
- Scottish Wildlife Trust (SWT)
- Tweed Forum (TF)

To help facilitate the work of the partnership, eight sub-groups have been established to work on specific issues and identify relevant projects. These groups report to the Biodiversity Partnership on an annual basis. These subgroups are:

- Grassland
- Peatland
- Woodland
- Freshwater and wetlands
- Invasive, Non-Native Species
- People and Nature
- Nature Positive (includes VDL, nature networks)
- Local Nature Conservation Sites (LNCS)

Statutory assessments

The Biodiversity Strategy has been assessed within by a Strategic Environmental Assessment (SEA) Screening Report, with regards to the requirements of section 9 of the Environmental Assessment (Scotland) Act 2005. The screening report was approved in May 2023 by the Scottish Government's SEA Gateway, setting out the views of South Lanarkshire council on the likelihood of significant environmental effects for the proposed strategy.

Structure of the strategy

In chapter two we set out the strategic framework in which the Biodiversity Strategy fits, our strategic approach and we identify our vision. In chapter three we set out the six key ecosystems which will be the focus of the strategy. We also identify five cross-cutting themes which are relevant to all ecosystems, some of which have associated outcomes and actions.

In chapters four to nine, we consider in turn each of the key ecosystems, and set out:

- An overview of the ecosystems in South Lanarkshire.
- Information on the key issues relevant to the ecosystems.
- The progress we have made since the last strategy was produced.
- Identification of our strategic outcomes and key actions.

In chapter ten, we set out how we plan to monitor progress in implementing the strategy to achieve our strategic outcomes. The appendices summarise our actions with reference to Scottish Government targets and contain a glossary of terms and acronyms.

Chapter 2: Strategic Framework

In this section we identify the key policy drivers at all levels which impact on the Biodiversity Strategy and outline our approach to setting our strategic vision and outcomes.

International and national context

The signing of the [Convention of Biological Diversity](#) in 1992 in Rio de Janeiro, Brazil, was a pledge to help stop the global loss of species, habitats, and genetic resources through the development of national strategies, plans or programmes for the conservation and sustainable use of biodiversity. The [UN Decade on Restoration](#) was launched in 2020 with the aim of preventing, halting, and reversing the degradation of ecosystems worldwide. Through the [Leaders Pledge for Nature](#), world leaders have committed to reversing nature loss by 2030 and delivering a nature positive world. Where nature positive means reversing the downward curve of biodiversity loss so that levels of biodiversity are once again increasing, bending the curve of biodiversity loss (see figure 1 below). The Scottish Government signed the Leaders Pledge for Nature at the UNFCCC's 26th Conference Parties (COP26) held in Glasgow.

In December 2022 the [United Nations Biodiversity Conference \(COP15\)](#) was held in Montreal, Canada. Governments from around the world came together to agree on a new set of goals to guide global action to halt and reverse nature loss. Two hundred countries agreed to guide action on nature through to 2030. The Global Biodiversity Framework aims to address the biodiversity loss and restore ecosystems. The plan includes measures to halt and reverse nature loss, putting 30% of the planet and 30% of degraded ecosystems under protection by 2030. The Scottish Government played a leading role in highlighting the role of sub-national governments in securing these global aims, via [The Edinburgh Declaration](#).

The draft [Scottish Biodiversity Strategy 2045](#) –‘Tackling the Nature Emergency in Scotland’ was published in December 2022, Scottish Government’s response to the nature crisis. The Strategy sets out clear ambitions for Scotland to be Nature Positive by 2030, and to have restored and regenerated biodiversity by 2045. The strategy was published in draft form to incorporate the outcomes from COP15 and to meet the international obligations. In December 2023 a [consultation](#) on the Scotland’s Strategic Framework for Biodiversity, including a first 5 - year Delivery Plan for Scottish Biodiversity Strategy and elements of the Natural Environment Bill.

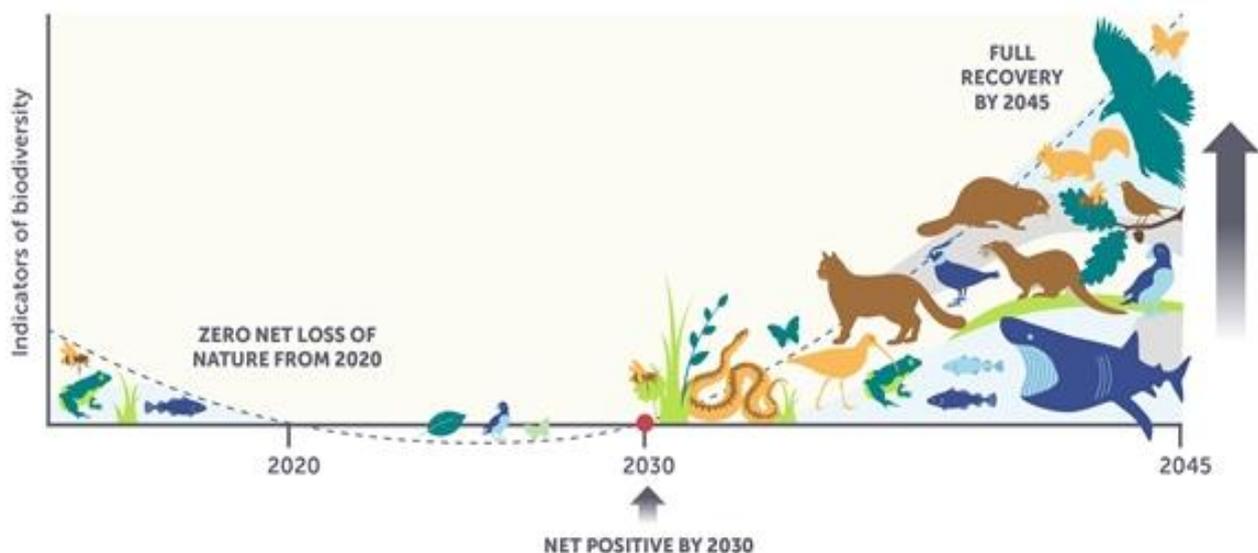


Figure 1: A [Nature Positive](#) Scotland by 2030, adapted from the Global Goal for Nature.

The strategy contains 26 of the most urgent priority actions which will put us on track for halting the loss of biodiversity and being nature positive by 2030.

These actions will:

- Accelerate restoration and regeneration.
- Expand and connect protected areas and improve their condition.
- Support nature-friendly farming, fishing, and forestry.
- Recover and protect vulnerable and important species.
- Generate the investment needed to support nature recovery.

The vision by 2045

“Scotland will have restored and regenerated biodiversity across our land, freshwater, and seas. Our natural environment, our habitats, ecosystems, and species, will be diverse, thriving, resilient and adapting to climate change. Regenerated biodiversity will drive a sustainable economy and support thriving communities and people will play their part in the stewardship of nature for future generations”.

By 2045 across our landscape:

- **Ecosystems** will be diverse, healthy, resilient and deliver a wide range of ecosystem services.
- **Protected areas** will be larger, better connected and in good condition.
- The **abundance and distribution of species** will have recovered and there will be no loss of diversity within species.
- **Scotland’s internationally** important species will have increased in numbers and have healthy resilient populations.
- **Natural capital** will be embedded in policy making.
- **Nature-based solutions**, such as tree planting, peatland and blue carbon habitat restoration, will be central to our efforts to deliver NetZero and adapt climate change.
- **Harmful invasive non-native species** will be managed so that established INNS no longer degrade native habitats and species or impede their restoration and regeneration.
- **Biodiversity** as a concept will be understood and valued across the population and embedded in educational curriculums.

The Nature Conservation (Scotland) Act 2004 sets measures to conserve and protect our natural heritage and places a duty on public bodies to further the conservation of biodiversity consistent with the proper exercise of their functions. The Wildlife and Natural Environment (Scotland) Act 2011 places a legal obligation on all public bodies to report upon their delivery of this duty. We have produced a [Biodiversity Duty Implementation Plan](#) and [Biodiversity Duty Report](#) in response to this duty. The [Scottish Biodiversity List](#) sets out the flora, fauna and habitats considered by Scottish Ministers to be of principal importance for biodiversity conservation.

Other strategies and plans of a specific relevance to the Biodiversity Strategy include:

- [Scotland’s National Strategy for Economic Transformation](#)
- [The Environment Strategy for Scotland Vision](#)
- [The Climate Change Plan](#)
- [Scotland’s Blue Economy](#)
- [Scotland’s Land Reform Bill](#)
- [2070 Vision for Forestry](#)
- [National Planning Framework \(NPF4\)](#)
- [Scotland’s Land Use Strategy](#)
- [Scotland’s National Peatland Plan](#)
- [Scotland’s Pollinator Strategy](#)

Local context

The South Lanarkshire [Community Plan](#) 2022-2032 is prepared by key public sector organisations in partnership with communities. It provides the overarching plan for the area. Its vision and priorities are reflected in the South Lanarkshire Single Outcome Agreement and the corporate plans of public bodies within the South Lanarkshire Biodiversity Partnership. The [Clydeplan](#) (Glasgow and Clyde Valley Strategic Development Plan), the South Lanarkshire [Local Development Plan 2](#) (LDP2) and [National Planning Framework 4](#) (NPF4) take cognisance of the importance of biodiversity. Supplementary Guidance, [Natural and Historic Environment](#) and [Green Networks and Greenspace](#) provide guidance in relation to biodiversity to developers, planners, and communities.

NPF4 is a long-term plan looking to 2045 that guides spatial developments, sets out national planning policies, designates national developments and highlights regional priorities. It replaces NPF3 and the Scottish Planning Policy. NPF4 now forms part of the statutory development plan, along with SLLDP2 and supporting planning guidance. From February 2023 planning applications will be assessed against these documents. As a result of the adoption of NPF4, The Clydeplan will no longer part of the development plan, but there will be a Regional Spatial Strategy in due course. Whilst not statutory it will contain many of the same things as the Clydeplan, including Nature Networks.

The NPF4 highlights six overarching spatial principles that should be applied to support the planning and delivery of:

- **Sustainable places**, where we reduce emissions, restore and better connect biodiversity. [Nature.Scot - developing nature guidance.](#)
- **Liveable places**, where we can all live better, healthier lives
- **Productive places**, where we have a greener fairer and more inclusive wellbeing economy.

NPF4 Policy Principles relevant to this strategy include:

- **Policy 3: Biodiversity** - To protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks.
- **Policy 4: Natural Place** - To protect, restore and enhance natural assets making best use of nature-based solutions.
- **Policy 5: Soils** – To protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development.
- **Policy 6: Forestry, woodland and trees** – To protect and expand forest, woodland and trees.
- **Policy 7: Greenbelts** – To encourage, promote and facilitate compact urban growth and use the land around our towns sustainably.
- **Policy 9: Brownfield, vacant and derelict land** – To encourage, promote and facilitate the reuse of brownfield sites and help reduce the need for greenfield development.
- **Policy 20: Blue and Green infrastructure** – To protect and enhance blue and green infrastructure and their networks.
- **Policy 22: Flood risk and water management** – To strengthen resilience to flood risk.

Other strategies and plans of a specific relevance to the biodiversity strategy include:

- [Sustainable Development and Climate Change Strategy](#)
- [South Lanarkshire Biodiversity Duty Implementation Report.](#)
- [The Carbon Management Plan](#)
- [Council Plan 2022-2027](#)
- [SLC State of the Environment Report](#)
- [Firth of Clyde Biosecurity Plan](#)
- [SLC Food Growing strategy](#)
- [Green Network Blueprint Our Blueprint - GCV Green Network](#)

Our strategic approach to biodiversity

The previous South Lanarkshire Biodiversity Strategy (2018-2022) used an ecosystems approach which aimed to conserve at a habitat wide scale over a long period of time. Building on the experiences and challenges of developing and implementing this, the new strategy takes a pragmatic and proportionate approach to biodiversity conservation. It sets outcomes and actions articulated through the work of the South Lanarkshire Biodiversity Partnership.

The strategy has cognisance of developments related to biodiversity at a national and local level, including:

- Ecosystem restoration.
- Ensure we secure positive effects for biodiversity from National Planning Framework 4 (NPF4).
- Map and establish a Nature Network throughout South Lanarkshire, connecting nature-rich sites, restoring areas and encourage environmental projects through a series of areas of suitable habitat, habitat corridors and stepping-stones.
- Support regional and national approaches to protect nature, providing local benefits to wildlife and people.
- Expand, protect and monitor our designated sites working towards the national 30x30 ambition.
- Protect and enhance the potential of our National Nature Reserve (NNR) as a key asset for increasing ecological connectivity.
- The prevention, control, and removal of invasive, non-native species.
- The Scottish Biodiversity priority list of species and habitats.
- Report potential pathogens and disease in wild bird populations.
- Support nature-based education, skills, and volunteering.
- Continue to enhance woodland connectivity and canopy cover.
- Continue to protect and enhance our peatlands.

The vision for the South Lanarkshire Biodiversity Strategy:

The future environment of South Lanarkshire will consist of a suite of robust ecosystems which can adapt to climatic changes without the wide scale breakdown of local ecosystem services, habitat fragmentation and species extinctions.

Where we have:

- A species rich network of habitats, abundant in wildlife that is enjoyed and respected by people.
- Ensuring climate change resilience; resistance to invasive species; forming a foundation for ecosystem services; supporting healthy lifestyles and a vibrant, sustainable economy.
- People will be able to easily access, learn about and engage with their local biodiversity directly contributing through conservation to protect and enhance it.

Taking an ecosystem approach

An ecosystem approach aims to protect individual species and habitats by conserving the whole of the environment in which they are found. This benefits not only wildlife, but humans too, through the maintenance of ecosystem services.

“Ecosystem” means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit”.

We take an ecosystem approach as it provides a framework for considering whole ecosystems in decision making, and for valuing their services to help ensure that society can maintain a

healthy and resilient natural environment now and for future generations. Our approach builds on traditional conservation attitudes and recognises links between land, water, air, and biodiversity. Following an ecosystems approach means understanding these connections and taking account of ecosystem services in how we manage land and freshwater.

An ecosystem approach can help to:

- Interconnect across landscapes, so we must consider broad scale as well as local.
- Takes account of how nature works and the benefits (ecosystem services) that nature provides people. These range from food and water to flood and climate control, recreation, and mental well-being.
- Involves people in decision-making, both those who benefit from nature and those who manage land and freshwater.
- Saves money by allowing nature to work for people rather than relying on human solutions.
- Promotes collaboration and efficiency across different policies and plans.

The Scottish Biodiversity Strategy applies an ecosystem approach to meeting its biodiversity targets. Protecting the land on an ecosystem approach can allow us to highlight, protect and expand our nature networks to improve ecological connectivity across the region.

Natural capital and ecosystem services

Natural capital is the world's stock of natural resources. This includes air, water, minerals, and all living things. The natural resources underpin our society and economy because they provide a wide range of benefits: pollution removal, carbon sequestration, flood management. These benefits are often known as 'Ecosystem services.'

Ecosystem services can be split into four groups: supporting, provisioning, cultural and regulating:

- **Provisioning services:** products obtained from ecosystems (food, water and minerals, fuels).
- **Regulating services:** benefits obtained from the regulation of the ecosystem services (climate, air quality and carbon sequestration).
- **Cultural services:** nonmaterial benefits to people from ecosystems (aesthetic values and recreation).
- **Supporting services:** these are necessary to produce all other ecosystem services (soil formation, photosynthesis).

We can look at natural capital assets, including the physical and monetary flows of assets and the values of services that they provide, which can help us to measure aspects of the natural world and their impact upon people. Framing the natural environment in this way emphasises the need to invest in and manage this asset within safe environmental limits.

The natural environment is under constant pressure, making it difficult to balance social, economic, and environmental objectives. It is important that the value of the economic contribution that the natural environment makes is recognised and that steps are taken to sustainably manage our natural resources. It is estimated that nature is worth around £196 billion per year to Scotland's economy, for example:

- In Europe it is estimated that 84% of our 264 crops are pollinated by insects.
- In Scotland insect pollinators contribute around £43 million to the Scottish economy and that 80% of our wildflowers rely on insect pollination.
- Tourism contributes to more than £4 billion to our economy each year.

- Spending on nature-based tourism is estimated to contribute nearly 40% of all tourism spend supporting 39,000 full time equivalent jobs.
- The value of walking tourism is £533 million per year.
- Peat soils store ten times more carbon than all UK trees.
- Scottish carbon sequestration is valued at £768 million in 2018, representing 40% of CO2 equivalent sequestered in the UK.

[Scottish Natural Capital Accounts 2021](#)

This Biodiversity Strategy aims to develop natural capital in South Lanarkshire through the implementation of projects which will conserve and build ecosystem services and raise awareness of the value of the natural environment.

Nature-based solutions

Nature based solutions (NBS) are actions to protect or enhance nature in a way that helps tackle the nature emergency and the climate emergency, whilst benefitting biodiversity and improving human wellbeing. NBS typically result in thriving ecosystems that store more carbon, help meet carbon reduction targets while providing homes for a greater diversity of plants and animals. They can also help reduce flood risk or provide much-needed shade as temperatures rise. The potential of nature-based solutions depends on a variety of factors, including habitat condition, how carbon is sequestered and the management of the land.

There are several nature-based solutions for example restoring peatland can secure and increase the amount of carbon they store, and SUDs (Sustainable Drainage Systems) can help to control surface water, water quality and flooding, as well as creating areas for biodiversity, aesthetics, and amenity value. NBS can provide ecosystem services for urban areas providing resources, regulating environments, creating habitats, cultural and social activities.

Nature Networks and 30 x 30

The Scottish Biodiversity Strategy includes a commitment to protect 30% of its land and seas for nature by 2030 and ensuring that every local authority area has a nature network to improve ecological connectivity across Scotland. The vision is that Scotland will have evolving, flexible and resilient nature networks connecting nature-rich areas allowing wildlife and natural processes to move and adapt to land use and climate change pressures. The networks will help build people's connection to nature, providing biodiversity-rich spaces that deliver benefits, and meet the priorities of local communities for nature.

Nature networks are primarily about connectivity, through protecting and managing existing habitat, restoring degraded habitat and linking everything together through the creation of new habitat in key locations. In rural situations the focus will largely be landscape scale networks across varied land uses, while in urban situations the networks and opportunities are likely to be of a smaller scale, creating permeability through barriers to nature.

The concept of nature networks has been around for some time, it has found new prominence in a Scottish context through the NPF4, the recently published Local Development Plan Guidance and the Scottish Biodiversity Strategy. In response to the national and global ecological crisis these documents have the identification, protection, enhancement and expansion of nature networks as a key principle, placing a responsibility on local authorities to consider how their plans, strategies and actions will deliver on the national priority.

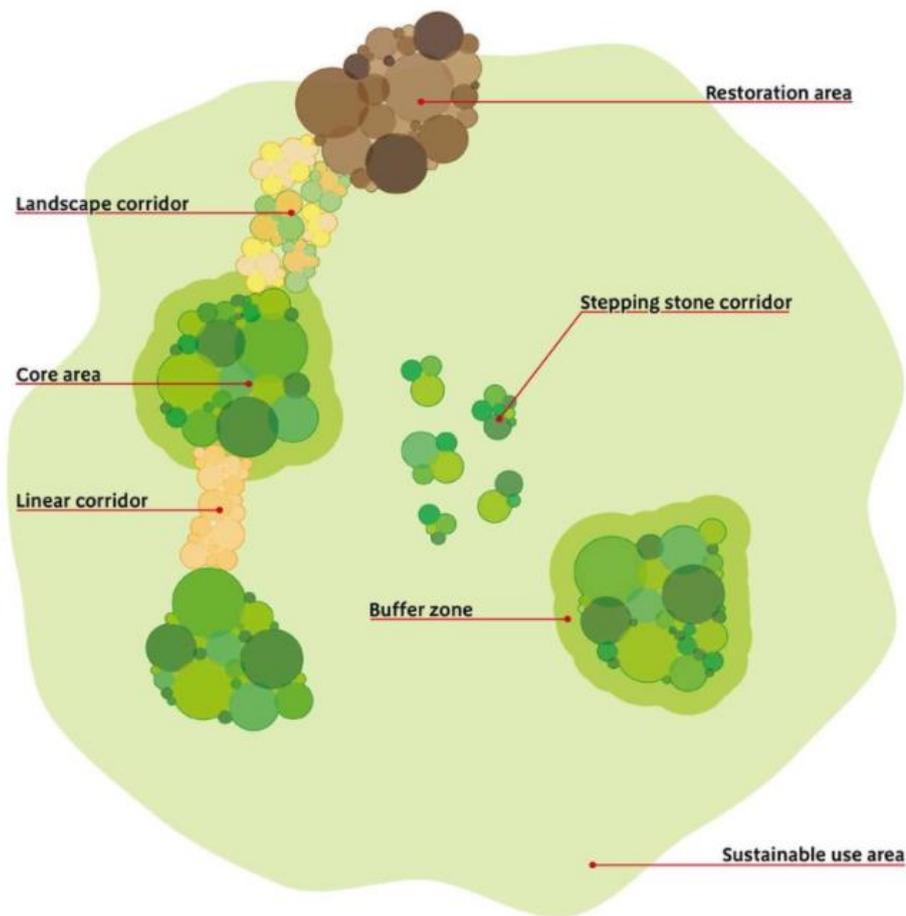


Figure 2: The typical component of a terrestrial ecological network. Source: Lawton et al.,2010. Making space for nature: A review of England’s wildlife and ecological network. Report Defra, 107.

Each local authority in Scotland will have a spatially defined nature network. The core areas in this network will include all those sites that are contributing towards 30 x 30 (protected areas and other effective area-based conservation measures). LNRs and LNCS along with areas being restored for nature, will connect and contribute towards the nature networks. The connections between these core area will be delivered primarily through ecological corridors, and where this is not possible, through ‘stepping stones’ of suitable habitat. An ecological corridor is a natural or semi-natural habitat or landscape element that facilitates the movement of individuals across landscapes, especially between otherwise isolated habitats or populations. Further information can be found in [Ecological Networks Protected Areas Review - Ecological Networks Think Piece | NatureScot](#)

SLC are working in partnership with Glasgow and Clyde Valley Green Network (GCV) mapping South Lanarkshire’s species rich areas with the aim to identify and establish nature networks throughout the region. Nature networks are a strategic, cross-boundary issue that requires a collective and consistent approach to deliver the best outcomes. The eight [Glasgow City Region](#) local authorities have produced: Developing Nature Networks for Glasgow City Region Discussion paper highlighting the key principles and constraints in developing nature networks.

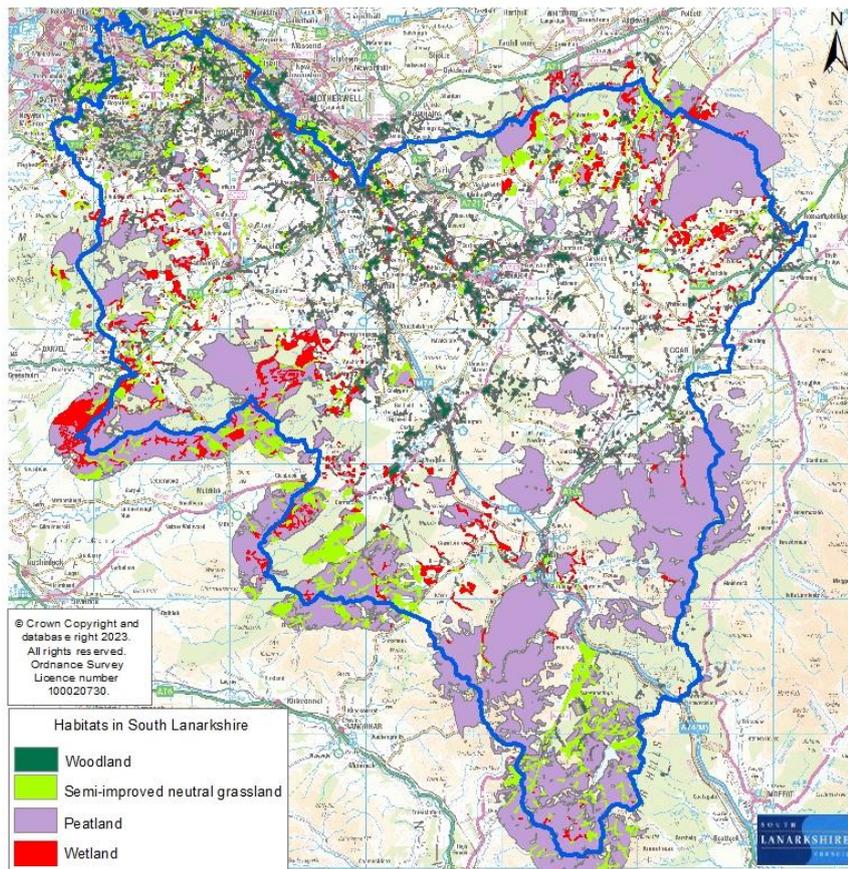


Figure 3: Map showing the coverage of our key woodland, semi-improved neutral grassland, peatland and wetland habitats throughout South Lanarkshire.

Green Infrastructure, green and blue networks

Green infrastructure is a term used to describe the networks of natural and semi-natural features that provide benefits to people. These features range from trees, woodlands (green) and ponds to rivers (blue). It can deliver multiple environmental benefits, whilst playing a key role in mitigating against the climate crisis. Developing and strengthening green infrastructures will underpin ecosystem services and contribute to healthy and resilient ecosystems.

Green networks refer to the connected areas of green infrastructure and open space which together form an integrated and multi-functional habitat network. Green networks help define the landscape, providing links with the countryside and allowing movement of people and wildlife, creating opportunities for access to the outdoors.

The term 'green infrastructure' is closely related to the natural capital concept, it focuses on the spatial arrangement of natural features as a network. Actions to enhance can take many scales from individual neighbourhoods to the wider landscape.

To support this approach SLBS continues to include actions to enhance and protect its green infrastructure, green and blue networks, with an emphasis on the importance of collaborative and partnership working across different habitat types to increase connectivity.

Integrated habitat networks form a key component of SLBS's green networks where we aim to:

- Protect our woodland resource, create new woodlands and continuing to plant trees in urban parks and greenspaces.

- Improve LNRs, greenspaces and urban parks for biodiversity. Using appropriate measures such as reduced grass cutting and managing to create habitats such as nectar borders and berry hedges to benefit bees and other species.
- Improve vacant and derelict land for wildlife.

Green networks are therefore more about delivering multiple environmental, social and economic benefits, while nature networks are focused on benefitting habitats and or species. In some situations the benefits to people and nature may occur in the same location for example: a river corridor that acts as an access and habitat corridor.

Landscape Scale Conservation

Landscape scale conservation seeks to understand the flow of ecosystem services and consider other land uses, to deliver benefits for biodiversity and people. The strategy needs to consider the landscape scale which our priority species and habitats exist and deliver actions that contribute to wider conservation outcomes, to enhanced biodiversity which underpins ecosystem services, improved connectivity of natural places and to create a natural environment resilient to the threats of climate change, invasive species, habitat fragmentation, pests, and diseases.

Chapter 3: Our ecosystems and challenges

This Biodiversity Strategy focuses on six ecosystems which are of the greatest importance within South Lanarkshire:

- Freshwater and Wetlands
- Lowland and farmland
- Peatland
- Upland
- Urban
- Woodland

Five cross cutting challenges have been identified:

- Climate change
- Soils and geology
- Invasive, non-native species
- Key sites
- People and nature

The cross-cutting themes do not have associated outcomes and actions plans therefore actions have been incorporated within ecosystem action plans where possible.

Climate change

The Global Climate Emergency and the Nature Emergency are twin reinforcing crises: the actions we take to address each are fundamental to our wellbeing and survival as a species. We need to accelerate and scale up our efforts to drive a landscape scale recovery, to restore and regenerate biodiversity across our land and freshwater, linking our ecosystems throughout South Lanarkshire to neighbouring local authorities. Scotland's wildlife has a vital role in strengthening ecological health and helping us to build resilience in the face of the twin crises.

In January 2023 NatureScot published a report on [Scotland's wildlife struggling to recover from climate change and biodiversity loss](#), highlighted that Scotland's birds, mammals, butterflies and moths are struggling to recover as the twin crises of biodiversity loss and climate change take effect. The abundance of the 2803 Scotland's marine and terrestrial species have stabilised at levels similar to the 1990's, but well below historic populations.

In 2023, the fourth [State of Nature Scotland Report](#) was published highlighting that the abundance and distribution of Scotland's species has on average declined over recent decades and most measures indicate that this decline has continued in the most recent decade. There is no let-up in the net loss of nature in Scotland.

Understanding the state of nature is a starting platform for tackling losses. The social and economic consequences of living in a nature-depleted country are immense. They include impacts on human health and wellbeing, alongside direct costs associated with lost and damaged ecosystems services. For example, recent years have seen severe flooding in Scotland aggravated by poor habitat management, increased urban developments and climate change. Active investment to prevent damage to restore species and ecosystems is less costly than bearing the costs of continuing degradation.

The key findings in the report included:

- Average 15% decline in species abundance since 1994.
- 11% of Scottish species are threatened with extinction from Great Britain
- Strong decreases in plant and lichen distribution, since 1970.

- 49% decline in average abundance of Scottish seabirds.
- Average 15% increase in the distributions of invertebrate species, driven by climate change.

Climate influences the landform processes directly shaping our hills and rivers and underpins our habitats, ecosystems and landscapes. Climate change and extreme weather events have already impacted on many aspects of our natural and human environment, including agriculture, forestry, transport, water resources, energy demand and human health. Some habitats will be affected directly, but often climate change will alter intricate ecological balances. Many of Scotland's species are adapting to specific climatic conditions, meaning that climate change is projected to have strong effects. For example, the frequency of fires in woodland and peatlands is predicted to increase, these ecosystems play a crucial role in carbon storage, flood alleviation and water quality, whilst delivering significant biodiversity benefits.

Building ecological resilience will enable biodiversity to respond and adapt to changes brought about by climate change. The natural environment can reduce the potential effects of climate change on communities by reducing the severity of flooding, absorbing and storing carbon and providing resistance to new pests and diseases.

Many public sector organisations actions contribute to reducing the effects of climate change by enabling adaptation of our natural systems. Actions outlined throughout this strategy such as the conservation and improvement of peatlands will hopefully make a contribution to addressing the impacts of climate change.

Soils and Geodiversity

Soils underpin all ecosystems, including aquatic habitats, many organisms have co-evolved with the soils in their environment; damage to the structure and composition of soils can have profound implications for the entire ecosystem. Geology, climate and land use practices interact to form the landscape and habitats of South Lanarkshire, and the wildlife they support. Cultural and archaeological heritage can also be damaged when soils are disturbed. At a local level, erosion, compaction, contamination, and damage to soil structure can occur at significant levels; it is important to have mechanisms in place to monitor and protect soils where possible.

Biodiversity is fundamentally linked to underlying geological features. The term 'geodiversity' or geological diversity, encompasses rocks, minerals, fossils, soils, sediments, landforms, and their processes; all of which are the foundation for biodiversity. To make progress with biodiversity, our understanding of geodiversity must increase to improve the management of nature. For example, managing our amenity grasslands to benefit wildlife requires soils with low nutrient levels to suppress the growth and dominance of grass species and increases the growth of wildflowers.

[Scotland's Geodiversity Charter](#) (2018-23) addresses the benefits of recognising the value of geodiversity, outlining its relevance and the benefits it delivers to biodiversity through support of habitats and ecosystems. It aims to promote integration of geodiversity within the ecosystem approach and to be acknowledged through policy and guidance documents at national and local level.

Cross-cutting themes action plan

Issues relating to the following cross-cutting themes can be applied to every ecosystem in this plan: outcomes and actions have been identified for the following three themes.

Invasive, non-native species (INNS)

INNS are a major driver of biodiversity loss globally. Impacts include predation, competition, hybridisation, pathogen transfer and habitat degradation. Despite recent progress in policy and legislation the threat from INNS to biodiversity is intensifying significantly in Scotland. Indicators

show an increasing spread of 190 established INNS across terrestrial, freshwater, and marine environments in the UK during the last six decades. There has been no reduction in the rate of new-non-native species, with evidence that climate change and INNS will continue to impact biodiversity in a negative way, as species established in the south and spread north.

People have introduced species to Scotland from other countries for the benefit of farming, forestry and horticulture. Although the majority of these do not cause issues, a small proportion designated as INNS are a significant threat to native wildlife and can have economic and social impacts. Some species are difficult to manage and eradicate.

A major part of managing INNS is being aware of potential species of risk that may enter the UK and employing biosecurity measures to prevent them becoming problematic. Various organisations in the country take responsibility for this; members of the biodiversity partnership will be made aware of any future issues and will be able to act as appropriate.

In South Lanarkshire, priority species for monitoring and control are Japanese knotweed and giant hogweed. Also of interest are Himalayan balsam and rhododendron. Chemical and physical control of various species takes place across the area.

INNS records and treatment in South Lanarkshire.

INNS Records	Number
Total number of INNS records	590
Records on SLC land	492
Records on private land	98
Sites being treated	530

Source: South Lanarkshire Council [State of the Environment Report](#) 2023.

Making progress

Since the last Biodiversity Strategy, we have continued to highlight the problem of INNS within South Lanarkshire. We have created a guide to INNS on the SLC webpage [Information on Invasive Non-Native Species](#) providing information on identification, together with links to contacts for help and guidance on monitoring and control. A position statement has been produced where the council will respond to reports of INNS on their land and consider control of giant hogweed and Japanese knotweed. We also maintain a database of priority one species, monitor, and evaluate control methods and distribute records to relevant organisations.

Examples of controlling INNS within South Lanarkshire.

As part of the Nature Restoration Fund priorities, South Lanarkshire's Grounds Services Team undertook a programme of rhododendron control at Calderglen Country Park, delivering biodiversity gains by the removal of a priority INNS. This was also an important measure for the ongoing sustainability of important woodland, as some rhododendron plants were shown to host the fungal pathogen *Phytophthora ramorum*. Monitoring and treatment of regrowth will be an ongoing priority for the foreseeable future. The Countryside and Greenspace Team (CAG) work with many volunteers and local community groups throughout our LNRs and local greenspaces to help monitor and control the spread of INNS.

Blantyre, Bothwell and Uddingston LNR is centred around the River Clyde, as a result there are significant issues with INNS - such as Japanese Knotweed and Himalayan Balsam. Supporters of the LNR have been assisting with a programme of Himalayan balsam removal at certain key sites, to observe the effects of this control on native species. Rhododendron is also a problem in the SSSI woodland, so seasonally appropriate control is undertaken too. The SLC Ground

Services team have experimentally undertaken some larger scale control of Japanese Knotweed using herbicide foam application.



Photo 1: Showing the density of INNS Japanese Knotweed along the River Clyde.

Photo 2: Removing Japanese Knotweed along the River Clyde at Bothwell LNR.

Our next steps

We have identified the key issues within this section and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 1: Invasive non-native species are monitored and controlled.

Action	Lead partner	Timescale
Raise awareness and encourage reporting of INNS sightings	SLBS (INNS sub-group)	Ongoing
Control INNS where feasible	SLBP, SLC, landowners	Ongoing
Investigate the potential for a cross-boundary, multi-agency approach to dealing with INNS	SLBS (INNS sub-group), NS	Ongoing

Key sites

Protected areas are key pillars of nature conservation, where biodiversity is rare, sometimes endangered and globally significant. They are legally designated sites where natural features including species and habitats are safeguarded and managed for the benefit of wildlife and people.

The latest State of Nature Report 2023 highlights that while 18% of Scotland's land is currently protected, 65.2% of the features for which these areas are protected are in favourable condition, down from 67.5% on 2007. Only 3% of native woodland are in favourable condition and 80% of our peatlands are damaged and releasing carbon equivalent to an estimated 13% of Scotland's terrestrial emissions. The report discusses the pressures affecting our designated sites, with the top pressures being INNS, overgrazing and disturbance from recreation.

The Scottish Government has committed to protect at least 30% of Scotland's land for nature by 2030. NatureScot has been undertaking a co-design process with stakeholders to develop a framework for 30x30 in parallel with a framework for delivering nature networks. A new monitoring and surveillance strategy for protected areas is also being developed in Scotland.

By 2030 the Scottish Biodiversity Strategy aims to:

- Expand our protected areas to at least 30% of the land surface.
- Ensure that every local authority area has a nature network of locally driven projects improving ecological connectivity across Scotland.
- Ensure positive effects on biodiversity from NPF4 and that Nature Networks are integrated into the urban fabric, ecologically coherent and prominent in our school, health, neighbourhood and community spaces. Development proposals will contribute to the enhancement of biodiversity including, where relevant, restoring degraded habitats and building and strengthening nature networks.
- Realise the potential of NNR as key assets for building landscape-scale approaches and increasing nature connectedness.

Designated sites in South Lanarkshire

There are many different designations for preserving ecologically important habitats and species in South Lanarkshire. These range from international designations such as Special Protected Areas (SPA) and Special Areas of Conservation (SAC) to locally designated sites, including Local Nature Reserves (LNR). South Lanarkshire is home to one SPA, Muirkirk and North Lowther Uplands covering 26,832ha the SPA is an extensive area of moorland extending south near Darvel in South Ayrshire to near Kirkconnel in Dumfries and Galloway. Four areas of the SPA lie within SL an area of outstanding interest for its variety of upland habitats and breeding birds. SL is home to seven SACs, these together with the SPA are called [Natura sites](#) and are internationally important for threatened habitats and species.

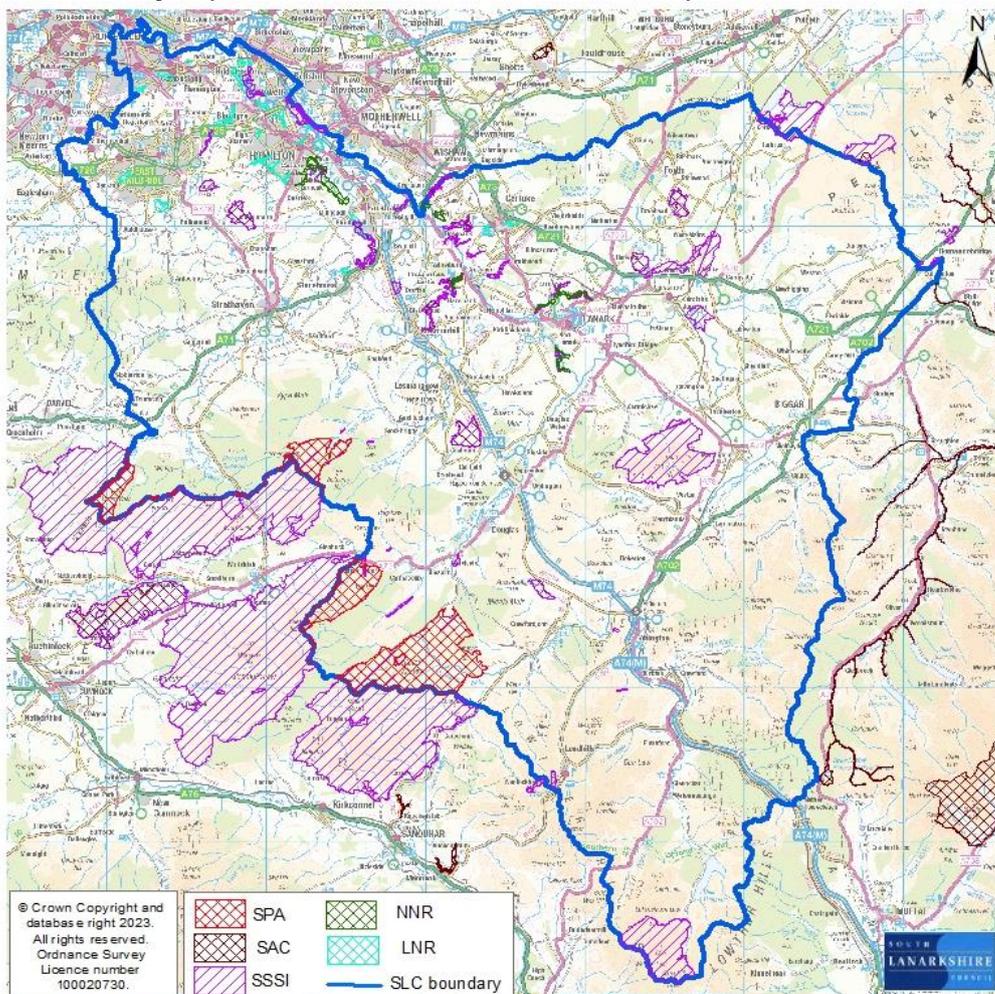


Figure 4: Map showing the location, area and types of designated sites within South Lanarkshire.

The seven Special Areas of Conservation (SAC) within South Lanarkshire are:

- Braehead Moss
- Clyde Valley Woods
- Coalburn Moss
- Craigengar (with West Lothian)
- Cranley Moss
- Red Moss
- Waukenwae Moss

South Lanarkshire is home to one National Nature Reserve (NNR): The Clyde Valley Woodlands one of Scotland's oldest and richest forest supporting ancient oak woods supporting a rich diversity of birds, mammals and invertebrates. SL also supports 45 Sites of Special Scientific Interest (SSSI) spread throughout the region. SSSIs are chosen by virtue of the special interest of any of their flora, fauna, geological or physiological features, to represent the best national and regional examples of natural habitat, physical landscape features or sites of importance for rare or protected species. Information on all designated sites in South Lanarkshire and their condition is available from [NatureScot Sitelink](#).

Designated sites are important, but we must be sure that key sites on all scales are recognised, monitored, protected and appropriately managed. As human impacts on the environment increase, many valuable habitats have become fragmented. The establishment of a network of designated sites throughout SL including Local Nature Conservation Sites (LNCS) can help to ensure that local priority species and habitats are protected as well as contributing to wider ecological networks. Similarly, there is a need to recognise geologically important sites that are not designated but are important for their local geodiversity.

Making Progress

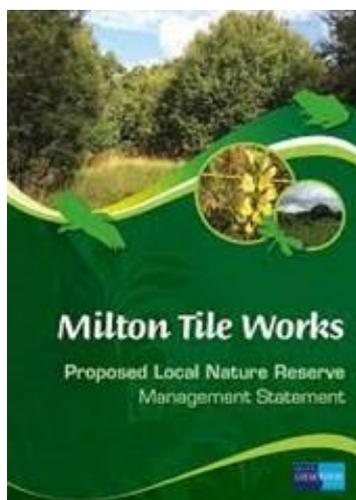


Photo 3: The front cover of one of our new LNR's Management Statements.

In April 2022, SLC and NatureScot designated a total of 17 Local Nature Reserves (LNR), with 16 new sites adding to the existing one at Langlands Moss. Covering 610 hectares in total, these encompass a broad spectrum of habitats including raised bog, ancient broadleaved woodland, riparian woodland, grasslands, wetland, and freshwater. LNR's are locally important areas of natural heritage, usually close to our towns and cities.

Each site has a draft management statement prepared by SLC, which provides information on why it is important in terms of the reserve's natural history, historic environment and to the local community, the statements also provide general management aims to preserve the key features and enhance the site for biodiversity. Further information on each site can be found on the [Council webpage](#), each draft management statement will be developed into a full site management plan in partnership with NS and the local communities.

The new local nature reserves are:

- Backmuir wood, Hamilton
- Blantyre, Bothwell and Uddingston
- Cadzow Glen, Hamilton
- Fernbrae Meadows
- Greenhall, Milheugh and Barnhill, Blantyre
- Hamilton Low Parks
- Holmhills Wood, Cambuslang
- James Hamilton Heritage Park, East Kilbride
- Jock's Burn, Carluke
- Langlands Moss, East Kilbride
- Milton, Carluke
- Morgan Glen, Larkhall
- Mossneuk, East Kilbride
- Neilsland and Earnock, Hamilton
- Stonehouse Park, Stonehouse
- Udston and Glenlee Woods, Hamilton
- Westburn Marsh, Cambuslang

Our next steps

We have identified the key issues within this section and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 2: Designated and locally important sites are conserved.

Action	Lead partner	Timescale
Nationally designated sites are monitored.	NS	Ongoing
Actions are taken to maintain and /or improve the condition of nationally designated sites.	NS	Ongoing
Manage and monitor all LNR's to benefit biodiversity.	SLC	Ongoing
Continue to survey and assess potential Local Nature Conservation Sites (LNCS), work with planning to establish designation.	SLC	Ongoing
Establish a list of important / notable species in South Lanarkshire to guide conservation and habitat mitigation.	SLBP	2027
To establish and run priority species and / or habitat project every two year.	SLBP	Every two years
Continue to progress a variety of projects that benefit species / habitats of importance within South Lanarkshire.	SLBP	Ongoing
Investigate land coverage of designated and key sites within South Lanarkshire, with aim to expand to 30% of land use.	SLC, NS, GCV	Ongoing
Continue to work with GCV mapping key habitat sites, identify and create nature networks throughout South Lanarkshire.	SLBP, SLC, GCV	Ongoing

Investigate the development of a Geodiversity Plan and site designations that identify locally important sites.	NS, SLC	Ongoing
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People and nature

Public engagement, wider education and a skills development system promote increased understanding of our relationship with nature and positive action to secure its sustainable use. Local authorities play key roles in conserving, restoring, and reducing threats to biodiversity, in meeting people’s needs implementing biodiversity protection actions, in monitoring and reporting.

Mainstreaming biodiversity ensures that support is in place at all levels. To deliver the awareness, and uptake of our goals for biodiversity across the whole of society, it is important that decision makers understand and value local biodiversity and to make informed decisions when setting policies.

Community engagement, conservation projects and legislation can have a positive impact on nature and the wider environment. Restoration projects, for native woodland, peatlands and species rich grassland can be scaled up to work across Scottish landscapes. Restoring these habitats will have a clear benefit for nature but can help us mitigate and adapt to the impacts of climate change and provide many benefits to people including for health and wellbeing. Biodiversity can bring communities together and give people a sense of place. It is therefore crucial that everyone is aware of biodiversity and its value.

Making progress

There is a strong track record of partnership working in South Lanarkshire in which biodiversity has a key role. Many of our designated Local Nature Reserves have a dedicated “friend’s” community groups attached to them. These groups are an important link within the community and are invaluable in protecting and promoting biodiversity through community engagement, accessing funding opportunities, carrying out practical conservation work to providing ecological data for national surveys. These groups work in partnership with many national organisations and engage in nation-wide biodiversity projects with many different organisations including Butterfly Conservation, Buglife, NatureScot, Froglife, Bat Conservation, Green Action Trust, Plantlife, The Woodland Trust and Keep Scotland Beautiful.

South Lanarkshire continues to work with volunteers and community groups, supporting various types of work. The average time spent volunteering each year is 4746 days (2018 to 2023), which equates to £474,600 annually (based on £100 per day). This is an under-representation of the work carried out in South Lanarkshire by volunteers as we do not receive information from all our groups every year. Events, activities, training, and projects within South Lanarkshire are promoted on the [South Lanarkshire Countryside Rangers Facebook page](#).

In 2021, CAG produced a draft report, celebrating the achievements of the many volunteer groups who have worked in South Lanarkshire over a period of ten years (2011 to 2021). The report found that 900 hectares of land have been improved for biodiversity and access. Work supporting biodiversity included the installation of dams along drainage ditches in the restoration of peatland to planting trees and expanding our nature networks to improving grasslands for pollinators. Many volunteers have a keen interest and extensive knowledge of flora and fauna, from butterflies, moths, bats, dragonflies, mammals, and amphibians providing key species information for national databases.



Photo 4: Butterfly Conservation’s Bog squad volunteers searching for the large heath butterfly at Langlands Moss (BC).

Outdoor Learning

In 2022 funding obtained through NatureScot was secured to run a pilot program to support local teachers to discover one of our newly designated LNR’s in Hamilton. The pilot project worked to deliver appropriate training for the teachers from the surrounding primary and nursery schools, to make them more knowledgeable about their local greenspace and to provide them with the skills that would enable them to visit and use the area for outdoor learning, both sustainably and with confidence with their pupils. 80 children and 10 staff took part in the pilot, training included practical skills and various outdoor activities to highlight the benefits of children connecting with nature and outdoor learning. With further funding we hope to repeat on the success of this project in other LNR’s in South Lanarkshire.

Our next steps

We have identified the key issues within this section and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 3: People have opportunities to connect with nature.

Action	Lead partner	Timescale
Raise awareness and understanding of the issues affecting biodiversity to provide opportunities for people to engage with nature.	SLBP	Ongoing
Natural spaces are used for volunteering, citizen science, education, and health improvement.	SLBP	Ongoing
Continue to support nature-based education, skills and volunteering.	SLC	Ongoing
Community groups are involved with local site management	SLC	Ongoing
Continue with Learning Outdoors Projects linking schools with their local greenspace for outdoor learning.	NS, SLC	Ongoing

Chapter 4: Freshwater and Wetlands.

Scotland's water environment is one of our most important national assets. It contributes to the health and well-being of our country; supports a rich diversity of wildlife; and provides growth of our economy. They form important corridors for wildlife movement, whether through the channels themselves, along riparian corridors or through wetland habitat networks. They are also hugely important in terms of ecosystem services, providing drinking water, renewable energy generation through hydroelectric schemes and recreation opportunities such as canoeing, fishing and swimming. Maintaining this resource is vital and it's critical that we manage the water environment to ensure the needs of society, economy and wildlife can be met and maintained for future generations.

South Lanarkshire is different from many other parts of Scotland in that it has many rivers and burns, but few lochs and ponds. The dominant influence of the River Clyde catchment gives the area its distinctive river valley landscapes. The freshwaters of South Lanarkshire are very important from a wildlife perspective, supporting important salmon and trout populations along with rare populations of lamprey and eel. Allowing space for natural river processes such as flooding to occur and for river channels to evolve naturally is important in maintaining their biodiversity.

A network approach recognises the importance of using an integrated, landscape scale methodology for example: river basin management on a catchment scale. SEPA's third [River Basin Management Plan](#) (RBMP3 2021-27) sets out a framework for protecting and improving the benefits provided by the water environment across Scotland. SEPA is responsible for developing and delivering the RBMP actions, by working with partners to restore rivers and improve how they manage surface water to create attractive and accessible blue-green river corridors and spaces within communities that can be used for active travel and recreation to help improve health and wellbeing. The [Water Environmental Hub](#) highlights potential projects for local authorities to explore the feasibility of delivering these river restoration projects.

The [Water Framework Directive](#) classifies water bodies based on their quality, habitat condition, water flow and levels, and the presence of invasive non-native species. Maintaining or improving the ecological quality of water bodies and their surrounding habitats is a priority.

Key issues

The key issues facing freshwater ecosystems, and the challenges and opportunities they present are set out in the table below.

Cross-cutting theme	Challenges	Opportunities
Key sites	The freshwater ecosystem is an irreplaceable biodiversity asset that cannot be recreated if lost.	Improve the biodiversity quality of the ecosystem. Freshwater systems are part of the LNCS designations assessment process.
Invasive non-native species	Himalayan balsam, Japanese knotweed and giant hogweed thrive on the banks of rivers and spread easily downstream. American signal crayfish impacts native species and habitats.	Use existing information on the location of INNS to co-ordinate control from upstream sites
Soils and geology	Bankside erosion	Exposed riverine sediments (sand and gravel) and banks provide

	Siltation Pollution and eutrophication	important habitat for invertebrates and breeding birds
Climate change	Changes to water level and flow Hydropower schemes affect water dynamics Acidification	Natural floodplain management: freshwater habitats store water and help control the effects of flooding
People and nature	Urbanisation of habitat such as culverting streams	Recreational use Citizen science volunteering schemes provide valuable information

Making progress

South Lanarkshire Council CAG team continues to work within our LNR's and greenspaces monitoring and removing INNS along waterways. Volunteers work with CAG along sections of the River Clyde in Bothwell and the Avon Water, in Hamilton removing Himalayan balsam and Japanese Knotweed. Volunteer's and members of the CAG team regularly monitor and maintain our freshwater ponds within our designated sites removing overhanging branches and maintaining open water by removing dominated vegetation. Biological data is shared with the British Dragonfly Society and Amphibian and Reptile Conservation.



Photo 5: Monitoring and recording dragonflies and damselflies at our LNR's.

In 2022, SLC identified three LNR's to undergo a Hydrological and Wetland Feasibility Study: Mossneuk, Langlands Moss in East Kilbride and Low Parks SSSI in Hamilton. The aim of the study was to identify the ability to improve the hydrology of the three sites supporting wetland and peatland habitats, to benefit biodiversity and mitigate the impacts of climate change including flooding and increased rainfall. The hydrological study included an ecological appraisal and a natural capital assessment.

Surface Water Management Plans were written recommending how the sites could be improved in terms of improving the capacity of the sites to retain water and cope with increased rainfall

and surface water to creating functioning wetland habitat mosaics that are of value to biodiversity.



Photo 6: Langlands Moss Local Nature Reserve one of the sites identified for hydrological feasibility study in 2022.

The Biggar Water Restoration Project.

The Heritage Funded Biggar Water Restoration Project lead by the [Tweed Forum](#) in partnership with SEPA, SLC and Scottish Borders Council aims to restore the natural alignment and function along a 2km section of river in two key areas within Biggar. Improvements to the watercourse include reprofiling banks, planting with native trees, creating areas of open water and wetland vegetation and the introduction of large wood structures for bank protection and habitat creation. The project aims to enhance the quality of the surrounding amenity greenspace, improved public access and built in resilience to the impact of localised flooding and climate change.

The Biggar Water is part of the River Tweed Catchment. The project was based on a scoping study commissioned in 2018 by the Tweed Forum to identify sections of the Biggar Water suitable for restoration. The work aims to restore and improve the natural features and morphological functions of the river, to connect and enhance fragmented riparian habitats through supplementary planting, benefiting key habitats and species that support the Tweed Catchment.

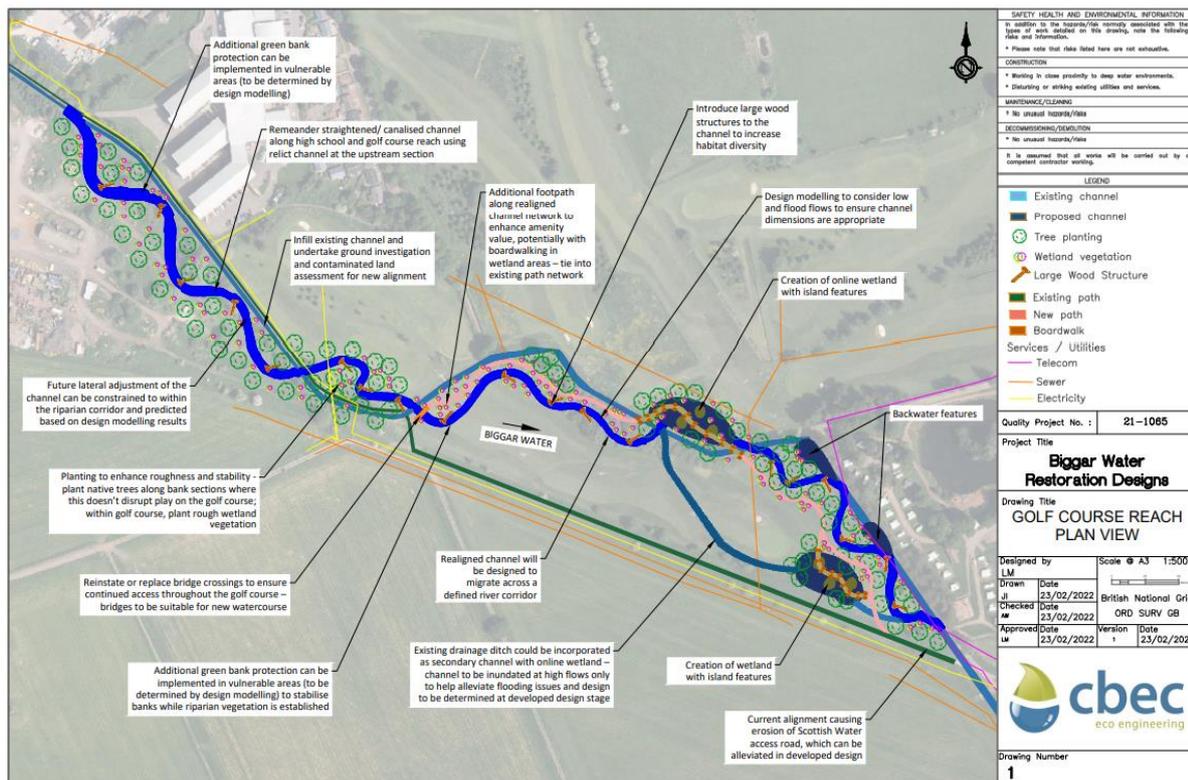


Photo 7: Map showing the proposed restoration works along the Biggar Water (Tweed Forum).



Photo 8: A visual representation of the proposed changes to the Biggar Water (Tweed Forum).

Our next steps

We have identified the key issues within this chapter and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 4: Freshwater habitats are improved and preserved.

Action	Lead partner	Timescale
Improve the ecological status of water bodies.	SEPA	Ongoing
<p>Work in partnership with Froglife to create new ponds and wetlands for nature especially amphibians. Monitor, maintain and manage for wildlife.</p> <p>Scoping report carried out in 2023 identified four sites for wetland creation and improvements:</p> <ul style="list-style-type: none"> • Langlands Moss LNR • Westburn LNR • Fernbrae Meadow LNR • Chatelherault Country Park 	SLC, Froglife	Ongoing
Continue to monitor and maintain wetlands and ponds.	SLC	Ongoing
Continue to carry out Flood Studies which may allow for Natural Flood Management measures.	SLC	Ongoing
Engage in promoting citizen science through national water monitoring schemes – for example Guardians of the river (Buglife), Upstream Battle (Keep Scotland Beautiful).	SLC, Buglife,	Ongoing
<p>To explore opportunities in urban areas for restoration projects on rivers identified in the third river basin management plan.</p> <p>Projects</p> <ul style="list-style-type: none"> • Biggar Water (part of the Borderlands project) • Kittochside (East Kilbride) • Wellshaw and Earnock Burn 	SEPA, Tweed Forum. SLC.	Biggar 2025 Ongoing
Continue to work on establishing nature network for wetland habitats in partnership with Glasgow and Clyde Valley Green Network.	GCV, SLC	Ongoing

Chapter 5: Lowland and farmland

The Scottish lowlands encompass a range of habitats including agricultural land, woodland, grassland and urban areas. These habitats often rely upon human intervention and land management to maintain their key features. This chapter of the strategy relates to areas of South Lanarkshire which are lowland in nature; areas which are typically slightly warmer and drier than the surroundings and in which the soil tends to be more fertile and productive. The mosaic of habitats and boundary features in farmed areas means that this habitat has potentially the greatest scope for biodiversity enhancement. South Lanarkshire is also renowned for its traditional orchards which support a wide range of unique biodiversity.

Various agri-environment schemes (AES) aiming to promote sustainable and nature friendly farming have been developed by the Scottish Government, the current scheme Agri-environment Climate Scheme (AECS) is designed to promote land management practices which protect and enhance natural heritage, water quality, manage flood risk and adapt to climate change. In 2020, 20% of Scotland's farmland (1.6 million ha) was in AECS agreements, the Scottish Government's Agricultural Reform Programme is devising future payment schemes for land managers, which includes targeted habitats and the desired outcomes. Future effectiveness in halting and reversing biodiversity losses will depend on the levels of funding allocated to environmental improvement through these support payments, advice, implementation and monitoring.

Key issues

The key issues facing lowland and farmland ecosystems, and the challenges and opportunities they present are set out in the table below.

Cross-cutting theme	Challenges	Opportunities
Key sites	Expansive agricultural land results in modification and fragmentation of other habitats	Rural funding schemes can provide benefit to landowners for making wildlife friendly improvements
Invasive non-native species	New species used for agriculture and their pests may cause problems	Bio-security awareness and measures to prevent future INNS
Soils and geology	Intensification of agricultural methods Nutrient enrichment and pollution Loss of exposed soil Mineral extraction	Guidance provides best management practice to reduce pollution risk Rural funding options encourage practices that reduce soil erosion The restoration of mineral sites can create land with biodiversity value
Climate change	Well-drained and uniform landscape contributes to flooding risk Changing weather and climate affects the crops that can be grown Open landscape acts as a barrier to species movement in response to changing conditions	Appropriately managed sites can contribute to flood management and carbon storage Aspects of the landscape such as hedgerows provide corridors for species movement, but need to consider open land habitat is a requirement for wading birds.
People and nature	Disturbance due to recreation	Managed recreation opportunities such as the Clyde Walkway

	Pressure from incremental urban expansion and development	Minimise the impact of new developments by identifying sustainable locations through the Local Development Plan
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Making progress

The RSPB's [Clyde Valley Wader Initiative](#)

This partnership includes around 30 upland livestock farmers, SAC Consulting and RSPB Scotland. It is focussed on developing and testing new farming and conservation management to conserve the region's important populations of wading birds in particular the northern lapwing, Eurasian curlew, common snipe, oystercatcher and redshank. The UK population of these once common species is in decline, with curlew and lapwing on the UK Red List of species most at risk, while the common snipe, Redshank and oystercatcher are on the Amber List. Scotland holds an estimated 15% of the global breeding population of Eurasian curlew.

Since 2019 RSPB staff and local volunteers have monitored 600 nests, gaining valuable data on why and where nests hatch or fail. Three meetings per year resulted in a collective understanding of the data and discussions about changes to management that can improve hatching success. This collaboration is beginning to bear fruit in 2023, for example, trial plots of brassica stubbles left fallow in spring resulted in high percentage (75%) of nests hatching. The partners feed the work back to national stakeholders to help inform national agri-environment schemes.



Photo 9: A newly hatched lapwing (RSPB).

Our next steps

We have identified the key issues within this chapter and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 5: The biodiversity value of low-lying farmland is improved.

Action	Lead partner	Timescale
As part of the Clyde Valley Wader Initiative, continue to work with the farming community to conserve important wading bird populations, by managing the agricultural grasslands and wetlands on which they depend.	RSPB	Ongoing

Promote good farming measures through funding streams that contribute to biodiversity conservation.	NS	Ongoing
Continue with Auchlochan Estate meadow management at Brackenhill by implementing fencing and conservation grazing.	FLS	Ongoing
Parkland at Mauldslie Woods is restored, monitored and maintained.	SLC	Ongoing
Monitor the evolution of the new agri-env payments through the Natural Environment Bill for opportunities to work with private landowners.	SLBP	Ongoing

Chapter 6: Peatland

Our peatlands, formed over thousands of years by the deposition of dead plant matter, are of international importance and are impossible to recreate once lost. Peatlands are a UK and Scottish priority habitat and home to an array of birds, plants, fungi, invertebrates, and micro-organisms, they are incredibly unique and biodiverse. Restoring our peatlands can help priority species like the large heath butterfly, a species restricted to wet boggy habitats, which is in decline in the UK.

Peatland restoration is a nature-based solution to the climate and nature crisis and can also help with the council's Net Zero ambitions. Healthy bogs can store large amounts of carbon, but if degraded they may emit more carbon than they remove. Healthy, functioning bogs can help mitigate the future impacts of climate change, such as increased rainfall events, by storing and slowly releasing water back into the river network.

There are a total of 69 sites listed on NatureScot's [Lowland Raised Bog Inventory](#) in South Lanarkshire, with blanket bogs, fens and mires covering large areas in the uplands.

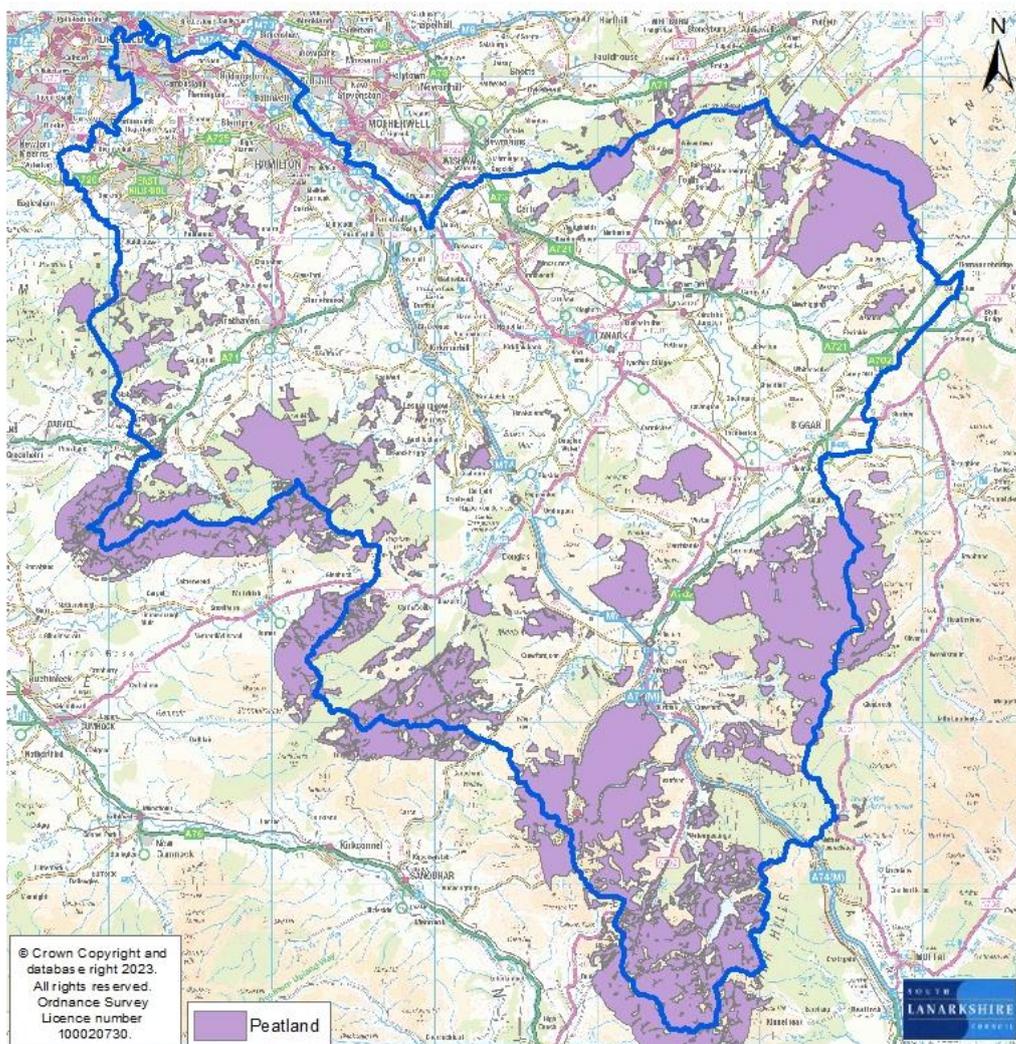


Figure 5: Distribution of priority peatland habitat (class 1 and 2) in South Lanarkshire, data source: [Soils, carbon and peatland 2016 map, NatureScot.](#)

Key Issues

The key issues facing peatland ecosystems, and the challenges and opportunities they present are set out in the table below.

Cross-cutting theme	Challenges	Opportunities
Key sites	<p>Quality of peatland on designated sites.</p> <p>Lack of knowledge of the distribution, extent, and quality of non-designated peatland sites.</p>	<p>Improving the quality of peatlands by working with landowners to ensure appropriate site management.</p> <p>Selection of relevant peatland as LNCS</p>
Invasive non-native species	<p>Species such as rhododendron invade from adjoining woodland.</p>	<p>Site management to raise water levels and help restrict growth of trees and shrubs</p>
Soils and geology	<p>Peat is extracted for horticultural use due to historic licence approvals</p> <p>Restoration of sites once extraction is complete</p> <p>Development pressures such as agriculture and renewable energy</p> <p>Drainage, erosion, eutrophication and pollution</p>	<p>There is potential to refuse further application extensions</p> <p>Sites to be restored to raised mire or bog habitat (depending on the level of peat previously milled)</p> <p>National and local policy protects peatlands</p>
Climate change	<p>The destruction of bogs contributes to climate change due to the release of carbon dioxide and methane.</p> <p>Degradation of wetland habitats contributes to flooding risk</p> <p>Afforestation and succession releases stored carbon</p> <p>Sitka spruce seeds spreading from commercial forests.</p>	<p>Peatlands store vast quantities of carbon</p> <p>Safeguard peat resources from development</p> <p>Removal of forestry plantations where a net benefit to carbon sequestration can be established</p> <p>Management to raise the water table and restrict natural tree growth</p>
People and nature	<p>Access to sites that can be dangerous due to water levels</p>	<p>Opportunities for people to explore and understand peatlands for example by visiting Langlands Moss Local Nature Reserve</p> <p>Volunteer opportunities are available with groups such as the Friends of Langlands Moss and Butterfly Conservation's Bog Squad</p>

Making progress

Langlands Moss LNR Peatland Restoration Project

In early 2020 Langlands Moss LNR underwent a dramatic transformation as part of a £202,000 peatland restoration project in partnership with Green Action Trust (GAT) and NatureScot (NS). A feasibility survey was commissioned by SLC in 2018 through NatureScot's Peatland Action Fund to determine the potential of the site for eco-hydrological restoration. A large conifer plantation stood to the north and west of the raised bog and the survey found sections of deep peat underneath this plantation. The average peat depth was found to be 139cm, with deeper pockets of over nine metres. The volume of peat equates to 298,199.6m³ with an estimated carbon content of 28,925 tonnes of carbon. With this evidence from the study, we decided to remove the large stand of conifer trees and dam the drains associated with the forestry plantation, with the aim to increase the water level in and around the raised bog.

The project involved removing an area of 20.15ha of over mature conifer trees, a protected species survey, removal of brash from the surface of the peat, the installation of twenty-one peat dams and five bunds, resulting in installing approximately 278 metres length of dams at the reserve. By felling the conifer trees and blocking the associated drainage ditches, we are allowing the water table to rise back to its natural level, preventing the underlying peat from drying out and, in time, restore the growth of sphagnum mosses to make the peat an active carbon sink once again.



Photo 10: Contractor installing peat dams at Langlands Moss LNR.

Photo 11: Showing the removal of the conifer trees and installation of dams and bunds.



Photo 12 and 13: Highlight the vegetation at the Langlands Moss LNR before and after removing the plantation conifer trees.

Restoring the peatland at the reserve will support the council's commitment to combating climate change, it will also lead to a much more diverse, attractive, and accessible recreational facility for the people of East Kilbride. In 2021, we found that some of the dams had become damaged, failing to retain the water. So, in 2022 with GAT and advice from NS we employed a contractor to reprofile the failing dams with peat.

We continue to monitor the regrowth of the vegetation on the felled conifer area through fixed-point photography, quadrats, and an annual vegetation survey. A butterfly transect runs through Langlands Moss and since the removal of the trees the number of butterflies and moths recorded at the reserve has increased significantly, including sightings of the UK BAP priority species large heath. CAG and the Friends of Langlands Moss continue to improve the reserve for wildlife, repairing any damage dams, removing scrub and trees from the peatland to improving the grasslands with the addition of wildflower seed and plugs.

Butterfly Conservation [Lanarkshire's Large Heaths and Mosses - Restoring Precious Peatlands](#)

The project launched in 2023 focusing on a cluster of peatlands sites to the north-east of Lanark including Braehead Moss SSSI, Cranley Moss SSSI and Blacklaw Moss Wood. The restoration work is aimed at re-wetting bogs so that natural flora and fauna can thrive and peat formation can take place again in the future. The work includes ditch-damming and invasive scrub removal, carried out by contractors and trained volunteers from BC's Bog Squad. The project sites will be surveyed and monitored to help improve BC's knowledge and understanding of the large heath butterfly and peatland restoration. BC are the lead partner in the project working closely with NatureScot and Forestry Commission Scotland.

Large Heath Survey 2022 / 2023 in South Lanarkshire

During the 2022 and 2023 summer seasons, Butterfly Conservation Scotland ran a volunteer-led large heath survey across lowland raised bogs in Scotland. Volunteers recorded any sightings of the butterflies and carried out habitat assessments to determine whether the bogs

could potentially support large heath. Butterfly Conservation held training session for field surveyors at Langlands Moss, Whitelee and Ardochrig.

Before the survey work BC were aware of 17 lowland raised bogs in South Lanarkshire with populations of large heath butterflies. The recent survey data showed that ten of these bogs still have the butterfly. Of the remaining seven bogs where we hadn't seen large heath for a while, we were able to re-find large heath on three bogs through volunteer sightings and the survey. Additionally, one of our volunteers found another lowland raised bog where we hadn't found the butterfly before.

Peatland ACTION

As well as work at Langlands Moss and the sites associated with the Lanarkshire's Large Heaths and Mosses project, [Peatland ACTION](#) has also funded a number of other peatland restoration projects across South Lanarkshire. This work included ditch blocking and damming at Blantyre Muir SSSI, affecting approximately 20ha, in 2019; ditch blocking and re-profiling, peat damming, and stock fencing at Waukenwae Moss SAC & SSSI, affecting approximately 70.4ha in 2020; and bare peat restoration, drain blocking and re-profiling, and hag and gully re-profiling in the Lowther Hills (including Shiel Dod SSSI), affecting approximately 192.4ha in 2021 and 44.2ha 2023.



Photo 14: A bog squad volunteer removing birch at Langlands Moss LNR (photo by A. Wilson BC).

Our next steps

We have identified the key issues within this chapter and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 6: Peatlands are protected and improved.

Action	Lead partner	Timescale
Continue peatland restoration work at Coalburn Moss SSSI identified within the 10 years plan forestry and land Scotland Active management Plan Lesmahagow	FLS, NS	Ongoing
Butterfly Conservation will continue to monitor and improve areas of peatland for large heath butterfly within South Lanarkshire.	BC, SLC	Ongoing
Butterfly Conservation's Bog Squad and volunteers will continue to improve peatlands at Langlands Moss, Braehead Moss and Blacklaw Moss Wood.	BC, SLC	Ongoing
Continue to improve the peatland at Cander Moss reserve through conservation grazing and habitat restoration work.	SWT	Ongoing
Monitor the restoration of peatland habitats that is stipulated in windfarm habitat management plans (HMP).	SLC, RSPB	Annual
Continue to restore areas of blanket bog as part of habitat management at Whitelee Windfarm (management plan formally adopted in 2020) Whitelee Forest Land Management Plan	FLS Scottish Power Renewables	Ongoing
Clyde Peatlands - Peatland officer to work with landowners to identify areas of lowland peat to be restored. https://www.gcvgreennetwork.gov.uk/clyde-peatlands	GCV, SLC	Ongoing
Continue to work in partnership with Butterfly Conservation's Bog Squad and the Friends of Langlands Moss LNR in maintaining, restoring, and monitoring the peatland within the reserve.	SLC, BC	Ongoing
Felled section at Blackgate Moss (Carnwath) to be planted with wet woodland	FLS	Ongoing
Investigate opportunities to enhance the peatland at Mossneuk LNR.	SLC	Ongoing

Chapter 7: Upland

Upland ecosystems tend to comprise a mosaic of different habitats including heath, moor, bog and grassland with patches of woodland in sheltered areas. In many areas peat soils underpin the ecosystem and are vital carbon and water stores. Key land uses in South Lanarkshire include upland sheep and cattle farming, productive grouse moor, commercial forestry and developments such as windfarms. An estimated 23,500ha (13.5%) of South Lanarkshire is classified as 'upland', however, an exact figure for the different component habitats is not known.

There are nine designated sites within South Lanarkshire that fall within the upland category, with features of interest including various breeding birds and blanket bog. Two of these sites are also designated as a Special Protection Area, for their importance to rare upland bird assemblages and breeding bird habitats.

Key issues

The key issues facing upland ecosystems, and the challenges and opportunities they present are set out in the table below.

Cross-cutting theme	Challenges	Opportunities
Key sites	Maintaining or restoring upland designated sites to favourable condition. Loss and fragmentation of habitat.	The complex mosaic of habitat types supports many species.
Invasive non-native species	Spread of non-native conifers from plantations onto moorlands.	Restructuring forestry plantations to give a mix of tree species and age classes.
Soils and geology	Development, including mineral extraction and onshore renewables. Erosion, drainage, afforestation, agriculture (grazing levels and nutrient enrichment). The extent and quality of blanket bog is unknown.	The renewable energy sector provides opportunities to restore large areas of the uplands, when developments are appropriately sited. Selection of relevant peatland as LNCS.
Climate change	Ineffective bogs can contribute to flooding risk. Well-drained and uniformly grazed landscape can contribute to flooding risk. Contribution of muirburn and risk of uncontrolled fire if managed incorrectly. Warming climate increases risk of local extinction of upland species at the edge of their range.	Peat soils store carbon and retain water. Potential for land management and placement of planting schemes to help mitigate flooding risk. Muirburn code provides guidance on managing fires appropriately.
People and nature	The balance between biodiversity and business that can manage vast areas of land, resulting in large areas of uniform habitat.	Rural funding can help landowners create opportunities to manage land for wildlife. Opportunities for access such as the Southern Upland Way and Pentland Hills Regional Park.

Making progress

As part of the windfarm development, many of which are in the upland areas, large areas of land are covered by Habitat Management Plans (HMP). Each plan has a Management Group who meet once a year to oversee the preparation of the approved HMP.

Representatives from SLC, RSPB along with the developers, landowners, and ecologists have powers to make reasonable changes to the plan to deliver its agreed aims. The plans aim to improve, monitor, and maintain habitats such as woodland, peatland, wet heath with monitoring and measures to benefit biodiversity especially waders and raptors, including hen harriers and black grouse.

[A Development Framework for the Hagshaw Energy Cluster](#) was developed by a number of partners, including NatureScot and South Lanarkshire Council, between 2020-2022. This Framework encourages a more strategic approach across the energy developments in the Hagshaw area, on issues such as habitat management and restoration.



Photo 15: Clyde Windfarm, Crawford. **Photo 16:** Peatland restoration work at Clyde windfarm. In South Lanarkshire, over 11,000ha (approximately 6.3% of the total land area) is managed in this way. See link for more information on the [Location of wind turbines in South Lanarkshire](#).



Photo 17: Hydrological monitoring photo C. MacIver, Broken Cross Windfarm.

Our next steps

We have identified the key issues within this chapter and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 7: Uplands are managed in a sustainable way.

Action	Lead partner	Timescale
Ensure Habitat Management Plans (HMP) from renewable energy developments are used to secure landscape scale habitat restoration.	SLC, RSPB, NS	Ongoing
In partnership with others, seek funding mechanisms to develop conservation initiatives aimed at the conservation of upland birds including black grouse, waders and raptors in southern Scotland including Lowther Hills, as part of landscape scale project delivery.	RSPB	Ongoing
Monitor opportunities presented by the new agri-environmental payments through the Natural Environment Bill.	SLBP	Ongoing

Chapter 8: Urban

In South Lanarkshire, urban land accounts for only 6%¹ of the total land area. Within this, around 27% is open space, with around 17% being accessible and usable for people. The urban areas are concentrated in the north of South Lanarkshire, where the majority of people live. Pressures such as changes in land-use, urbanisation, pollution, and spread of INNS has resulted in the loss of valuable habitats, that have become damaged and fragmented. This has impacted on species dispersal and mortality, restricting genetic mixing, increasing inbreeding and as a result increasing species isolation and the chance of local populations going extinct. It is important that all our activities avoid damage and loss of biodiversity but helps to restore nature by delivering positive effects for biodiversity.

Natural features and green infrastructure within the urban environment offer significant opportunities not only to biodiversity but can also provide multiple benefits for health, wellbeing, and community development. The creation of new green or blue natural spaces, better management of existing green and blue spaces and the restoration of functional ecosystems can deliver a wider range of ecosystem services and benefits. Planting for pollinators, creating wildflower meadows, new orchards, trees, scrub and woodlands creation, green walls, and green screening, living roofs, boundary hedges are an integral part of diversifying the urban landscape. Enhancing urban biodiversity provides habitats for birds, insects, and other wildlife and can increase environmental awareness among local communities.

[Nature based solutions](#) are a popular means to build urban resilience while tackling sustainability challenges in our towns they can provide:

- **Benefits biodiversity:** by increasing the amount of habitat and connectivity for species.
- **Improves water quality and flow management:** by reducing rainwater run-off and retaining sediments and other contaminants entering watercourses.
- **Provides urban cooling:** by as much as 2°C to 8°C, through the shading by trees and by vegetation and associated soils evapotranspiration.
- **Improves air quality:** as vegetation absorbs and removes particulates and greenhouse gases from the atmosphere
- **Attractive spaces** for people to enjoy.

A report on [Greenspace indicators](#) produced by NatureScot in 2021 looked at the extent of urban greenspace and blue spaces as a percentage of the urban land area in each local authority. Understanding the changes in the extent, distribution and types of greenspace is essential for the strategic planning and the management of our greenspaces assets to enable us to deliver better quality local landscapes. Figures for South Lanarkshire can be found in the following tables below:

Total area of greenspace (ha)	Area of publicly accessible greenspace (ha)	Greenspace as percentage of urban area %	Publicly accessible greenspace as percentage of urban area %	Area of greenspace per 1000 people ha	Area of publicly accessible greenspace per 1000 people ha
9421	6733	53	38	34	24

¹ [Understanding Glasgow: the Glasgow Indicators project](#)

In South Lanarkshire the total area of greenspace covers 9421ha which equates to 53% of the urban area. Greenspaces include public parks, school grounds, playing fields, allotments, golf course and other sporting facilities. From the report 9% of the greenspace in South Lanarkshire was identified as natural areas, split into the following habitats:

Inland water	Open semi-natural	Woodland	Natural total in SL
2%	4%	3%	9%

Key issues

The key issues facing urban ecosystems, and the challenges and opportunities they present are set out in the table below.

Cross-cutting theme	Challenges	Opportunities
Key sites	<p>Land management.</p> <p>Development pressure on greenspaces including urban woodlands and the greenbelt.</p> <p>Loss, modification and fragmentation of natural habitat.</p>	<p>LNRs close to urban areas provide access to wild places for everyone.</p> <p>LNCS in urban and greenbelt areas help to protect locally important sites and species.</p> <p>Development of habitat networks particularly for the urban forest.</p> <p>Creation of a Tree Policy will set out how SLC manage and enhance trees and woodlands.</p> <p>The Open Space Strategy will recognise and identify opportunities for biodiversity improvements.</p>
Invasive non-native species	<p>Escapes from gardens.</p> <p>Strategic control of INNS by multiple landowners.</p>	<p>Raise awareness with the public.</p> <p>Potential for a cross agency approach to controlling INNS.</p>
Soils and geology	<p>Development pressure.</p> <p>Past land use resulted in contaminated and Vacant and Derelict Land (VDL).</p> <p>Pollution and anti-social behaviour such as fires and litter.</p>	<p>Relic sites such as urban woodlands safeguard soils.</p> <p>Restoration of VDL to a biodiversity friendly use.</p> <p>Recognition of the intrinsic value of some brownfield sites.</p>
Climate change	<p>Hard surfaces leading directly to drains contribute to flood risk.</p> <p>Heating effect of towns and cities.</p> <p>Pollutants from industry, cars and households.</p>	<p>Reduce the use of hard engineering of watercourses; use soft engineering such as SUDS and permeable surfaces.</p> <p>Increased opportunities for tree planting in urban areas helps to reduce heating effect.</p>

	Fragmentation of natural habitat limits species movement in response to changing conditions.	Use of green infrastructure to help regulate environmental factors such as air quality. Green networks provide corridors for species movement. Improvement and creation of green infrastructure within new housing developments.
People and nature	Connecting people with nature near their homes. Disturbance and pressures of land use due to recreation.	Improve the quality of greenspaces, ensuring safe access to quality sites. Communities are involved with managing greenspaces and LNRs. Provide information and opportunities for people to use and engage with the outdoors.

Making progress

Buglife B-lines Scotland in the Clyde Valley.

Our grasslands in Scotland have become fragmented and improved through the application of chemicals, over-grazing, and over-cutting or by a lack of management where the grassland vegetation is lost to scrubland and trees. Grasslands are vital habitat for a wide range of animals and plants and are particularly important for invertebrates from bees and hoverflies to butterflies and moths. The Buglife's B-line project with funding from NS, continues to create and map B-Lines across the CSGN area covering over 10,000 hectares and 19 local authorities. Creating grassland habitat and enhancing sites for wildlife.



Photo 18: One of our B-line sites at Castlebank Park, Lanark.

In 2019 South Lanarkshire Council Grounds Service Team and CAG worked with Buglife to improve 12 sites throughout Lanark, Kirkfieldbank, and Crossford for pollinator species such as bees and hoverflies. Staff and volunteers changed the management at the sites to increase the

wildflower content within the grassland. The project was funded by the Biodiversity Challenge Fund, due to be completed in 2020, extra funding allowed the work to be extended to 2021, which allowed us to sow more wildflowers at the sites. In 2022 and 2023 we continue to monitor the development of the sites and record species within the FIT Count app.

[Clyde Grasslands Project](#)

GVC Green Network launched the Clyde Grassland project in 2023 aimed at boosting grassland habitats for wildlife across the region. The project aims to help restore some of the 97% of species rich grassland lost since the 1940's in the UK, by creating and restoring wildflower meadow and linking them up through greenspaces, road verges and farmland. On the ground delivery will be guided by recently completed grassland opportunity mapping analysis, funded by NatureScot's Nature Restoration Fund, which has identified key locations for grassland protection, management and expansion. Clyde Grasslands is part of the Green Network suite of habitat projects which emerged from GCV [Blueprint](#) launched in 2019.

Helping Hands for Butterflies

In partnership with Butterfly Conservation the "Helping Hands for Butterflies" was a three-year project that ended in October 2022 and engaged with over 700 people throughout the central belt of Scotland. The project was funded by the National Lottery Heritage Fund and NatureScot to create new habitats for butterflies in urban places.



Photo 19: A burnet moth noted during one of the events with Butterfly Conservation as part of the Helping Hands for Butterflies project.

The project introduced the world of butterflies and moths to new volunteers, through training events and workshops to help people identify and monitor species. The project also aimed to create flower-rich grasslands in urban parks that were specifically intended to help butterflies and moths. Management plans were created for each site, with four main aims to reduce the cutting, remove the cuttings, plant yellow rattle for the first year, then plant with butterfly friendly species.

Three sites were chosen in South Lanarkshire at Stonefield Park and Hunthill Road community orchard in Blantyre and Bothwell Park, in Hamilton. Staff and volunteers help create and improve these sites for invertebrates removing the cutting to reduce the nutrient content going back into the soils and the addition of wildflower seed. The council maintain, monitor, and aim to expand the three project sites for wildlife. A full report and films of the project highlights produced by Butterfly Conservation can be found on their webpage [Helping Hands for Butterflies](#).

Making Space for Pollinators report 2023.

In November 2023, South Lanarkshire council produced a report summarising the work undertaken over several years to help conserve and enhance for pollinators and their habitats. Over the years the Countryside and Greenspace team have worked in partnership with a variety of organisations, different council resources and volunteers in developing and improving over 155 grassland sites for pollinators covering approximately 63 hectares. Creating naturalised grassland, allowing the grass to grow longer, more naturally, to allow wildflowers to flourish and set seed. Where possible we have removed the grass cutting to reduce the nutrient level in the soil, which favour wildflowers. This has been achieved through various projects and case studies which are highlighted in the [Making Space for Pollinators report](#)

We will continue to identify suitable areas throughout South Lanarkshire to improve the wildlife value of managed grasslands. Creating nature networks through our urban areas linking to allotments, public parks, greenspaces and our nature reserves, to the wider countryside to help keep South Lanarkshire pollinator friendly.

Our next steps

We have identified the key issues within this chapter and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 8: The urban environment of South Lanarkshire benefits biodiversity.

Action	Lead partner	Timescale
Continue to create areas of wildflower meadow, in partnership with local communities.	SLC, BC, Buglife Scotland, GCV	Ongoing
Review grass management with the aim to improve the biodiversity value of amenity grassland throughout South Lanarkshire.	SLC	Ongoing
Urban woodlands are managed and restored for biodiversity and people.	SLC, SF	Ongoing
Ensure we secure positive effects for biodiversity from National Planning Framework 4 (NPF4).	SLC	Ongoing
Identify and create nature networks to create corridors for species movement, link to neighbouring authorities to improve ecological connectivity across Scotland.	SLC, GCV	Ongoing
The urban drainage system is designed to give the maximum benefit to biodiversity while contributing to minimising pollution and flooding risk.	SLC, SEPA	Ongoing
Investigate the potential to map SUDS ponds and assess their biodiversity value.	SLC	Ongoing
Investigate and control the impacts of increasing deer populations to the urban environment, particularly woodlands.	SLC, NS	Ongoing

Vacant and Derelict land

Vacant and derelict land can be havens for wildlife and can also be a wild space in urban areas for local communities to access nature. They can provide types of unmanaged habitats which are uncommon, such as bare soil and rubble are valuable for plants and insects. These can provide development opportunities in urban areas, reduce pressure on green belt and other undeveloped land. In 2022, 27 sites are on the VDL register in South Lanarkshire covering 115.93ha that are uneconomic to development or soft end use (non-built use).

Making progress

In 2020/21, significant site works were undertaken at Milton LNR a former brick works covering around 14 hectares, in Carluke thanks to the Vacant and Derelict Land Fund and the Green Action Trust. Three new access points were created, paths and boardwalks were installed along with benches, drainage has been improved throughout the site and a dipping platform installed at one of the ponds. Wildflower seeds were sown in many areas to improve both grassland diversity and pollinator habitats. The site was designated an LNR in 2022 and is managed for biodiversity.

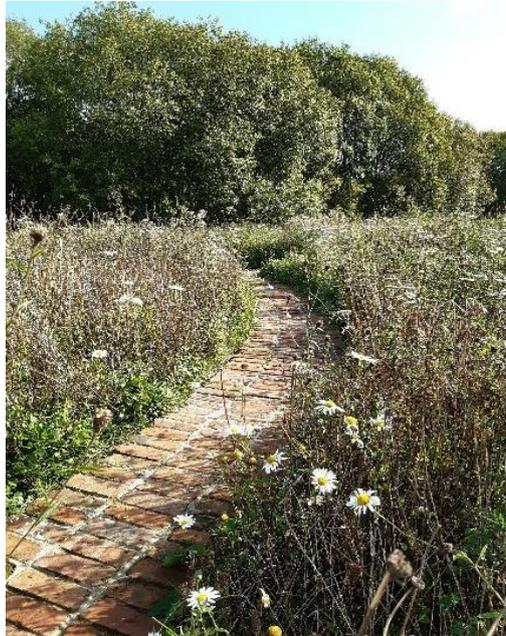


Photo 20: Milton LNR, one of the areas improved for pollinators and wildlife.

Fernbrae Meadows LNR on the western edge of South Lanarkshire at the boundary with Glasgow. Fernbrae Meadows comprises the former Blairbeth Golf Course and part of Cathkin Braes Country Park. The southern half of the reserve is dominated by broadleaved woodland, which forms part of Cathkin Braes Country Park (CP) and is managed by Glasgow City Council. Cathkin Braes CP covers around 199 ha of land and includes woodland, ancient woodland, heath and grassland. There are many paths linking the existing country park to the LNR. The closure of the golf course in 2015 left a significant area (22.33 ha) of formal amenity grassland.



Photo 21: Fernbrae Meadows LNR, this former golf course now supports wildflower meadow.

In 2018 SLC with help from NatureScot's (NS) Green Infrastructure Fund, established a variety of new habitats at the LNR: ponds and associated marshy grassland, an orchard and native woodland planting to link to existing woodland in the south of the site. Native wildflowers have been sown in large swathes of grassland, in which can be found plants of interest including common-spotted orchid, northern marsh-orchid, and greater butterfly-orchid. Community events focusing on community connection, taking care of the surroundings, and developing the space for biodiversity, while also researching the history of the landscape. Educational establishments have been actively engaged with the space throughout its development by helping to plant trees and wildflowers. Fernhill School uses the site for Forest Kindergarten and outdoor learning.

Glen Esk Urban Greenspace Located in East Kilbride, this was a former landfill site left to regenerate naturally, subsequently dominated by birch and willow scrub. The site was much neglected, used only by local dog walkers, and as a short cut to the local school. In 2019/20 a SLC collaborated with the local community to explore how to spend the £1 million awarded by the Scottish Government Vacant Derelict Land Fund. The 7.6 ha site now incorporates native planting and habitat creation, footpaths, artwork, an outdoor classroom, and a car park. Habitats of open water, wet meadow, wildflower meadows, planted trees and marshy grassland were added to increase the biodiversity value of the park. The network of paths now forms an important link between residential estates by improving the quality of paths and greenspace networks.



Photo 22: One of the created ponds and wetlands at Glen Esk Urban Greenspace in East Kilbride.

This has been achieved by the addition of boardwalks and all access pathways. The greenspace links to areas of broadleaved woodland in the surrounding landscape connecting to an extensive wildlife corridor following the wooded banks of the Rotten Calder Water within Calderglen Country Park. Glen Esk Urban Greenspace; boardwalk and pond.

Strategic Outcome 9: Vacant and Derelict Land contributes to biodiversity.

Action	Lead partner	Timescale
Survey VDL sites now thought to be wooded with a view to their removal from the register	SLC	Ongoing
Reduce the area of land on the VDL register due to naturalisation or other land use	SLC	Ongoing
Deliver projects on VDL site projects to remediate the land or bring it into practical use	SLC	Ongoing

Chapter 9: Woodland

Woodlands provide the most biodiverse habitat in South Lanarkshire; ancient and veteran trees, and ancient and semi-natural woodland are an irreplaceable biodiversity asset. This habitat supports a wide range of species and complex ecological processes that have developed over thousands of years. These cannot be replicated effectively, and any loss of this habitat is detrimental to the ecology of the area. Woodland cover has diminished considerably over the last millennia through changes in land management. The clearance of ancient and semi-natural woodland has resulted in fragmentation and isolation of the remaining sites. Woodland biodiversity faces a challenge from deer numbers and invasive non-native species, specifically rhododendron, which restrict natural regeneration and habitat restoration.

Scotland is the most wooded of the UK countries (19%), but this is well below the current European average of 37%. Scotland's rich and diverse woodlands are important natural assets. Woodlands help to purify our water and air, reduce flood risk, improve slope and riverbank stability, help to decontaminate soils on post-industrial sites and help mitigate the impact of climate change by absorbing and storing carbon. They provide opportunities for people to engage in healthy activities and community-based participation in management of the woodlands allows people to gain a better understanding and appreciate the natural world.

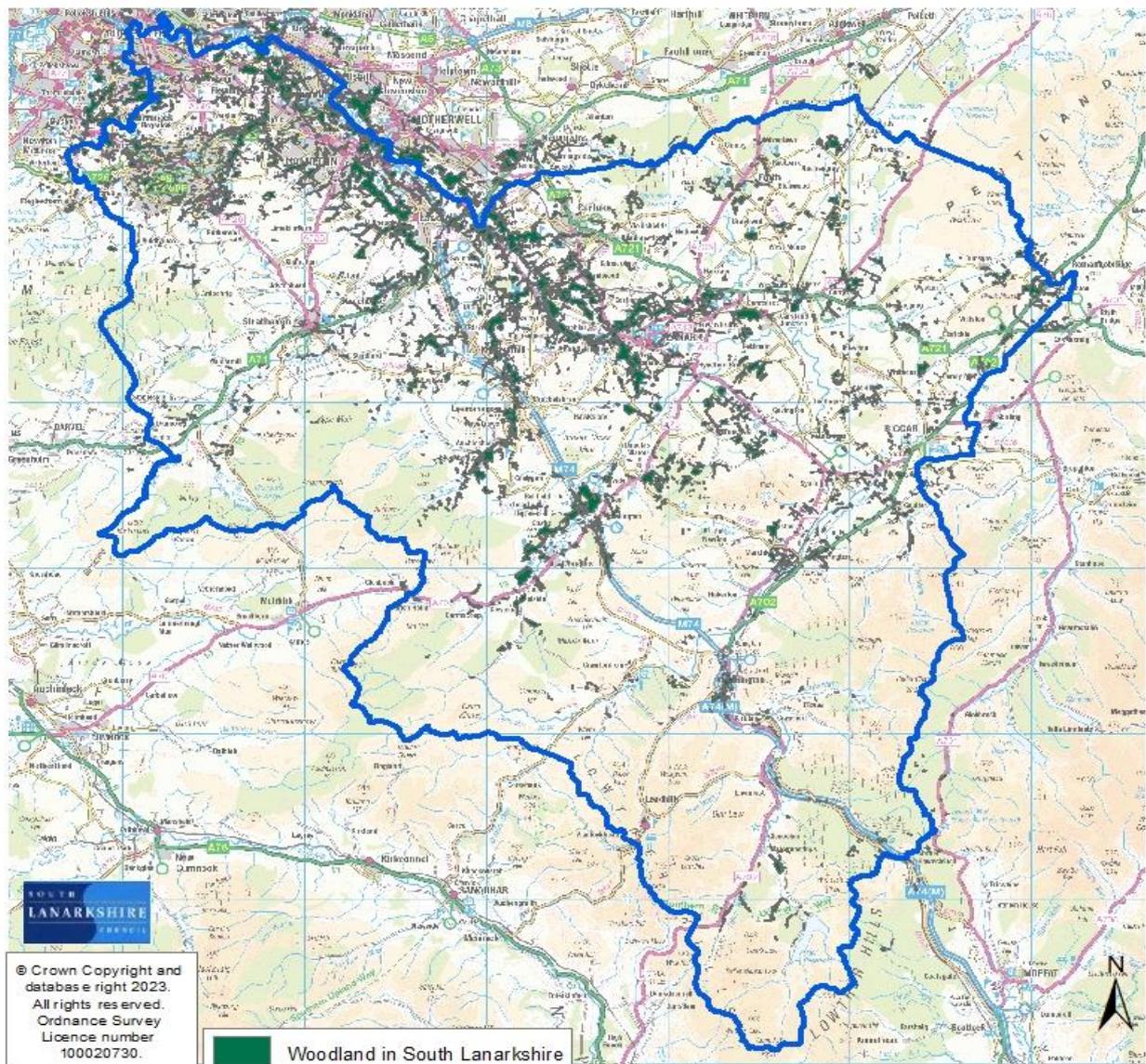


Figure 6: Distribution of broadleaved woodland in South Lanarkshire.

Improving woodland condition is a strategic driver in [Scotland's Forestry Strategy](#) with aims to increase the amount of native woodland in good condition by creating 3000-5000ha of new native woodland per year and restoring 10,000ha of new native woodland.

The [National Forest Inventory](#) (NFI) shows South Lanarkshire as having a total of 27,065ha of woodland. Conifer and other plantation accounts for 47% with broadleaved and mixed woodland covering 17%. The Native Woodland Survey of Scotland was carried out from 2006 to 2013, with results published in 2014 to give an authoritative picture of the location, extent, type and condition of Scotland native woodlands.

The table below shows the types of native woodland that comprise 4,799ha of the total wooded area:

Dominant native woodland type	Area (ha)	% of total
Lowland deciduous woodland	1,964	41
Wet woodland	971	20
Upland birchwood	838	17
Other woodland	562	12
Upland mixed ashwood	314	7
Hawthorn scrub	102	2
Upland oakwood	49	1
Native pinewood	1	<1
Total	4,799	100

The woodlands with the highest biodiversity value in South Lanarkshire can often be found along river valleys where steep slopes have protected the land from development. The remaining ancient, semi-natural woodland found on the steep slopes and ravines of the River Clyde and its tributaries is a nationally significant biodiversity resource. These are amongst the last remnants of native, broadleaved woodland in southern Scotland and make up the Clyde Valley Woodlands National Nature Reserve (NNR). In South Lanarkshire 1,528 ha of woodland is on the Ancient Woodland Inventory. Ancient, semi-natural woodland makes up 32% of all native woodlands but less than 4% of the area's total woodland cover.

Some areas of this ancient woodland were felled and replanted with conifers in 20th Century and listed as Plantation on Ancient Woodland Sites (PAWS). There are 283 ha of PAWS in South Lanarkshire. The restoration of these sites to native tree cover is a priority for both local and national strategies.

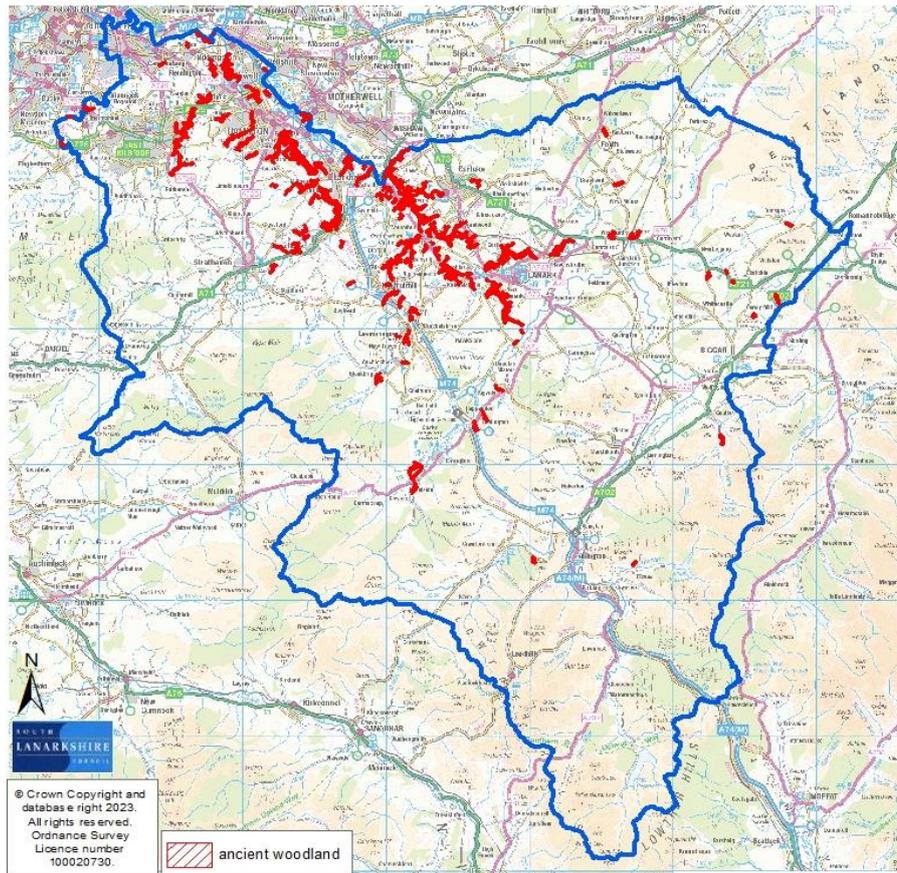


Figure 7: Distribution of ancient semi-natural woodland in South Lanarkshire.

Key issues

The key issues facing woodland ecosystems, and the challenges and opportunities they present are set out in the table below.

Cross-cutting theme	Challenges	Opportunities
<p>Key sites</p>	<p>Improving the condition of designated woodland.</p> <p>Significant areas of woodland have not been managed for some time.</p> <p>Fragmentation of habitat results in isolated populations of plants and animals.</p> <p>Sustainable management of non-woodland trees.</p> <p>Managing and protecting a diverse canopy cover.</p>	<p>Management of nationally important gorge woodland in the Clyde Valley Woodlands National Nature Reserve.</p> <p>Trees, woodlands and forests can be covered by management plans.</p> <p>Improving habitat connectivity through developments that follow integrated habitat network modelling.</p> <p>A Tree Policy will set out how SLC manage and enhance trees, forests and woodland.</p>

		<p>Create and maintain records of canopy cover and the tree population.</p> <p>Develop replanting standards for non-woodland trees.</p>
Invasive non-native species	<p>Rhododendron can be a major component of the understory.</p> <p>Damage caused where INNS are a major component of the ground cover beneath trees.</p> <p>Where woodlands meet waterways, roads or railways other INNS can be problematic.</p> <p>A range of potential and actual pests and diseases such as Chalara ash dieback</p>	<p>Control of INNS, particularly on key sites.</p> <p>Use of funding streams to manage woodlands and control INNS.</p> <p>Co-ordinated approach to controlling INNS.</p> <p>Raise awareness of pests and diseases and act as necessary in line with national strategy.</p>
Soils and geology	<p>Plantations on Ancient Woodland Sites (PAWS).</p> <p>Loss of woodland and trees exposes soils to erosion, especially on slopes.</p>	<p>Conversion of conifer plantations to native woodlands.</p> <p>Ensure constant canopy cover.</p>
Climate change	<p>Forestry plantation on inappropriate sites, especially peatland.</p> <p>Expanding tree cover without affecting land of biodiversity value.</p>	<p>Maximise the multiple benefits of woodlands and trees in mitigating and adapting to a changing climate.</p> <p>Woodlands created on appropriate sites support flood mitigation measures.</p> <p>Grant funding options support native woodland expansion.</p> <p>Tree planting in towns and villages aids climate change resilience.</p>
People and nature	<p>Providing information and access for people to quality woodlands Impacts of recreation.</p>	<p>Urban woodlands provide valuable access to greenspace, improve health and wellbeing and offer opportunities for recreation and education.</p> <p>Community involvement with woodland management.</p>

Making progress

The [Clyde Climate Forest](#) (CCF) will see 18 million trees planted in both urban and rural parts of Glasgow City Region over the next decade. Trees, woodlands and forests are recognised as essential if we are to address the climate and nature crisis by reducing damaging atmospheric

emissions and to assist in a nature recovery. The project is part of the Green Network Blueprint and is in partnership with GCV Green Network's Strategic Habitat Network. The CCF aims to increase canopy cover, connectivity and carbon storage.



Photo 23: A drones eye view over the tree planting in Hamilton.

Photo 24: Planting trees as part of the Clyde Climate Forest scheme.

In March 2022 an urban woodland has been created in Hamilton as part of the Clyde Climate Forest and the ash dieback disease recovery in South Lanarkshire. The South Lanarkshire Countryside Rangers supported a dedicated team of volunteers who learned skills to successfully plant around 1000 trees. The volunteer team continued in 2023 planting nearly 4000 more trees, to add to the woodland canopy and expand the woodland corridor connecting to established broadleaved woodland in the surrounding landscape. To aid future tree planting and increase canopy cover within South Lanarkshire, GAT and CCF in 2023 carried out an assessment into the CCF landholdings for woodland creation.

[Clyde Valley Woodlands National Nature Reserve](#)

This composite NNR comprises six sites which are managed by their respective owners: SLC, SWT and NatureScot. The sites are managed under joint objectives; members of staff attend regular steering group meetings. The [management plan](#) (2017-27) sets out objectives and actions for the sites, including the following objectives:

- To maintain a naturally dramatic semi-natural- gorge woodland.
- To maintain and enhance biodiversity on the reserve.
- To encourage research, survey and monitoring appropriate to the reserve.
- To increase awareness and understanding of the rich natural and cultural heritage of the Clyde Valley Woodlands NNR.

In 2022 SWT carried out an INNS survey of the Upper Nethan Gorge mapping locations of Japanese Knotweed and Himalayan balsam within the NNR.

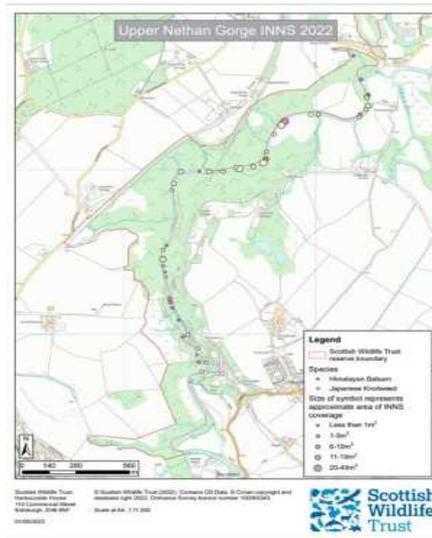


Figure 8: Mapping INNS within the NNR.

Our next steps

We have identified the key issues within this chapter and the strategic outcomes and actions we will strive to achieve during the lifetime of this strategy:

Strategic Outcome 10: Woodlands are restored and managed.

Action	Lead partner	Timescale
PAWS at Chatelherault Country Park are converted to native woodland.	SLC	Ongoing
There is no loss of ancient semi-natural woodland.	NS, SLC, FLS	Ongoing
Increasing woodland cover and native woodland expansion contributing to our Nature Networks and the Clyde Climate Forest.	SLC, GCV, FLS, SF	Ongoing
To develop an interactive web based urban forestry tool (Tree Plotter Canopy) to view, plan and grow canopy cover on a right tree, right place basis. Setting canopy cover target and value to ecosystem services.	SLC	Ongoing
Investigate the potential to map changes in native woodland cover.	SLC	Ongoing
Produce and implement a Tree Policy which will manage and enhance woodland and trees and support measures such as canopy assessment and replacement planting.	SLC	Ongoing
Target new woodland creation schemes to manage the impact of sitka spruce regeneration on wetlands, peatlands and open space habitats.	SLC, RSPB, NS	Ongoing

Chapter 10: Monitoring

This Biodiversity Strategy sets out ten strategic outcomes which cover six ecosystems and the identified cross cutting challenges. We have set out the key issues for each and prepared and agreed an action plan to address these issues. The following table sets out the measures we will use to monitor the progress of our actions. Monitoring of the actions within the Biodiversity Strategy will be undertaken by the Biodiversity Partnership at meetings of the partnership and its sub-groups.

Action	Aim / Target	Timescale	Responsibility
Strategic Outcome 1: Invasive non-native species are monitored and controlled			
Raise awareness and reporting of INNS sightings	Continue to gather records from public and organisations	Ongoing	SLC
Control of INNS where feasible	Targeted control with a high success rate	Ongoing	INNS sub-group
Investigate potential for cross-boundary multi-agency INNS approach. Strategic approach on national level.	Form a partnership tasked with delivery	Ongoing	INNS sub-group
Strategic Outcome 2: Designated and locally important sites are conserved			
Nationally designated sites monitored	In line with current survey cycle and priorities	Ongoing	NS
Condition of nationally designated sites	Prevent deterioration of site condition: 42 favourable 4 recovering 14 unfavourable	Ongoing	NS
Number of LNRs	Now have 17 sites (designated 2022), monitor and improve for biodiversity. Investigate other potential LNRs.	Ongoing	SLC
Number of LNCS	Over 100 have been assessed, continue to survey, and assess, work with planning to formally designate.	Ongoing	SLC
List of important species in South Lanarkshire	To be completed	2030	SLBP
Projects focussed on species or habitats	Complete at least one every two years	Ongoing	SLBP
Investigate land coverage of designated and key sites within SL, with the aim to expand to 30% of land use.	Map designated and key sites, establish area covered, continue to identify, assess and designate LNCS.	2030	SLBP
Continue to work with GCV mapping key habitat sites, identify and create nature networks throughout South Lanarkshire.	Continue to work with GCV on Clyde Climate woodland, peatland and grassland nature networks.	2030	SLC, GCV

Investigate the development of Geodiversity Plan and site designations	Develop responsibility for action.	Ongoing	NS, SLC
Strategic Outcome 3: People have opportunities to connect with nature			
Number of events	12 per year	Ongoing	People and Nature sub-group
Volunteer hours	Maintain annual average: 4746 days	ongoing	
Number of training courses	4 per year	Ongoing	
Community volunteer groups engaged with local site management	Work with community groups associated with LNR's and local greenspaces	Ongoing	SLC
Taking outdoor learning project	1 per year	Ongoing	SLC, NS
Strategic Outcome 4: Freshwater habitats are improved and preserved			
Condition of water bodies	Improve condition through various action such as reducing pollution and improving physical condition	Ongoing	SEPA
Increase number of ponds and wetlands in SL.	Improve and create wetlands in LNRs and Country Parks. Monitor and maintain for wildlife.	2024/25	SLC, Froglife
Ponds managed, created or improved	Improve wetlands within LNR's and Country Parks Monitor and maintain for wildlife, following guidance in management plans.	2026	SLC
Engage in promoting citizen science through national water monitoring schemes.	Promote uptake of Guardians of the river through network of volunteers.	Ongoing	SLC, Buglife
Establish nature network for wetland habitats.	Continue to work with GCV identifying key wetland sites.	Ongoing	GCV, SLC
To explore opportunities in urban areas for restoration projects identified in the third River Basin management Plan	One	Ongoing	SEPA
Strategic Outcome 5: The biodiversity value of low-lying farmland is improved			
Clyde Valley Wader Initiative	Work with landowners to progress project.	Ongoing	RSPB
Auchlochan Estate meadow (Brackenhill)	Site management measures and surveys.	Ongoing	FLS
Continue to maintain parkland at Mauldslie Woods.	Ongoing restoration work, woodland management plan in place	Ongoing	SLC
Strategic Outcome 6: Peatlands are protected and improved			
Continue peat restoration work at Coalburn Moss SSSI	10-year site management plan in place	Ongoing	FLS, NS
Improve areas of peatland for large heath butterfly	Continue to survey and improve habitat for large heath butterfly across SL.	2023 onwards	BC
Continue to improve and promote peatlands working	Langlands Moss,	Ongoing	BC, SLC

with volunteers and the Bog Squad	Braehead Moss and Blackhead Moss.		
Continue to restore area of blanket bog at Whitelee Windfarm	Area of land under HMP	Ongoing	FLS, Scottish Power Renewables
Continue to improve the peatland at Cander moss	Site management measures and surveys	Ongoing	SWT
Clyde Peatlands – work with landowners to identify areas of lowland peat to restore.	Work in partnership with Peatland officer	Ongoing	GCV, SLC
Monitor the restoration of peatland habitats that is stipulated in windfarm HMP.	Attend steering group meetings and assess progress	ongoing	SLC, RSPB
SLC to investigate restoration work at peatland LNRs, Langlands Moss, Mossneuk	Identify potential projects, survey and investigate funding opportunities	Ongoing	SLC
Blackgate Moss (Carnwath)	Site management measures and surveys	Ongoing	FLS
Strategic Outcome 7: Uplands are managed in a sustainable way			
Monitoring of land managed under HMP	Attend habitat management groups.	Ongoing	RSPB, SLC
Continue to develop conservation projects for upland birds.	Seek funding and develop conservation initiative in partnership with others.	Ongoing	RSPB
Strategic Outcome 8: The urban environment of South Lanarkshire benefits biodiversity			
Continue to create areas of wildflower meadow in partnership with local communities	Monitor and manage current sites, aim to increase quality and number of sites.	Ongoing	SLC, BC
Review grassland management to improve the biodiversity value of amenity grassland in SL.	Work with SL grounds staff and GCV to produce pollinator report and identify areas to improve	Ongoing	SLC, GCV
Urban woodlands are managed and restored for biodiversity	Tree planting, monitor and increase canopy cover	Ongoing	SLC, GCV, CCF
Ensure we secure positive effects for biodiversity from NPF4	Review guidance from SG. Work with SLC planning department in response to planning applications.	Ongoing	SLC
Improve nature networks to create corridors for species movement, link to neighbouring authorities.	Work with GCV Green Network's Strategy Habitat Network: grasslands, wetlands, CCF, peatlands.	Ongoing	SLC, GCV
The urban drainage system is designed to give the maximum benefit to biodiversity.	Map SUDs ponds and assess their biodiversity	Ongoing	SEPA SLC
Investigate the impacts of increasing deer populations	Survey and monitor impact	Ongoing	NS, SLC
Strategic Outcome 9: Vacant and Derelict Land contributes to biodiversity			
Number of wooded sites surveyed	Complete	2030	SLC

Number of VDL sites improved for biodiversity	4	2030	SLC
Number of sites on VDL register (that are uneconomic to development or soft end use)	Decrease from 115.93ha in 2022 (27 sites)	2030	SLC
Strategic Outcome 10: Woodlands are restored and managed			
Area of land at Chatelherault converting to natural woodland	Increase	Ongoing	SLC
There is no loss of ancient semi-natural woodland	Monitoring	Ongoing	NS, SLC, FLS
Increase woodland cover and native woodland expansion	Increase CCF, Ash dieback recovery	Ongoing	SLC, GCV, FLS, SF
To develop an interactive web based urban forest tool to view, plan and grow canopy cover	Complete	2026	SLC
Investigate the potential to map changes in native woodland cover	Complete	2026	SLC
Develop and implement Tree Policy	Complete	2028	SLC
Target new woodland creation schemes to manage the impact of sitka spruce regeneration on wetlands, peatlands and open space habitats.	Monitor, comment on new woodland proposals / applications.	ongoing	FLS, SLC, RSPB.

Appendix 1: Our strategic outcomes

The Scottish Biodiversity Strategy 2045 sets out clear ambition for Scotland to be Nature Positive by 2030 and to have restored and regenerated biodiversity across the country by 2045.

Our vision is: *By 2045, Scotland will have restored and regenerated biodiversity across our land, freshwater and seas. Our natural environment, our habitats, ecosystems and species, will be diverse, thriving, resilient and adapting to climate change. Regenerated biodiversity will drive a sustainable economy and support thriving communities, and people will play their part in the stewardship of nature for future generations.*

The Strategy contains 26 of the most urgent Priority Actions which will put us on track for halting the loss of biodiversity and being nature positive by 2030.

Priority Actions from the Scottish Biodiversity Strategy 2045:

1. Accelerate restoration and regeneration.

- Introduce statutory nature restoration targets.
- Introduce a programme of ecosystem restoration.
- Continue to drive down and deliver substantially reduced deer densities across our landscapes.
- Implement Scottish Plan for INNS surveillance, prevention and control, and secure wider support measures to enable effective INNS removal.
- Ensure grouse-moor management sustains healthy biodiversity.

2. Expand and connect protected areas and improve their condition.

- Expand our protected areas to at least 30% of the land.
- Ensure we secure positive effects for biodiversity from our National Planning Framework (NPF4).
- Ensure that every local authority area has a nature network improving ecological connectivity across Scotland.
- Realise the potential of National Nature Reserves as key assets for increasing ecological connectivity.

3. Nature-friendly farming, fishing and forestry

- Ensure increase uptake of high diversity, nature-rich, high soil-carbon, low intensity farming methods while sustaining high quality food production.
- Ensure that productive forests and woodlands deliver increased biodiversity and habitat connectivity as well as timber production.

4. Recover and protect vulnerable and important species.

- Continue effective species recovery, reintroduction, and reinforcement programmes.
- Support surveillance and monitoring to support managing risks around pathogens and disease in wild bird populations.
- Implement measure to protect and recover Scotland's wild Atlantic salmon and migratory fish populations.
- Revise the Scottish Biodiversity List of species and habitats, to be of importance for biodiversity conservation in Scotland.

5. Generate the investment needed to support nature recovery.

- Maintain and seek to increase investment in nature restoration through the Nature Restoration Fund.
- Investment in green skills and local economic opportunities supporting nature-based education, skills and volunteering.

- Continue to develop and enhance the woodland and peatland carbon.

The Scottish Government is committed to developing an investment plan which sets out their assessment of investment required to deliver a nature positive future. The Biodiversity Investment Plan hopes to provide an overview of the range of known public and private funding sources for biodiversity restoration, drive efficiency in the use of public funds and encourage partnership in the development of projects to deliver transformative change on a landscape scale.

Strategic outcome	Priority Action for 2030
1: Invasive non-native species are monitored and controlled	1, 4
2: Designated and locally important sites are conserved	1, 2, 4
3: People have opportunities to connect with nature	1, 2, 5
4: Freshwater habitats are improved and preserved	1, 2, 3, 4
5: The biodiversity value of low-lying farmland is improved	1,2, 3
6: Peatlands are protected and improved	1, 2, 5
7: Uplands are managed in a sustainable way	1, 2, 4
8: The urban environment benefits biodiversity	1, 2, 5
9: Vacant and Derelict Land contributes to biodiversity	1, 2, 5
10: Woodlands are restored and managed	1, 2, 3, 5

Appendix 2: Acronyms

BC	Butterfly Conservation Scotland
CAG	Countryside and Greenspace Service
CCS	Climate Change and Sustainability Committee
CRF	Clyde River Foundation
FLS	Forestry and Land Scotland
GAT	Green Action Trust
GCV	Glasgow and Clyde Valley Green Network
HMP	Habitat Management Plan
INNS	Invasive Non-Native Species
LNCS	Local Nature Conservation Site
LNR	Local Nature Reserve
NBS	Nature-based solutions
NNR	National Nature Reserve
NS	NatureScot
PAWS	Plantations on Ancient Woodland Sites
RSPB	The Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEPA	Scottish Environment Protection Agency
SF	Scottish Forestry
SLBP	South Lanarkshire Biodiversity Partnership
SLBS	South Lanarkshire Biodiversity Strategy
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SUDS	Sustainable (Urban) Drainage System
SWT	Scottish Wildlife Trust
TF	Tweed Forum
VDL	Vacant and Derelict Land