

Nature Networks - Scottish Government Frequently Asked Questions (FAQs)

<https://www.nature.scot/home/nature-networks-toolbox/what-are-nature-networks/nature-networks-faqs/nature-networks-scottish-government-frequently-asked-questions-faqs>

The Scottish Government commissioned NatureScot to develop a co-designed Nature Network Framework, and a [toolbox of resources](#) which could be drawn upon by public bodies and other delivery organisations to aid implementation of Nature Networks. They have also produced [Frequently Asked Questions below](#), which will become available on the Scottish Government website alongside the SBS, the Delivery Plan, and the Nature Network Framework in due course.

What are Nature Networks and why do we need them across Scotland?

There is an urgent need to address biodiversity loss, and climate change, across the globe as well as here in Scotland. Around 50% of species in Scotland are in decline, and 11% are under threat of extinction. Habitat fragmentation is a key element in this decline and is exacerbated by current land use practices as well as the mounting climate crisis. In order to achieve a nature-positive, net zero Scotland by 2045 it is essential that Scotland's natural environment is restored and regenerated, to support thriving communities and wildlife alike.

Nature Networks are a key action the Scottish Biodiversity Strategy, Delivery Plan (SBS-DP), with a key commitment to strengthen and expand Nature Networks across every local authority area in Scotland, as set out in the Scottish Government's Programme for Government. Nature Networks enable healthy, well connected ecosystems – linking between and across important areas for nature, and creating new spaces for nature, across urban, peri-urban and rural areas. Their development allows species to move and adapt to our ever changing climate; and ensure high quality green spaces to help people connect to nature, improve health and wellbeing, and provide multiple local benefits that meet priorities for local communities.

What will a Nature Network look like?

Essentially, a Nature Network will connect important areas for nature. These will include nationally designated areas contributing to the '30 by 30' suite of protected areas alongside locally important areas – such as a Local Nature Reserves and Local Nature Conservation Site (LNCS), where appropriate.

The primary aim of a Nature Network is to support ecological connectivity. It may be appropriate to integrate an existing Green Network within a Nature Network, e.g. creating new or restoring existing spaces for nature along active travel routes.

A Nature Network can work at the national, regional and local scale, with all levels connecting to one another. How it is implemented will differ in different areas and locations. That is why Local Authorities will play such a key role in implementation.

We appreciate Nature Networks will look different in different areas of Scotland. There may also be different Networks within and between local authority areas, depending on the habitats, species and communities they are designed to support. Nevertheless, cross-border collaboration will be important to ensure that Nature Networks which cross shared boundaries remain fully functional.

Who is responsible for implementing Nature Networks?

Nature Networks implementation needs to take a 'whole-of-society' approach. The Nature Network Framework ([Framework for Nature Networks in Scotland - Draft | NatureScot](#)), which was co-designed by a range of stakeholders, sets out a high level vision and principles for implementation of Nature Networks in Scotland. It recognises that co-ordination across many partners will be imperative, with diversity and inclusion at the heart of decision-making and delivery, and open working and active sharing encouraged.

Implementation would ideally take place through local and regional partnerships to agree upon Nature Network corridors across an area; identify opportunities for enhancing existing, or creating new, spaces for nature that contribute to the corridor; and to work together to deliver locally-beneficial projects.

Will Nature Networks be designated?

No. Nature Networks will evolve over time and so need to retain flexibility to address the challenges of both changing land use and our changing climate. As nature restoration efforts increase across Scotland, and with work towards our '30 by 30' commitment, Nature Network evolution will need to flex to include more nature-rich areas over time. So whilst Nature Networks in themselves will not be designated, they will link into and across Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), LNCS, etc.. National Planning Framework 4 (NPF4) recognises the need to improve ecological connectivity across Scotland to support our health and wellbeing and to help address the twin crises of climate change and biodiversity loss, which is why nature networks have been embedded within the policies of NPF4.

We recognise that, where spatial mapping is done to help identify the areas of land appropriate to include in a Nature Network, this mapping will need to be updated and revised over time to remain agile to local place-making. This approach should enable continued, and new, conversations with appropriate land owners and managers about what can be done in practical terms to improve - and to retain - nature connectivity, and ensure access for people to high quality green spaces, in a particular place. Creating designated Nature Networks would unintentionally stifle that agility.

How do Nature Networks relate to Protected Areas and '30 by 30' sites.

Nature Networks aid ecological connectivity and help to address habitat fragmentation. Around 18% of Scotland's land areas is protected for nature through the network of Sites of Special Scientific Interest, National Nature Reserves, European and Ramsar sites. We are committed to increasing that safeguarding to cover 30% of our land area for nature by 2030 ('30 by 30' commitment).

This is a key action in the SBS-DP, which recognises that to build the '30 by 30' suite our existing protected areas will be supplemented by Other Effective [area-based] Conservation Measures (OECMs). OECMs offer a different approach to conservation in Scotland, by recognising areas that deliver positive, sustained, and long-term outcomes for biodiversity, as a result of the way the land is managed, regardless of the primary objective of this management. . This is a new mechanism in Scotland and could be delivered through contractual or other agreements.

At a national level, the Nature Network aims to provide ecological connectivity between protected areas and will look to build and enhance that connectivity between and across new areas that are added to the '30 by 30' suite, over time. Protected areas and OEEM's included in the '30 by 30' suite should act as the key nodes of a national-level Nature Network, with corridors for connectivity identified between those nodes. Local- and regional- Nature Networks will likely map across, and integrate with, any national-level Nature Network, which will grow and evolve alongside newly created and/or restored areas for nature, and as the '30 by 30' suite evolves.

What is the role for local conservation areas and other local designated areas for nature conservation within a Nature Network?

Adopting the same approach as that taken nationally, locally designated areas for nature and Local Nature Conservation Sites (LNCS) can act as key nodes within a local-level Nature Network.

By including locally important areas for nature within the Nature Network – whether they have been identified locally or nationally – is the key point to ensuring ecological connectivity across these areas; and access to high quality green spaces for local communities.

What is the role for Local Authorities in the development of a Nature Network?

Local Authorities best understand their administrative area. They have existing relationships with a wide range of partners and land owners – across both the public and private estate - and are often involved in bringing people together to allow new relationships to be developed. They are best placed to engage with local communities, including developing place-based approaches to tackle both the climate and nature emergencies.

Ideally a spatially defined nature network would be developed for the entirety of a Local Authority's area. This may be done by the Local Authority themselves, or in conjunction with other partners. This is likely to be visually represented through a Local Development Plan (LDP). Resultant mapping would enable conversations with the right land managers, landowners – whether in the public or the private sector - and communities, with a view to enabling the restoration/creation of connected habitats in a local area. It will also enable conversation with landowners and communities in neighbouring Local Authorities to realise both local, and wider regional connectivity.

Recognising that Nature Networks will necessarily evolve over time, the spatial mapping of those networks should be updated, as much as is possible.

Local Authorities should take a leadership role in enabling cross-sector conversations about Nature Networks and where these can be included in appropriate local and regional mechanisms. Existing local and regional mechanisms may already be in place (e.g. green space development, green-blue infrastructure networks, Climate Adaptation Networks, Community Planning Partnerships). There is no need to create something new if existing processes can sensibly incorporate Nature Network conversations and could direct the implementation of projects that will contribute to a Nature Network.

What is the role for non-public body land owners and land managers in helping to develop and implement a Nature Network?

Where a Nature Network has been spatially mapped across a specific landscape, it is beneficial for all land-owners and land-managers within that locality to discuss the opportunities that might exist on their land. Examples include, an individual farmer or cluster of farms where strips designated for nature might bring additional benefit to local connectivity; a commercial company putting in place forestry projects that are designed to ensure habitat connectivity is maintained ; a housing developer, where new developments might create opportunity for habitat creation and improving local connectivity.

Practical examples include a role for using existing planning mechanisms to avoid fragmentation and identify opportunities for enhancing existing biodiversity on a particular site; for Regional Land Use Partnerships to help identify parcels of land which provide opportunity to enhance/ create new habitats for connectivity, or improve access by local communities to existing nature-rich areas; energy providers looking to further enhance biodiversity on windfarm sites.

Is there a role for business in helping to develop and implement a Nature Network?

Many businesses are already taking voluntary action to conserve biodiversity and to support nature restoration activities. For example, Scottish Water are making significant investments in peatland restoration, woodland creation and other biodiversity enhancements on their estate; and in the marine environment businesses are investing in nature restoration through the [Scottish Marine Environment Enhancement Fund](#).

There is also a role for responsible private and philanthropic investment in funding nature restoration, connectivity and open space improvement projects. For example, NatureScot is working with SEPA, SRUC and the Enterprise Networks to support the development of [Landscape Enterprise Networks](#) in Scotland which provide a mechanism for businesses to invest in nature restoration in their local landscapes. NatureScot has also developed a [Nature Investment Partnership](#) to test out new approaches to investing in nature restoration, and is funding a wide range of businesses to develop new models for investment through the Facility for Investment Ready Nature Scotland ([FIRNS](#)) programme.

Additional, private investment is welcome, as Government funding alone is not enough to secure the actions needed for a nature-positive Scotland by 2030.

How is Scottish Government and NatureScot supporting the development of Nature

Networks?

The Scottish Government continues to look for appropriate opportunities for further integration, or 'mainstreaming' of Nature Networks across national policies. We have included Nature Networks as a key action within the SBS-DP to help stop biodiversity loss by 2030 and reverse that trend by 2045. Nature Networks are embedded within the fourth National Planning Framework (NPF4) to help develop high quality green spaces and address habitat fragmentation through the planning system. Nature Networks are also included as an outcome in the draft Scottish National Adaptation Plan (SNAP3), strengthening the role of nature in addressing the climate and nature crises and recognising the multiple co-benefits that nature restoration and habitat connectivity can bring to communities, as well as to nature. The Scottish Government has also commissioned NatureScot to develop an implementation framework and toolbox for use across the whole of Scotland; and are currently exploring options for an expertise hub to provide 'on the ground' support.

NatureScot are playing a key role in ensuring Nature Networks can be implemented across Scotland. They are;

- leading the co-development of the Nature Network Framework which sets out key, agreed, implementation principles [30 by 30 and Nature Networks | NatureScot](#). Following national consultation this will be published in full later in 2024.
- working with AECOM to develop a National-level Nature Network mapping tool; including mapping connectivity between existing nature-rich areas across Scotland, and identifying opportunity areas.
- collaborating with Local Authorities to further develop the AECOM tool as a local-level Nature Network spatial mapping tool, which is provided free to use by all Scottish Local Authorities, to enable spatial mapping of their Nature Networks.
- developing an implementation toolbox which will include guidance, signposting and exemplars on various implementation aspects including tools, data, funding and finance, expertise - sourced from multiple partners, sectors and interest groups. The toolbox is in early development and will evolve over time ([Nature Networks Toolbox | NatureScot](#)). Feedback on this developing area is particularly welcomed.
- publishing sector-specific guidance to support implementation across the whole of Scotland [Sector advice | NatureScot](#).

NatureScot continue to play a key role in providing ecological expertise to government and Ministers; and across local, regional and national levels to both public and private land owners and managers. Their expertise is helping to develop the evidence base for Nature Network creation; informing, monitoring and evaluating nature network projects for nature restoration and wider connectivity purposes.

What approaches are Local Authorities taking to develop their Nature Networks?

Different Local Authorities are at different stages in their Nature Network development. Some have undertaken a spatial mapping of Nature Networks across their area and are using the maps to inform conversations with other land-owners and managers, as well as local communities, to help identify key areas and projects on which to focus. Some examples of Nature Network mapping can be found below, and within the Nature Network Toolbox:

- [Edinburgh Nature Network \(arcgis.com\)](#).
- [Moray Nature Networks \(arcgis.com\)](#).
- [River Park Nature Network \(arcgis.com\)](#).

The above maps have been independently developed by individual Local Authorities. For anyone that wishes to explore how the AECOM mapping tool might help with local-level spatial mapping of Nature Networks please contact NatureNetworks@nature.scot.

What do you mean by ‘bottom-up’ and ‘top down’ approaches?

Bottom-up approaches to implementation include a role for communities and land owners – those who really understand the issues facing their local area and often know the best solutions. Including local land owners and managers, businesses, community groups and individuals in local decision-making is key to putting in place meaningful, long-term actions that benefits the whole community, as well as nature. Often there is valuable discussion and action already being taken within local areas, which could help contribute to and deliver Nature Networks.

Top down approaches includes what local and national Government can do to support local delivery. This includes enabling conversations between the right groups, providing strategic leadership and guiding implementation. For the Scottish Government this includes the integration of Nature Networks across appropriate policy areas such as Planning, Agriculture, Forestry, Climate Change and Health. For Local Authorities this includes enabling local implementation of strategies that bring multiple benefits for local communities, including mobilising communities, public bodies, the voluntary sector and private sector partners, in taking action on the ground.

For Nature Networks the balancing act comes in the empowerment and appropriate support to locally-driven implementation of projects that bring benefit to people and nature over the long term.

What are the benefits to people and communities?

Nature Networks should improve access to nature, for people in all communities. This is arguably more important across urban areas where people's interactions with green and blue spaces is limited, due to a variety of factors.

Nature networks can link across parkland, through active travel routes and along rivers or canals. Enhancing existing green and blue spaces for nature – for example changing grass management to encourage wild flower meadows, planting native trees, or installing green walls - can bring benefits for people, such as urban cooling, food production and air purification, as well as to nature, e.g. pollinator networks, river shading and nutrients, new habitats for birds and insects. Nature-based initiatives can also make communities and places more resilient to our changing climate, for example in helping to address flooding and surface water issues in both urban and rural areas.

Providing high quality and safe green and blue spaces where people can connect to nature is beneficial to people's physical health and mental wellbeing. They provide spaces for physical exercise activities, e.g. cycling, walking or water sports, areas for social interaction, as well as mindful spaces for relaxation and reflection. The creation, maintenance and monitoring of nature-based spaces also provides volunteering opportunities for people and community groups to engage in; bringing individual benefits, as well as supporting and enhancing the wider community.

Nature Networks will also contribute to restoring and maintaining vital ecosystem services that people and communities rely on, such as flood alleviation, and cleaner air and water; allowing us – as well as nature – to become resilient, and adapt to our changing climate.

What skills are needed to implement and

manage Nature Networks?

The development of Nature Networks will need to harness the existing knowledge and expertise within local communities. Different land management practices may need to be adopted which may mean that new green skills need to be developed within an organisation, or across a local area. These same skills will in many cases be needed to maintain and further restore the plants and animal populations within the Nature Network.

Strengthening Nature Networks, delivering nature restoration projects on the ground and managing nature-rich areas over the long term will require a range of skills and will need people from different disciplines to come together. Depending on the size, scale and location of the project, these may include project managers and funding officers, town planners, countryside rangers, factors, park managers, estate managers, foresters, farmers and rural contractors, landscape architects, ecologists and hydrologists. Nature restoration projects are more successful when the existing knowledge, expertise and human connections within local communities are utilised towards a common purpose and a common sense of stewardship for nature. Increasingly, volunteers with a range of skills are playing a key role in restoring and looking after nature-rich areas, and are helping to up-skill other volunteers involved in community-level action.

How will Nature Networks be financed?

The Scottish Government provided funding of £5M to local authorities in 2023-4 for the development of Nature Networks. This has helped to further develop the planning and delivery of specific projects across Scotland. Some projects funded through the Nature Restoration Fund are also contributing to a Nature Network. The competitive element of the [Nature Restoration Fund](#) supports projects that contribute towards strategic connectivity, improving habitat connectivity and Nature Networks.

The Scottish Government offers a number of rural development funds such as the Forestry Grant Scheme (FGS) and the Agri-Environment Climate Scheme (AECS), which support land managers to create and restore important nature habitats and strengthen Nature Networks

In the current competitive FGS, scoring takes into account connectivity between nature woodland. For projects where opportunity to expand and connect into native woodland has been identified, there is potential to tap into FGS funding. The Land Information Search website shows buffers where those opportunities are located.

The Scottish Government is also looking at how land managers and owners can be best supported in taking forward nature-positive actions through the Agricultural Reform Programme. Guidance on the future agricultural support framework and when further information will be provided, can be found in the [Agricultural Reform Route Map](#).

Nature restoration across Scotland is a shared responsibility and requires a mix of public, philanthropic and responsible private finance. The Scottish Government has published [principles for responsible investment](#) and will shortly also publish a market framework for natural capital which will provide more detail on what we mean by responsible investment.

In recent years the Scottish Government and NatureScot has worked with philanthropic funders such as Esmée Fairbairn Foundation and the National Lottery Heritage Fund to support those to seeking to attract private investment into natural capital and biodiversity projects.

Our current fund, the [Facility for Investment Ready Nature Scotland \(FIRNS\)](#), helps projects to develop business and governance models necessary to create a pipeline of investible nature-based projects.

Will Nature Networks make it more difficult to prevent the spread of Invasive Non-Native Species?

Invasive Non-Native Species (INNS) can have significant negative impacts on both Scotland's native biodiversity and human economic activities. To protect against these impacts Scotland has rigorous laws in place to prevent the establishment and spread of INNS. Projects such as the [Scottish Invasive Species Initiative](#) show how catchment scale action, including within and near to nature networks, can be taken to eradicate and control the spread of INNS such as American mink, Japanese knotweed and Giant hogweed.

Creating better links between native habitats through the growth and strengthening of Nature Networks in the landscape could be seen as providing an ideal super-highway for the spread of INNS, though there is no evidence at present that this is an issue. As with any nature restoration project, any proposals to improve connectivity and contribute to Nature Networks should be mindful of existing INNS in the area in which they are working. Similarly, care should always be taken to ensure non-native species are not introduced as part of works. INNS also need to be considered for established sites with ongoing management, which should include appropriate action to control and/or eradicate non-native species. The [Non-native species: code of practice](#) provides relevant information on INNS in Scotland and individuals roles and responsibilities in helping to prevent further negative impacts from them.

Return to the [Nature Networks Toolbox](#) page.

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