

## Topic: Blue and green infrastructure

Engagement version – September 2025

## Requirements addressed in this section

Table 1 Information required by the Town and Country Planning (Scotland) Act 1997, as amended, regarding the issue addressed in this section.

Section	Requirement
Section 15(5)(a)	the principal physical, cultural, economic, social, built heritage
	and environmental characteristics of the district.
Section 15(5)(b)	the principal purposes for which the land is used.

### Links to evidence

- National Planning Framework 4
   https://www.dpea.scotland.gov.uk/LibraryDocument.aspx?id=2094
- Updated Scottish Government policy on protecting Ramsar sites 2025
   https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2025/07/updated-scottish-government-policy-protecting-ramsar-sites/documents/updated-scottish-government-policy-protecting-ramsar-sites/updated-scottish-government-policy-protecting-ramsar-sites/govscot%3Adocument/updated-scottish-government-policy-protecting-ramsar-sites.pdf
- Cairngorms National Park Local Development Plan (2021)
   https://cairngorms.co.uk/documents/cairngorms-national-park-local-development-plan-2021
- Scottish Government's 'Green Infrastructure: Design and Placemaking' (2011): https://cairngorms.co.uk/documents/cairngorms-national-park-local-development-plan-2021



- Scottish Government Draft Planning Guidance: Biodiversity https://cairngorms.co.uk/documents/cairngorms-national-park-local-development-plan-2021
- NatureScot Developing with Nature Guidance https://www.nature.scot/doc/developing-nature-guidance
- Scottish Biodiversity Strategy to 2045: Tackling the Nature Emergency in Scotland https://www.gov.scot/binaries/content/documents/govscot/publications/strategyplan/2024/11/scottish-biodiversity-strategy-2045/documents/scottish-biodiversitystrategy-2045-tackling-nature-emergency-scotland/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland/govscot%3Adocument/scottishbiodiversity-strategy-2045-tackling-nature-emergency-scotland.pdf
- Scottish Biodiversity Delivery Plan 2024 2030
   https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2024/11/strategic-biodiversity-framework-delivery-plan-20242030/documents/scottish-biodiversity-delivery-plan-20242030/govscot%3Adocument/scottish-biodiversity-delivery-plan-20242030.pdf
- Framework for 30 by 30 in Scotland https://www.nature.scot/doc/30-30-framework
- Scottish National Adaption Plan (2024 2029)
   https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2024/09/scottish-national-adaptation-plan-2024-2029-2/documents/scottish-national-adaptation-plan-2024-2029/govscot%3Adocument/scottish-national-adaptation-plan-2024-2029.pdf



- Scottish Government Infrastructure Investment Plan for Scotland 2021 2022 to 2025 – 2026
  - https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2021/02/national-mission-local-impact-infrastructure-investment-plan-scotland-2021-22-2025-26/documents/national-mission-local-impact-infrastructure-investment-plan-scotland-2021-22-2025-26/national-mission-local-impact-infrastructure-investment-plan-scotland-2021-22-2025-26/govscot%3Adocument/national-mission-local-impact-infrastructure-investment-plan-scotland-2021-22-2025-26.pdf
- Cairngorms National Park Core Paths Plan 2015 (Review and public consultation underway (until 31 August 2025))
   https://cairngorms.co.uk/our-work/core-paths-plan
- Cairngorms National Park Partnership Plan 2022 2027
   https://cairngorms.co.uk/the-national-park/about/national-park-partnership-plan
- Cairngorms Nature Action Plan 2019 2024
   https://cairngorms.co.uk/wp-content/uploads/2019/02/CairngormsNatureAction19\_24PlanFinal.pdf
- Scotland's Forestry Strategy 2019 2029
   https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2019/02/scotlands-forestry-strategy-20192029/documents/scotlands-forestry-strategy-2019-2029/scotlands-forestry-strategy-2019-2029.pdf
- Water-Resilient Places: A Policy Framework for Surface Water Management and Blue – Green Infrastructure 2021 https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2021/02/water-resilient-places-policy-framework-surface-water-management-blue-green-infrastructure/documents/water-resilient-places-policy-framework-surface-water-management-blue-green-infrastructure/water-resilient-places-policy-framework-surface-water-management-blue-green-infrastructure/govscot%3Adocument/water-resilient-places-policy-framework-surface-water-management-blue-green-infrastructure.pdf



- Developing with Nature Guidance https://www.nature.scot/doc/developing-nature-guidance
- Identifying a Cairngorms National Park Nature Network https://cairngorms.co.uk/wp-content/uploads/2025/06/Identifying-a-Cairngorms-Nature-Network.pdf
- Cairngorms National Park Forest Strategy 2018
   https://cairngorms.co.uk/wp-content/uploads/2019/03/CairngormsNationalParkForestStrategy2019Final.pdf
- Blair Atholl Community Action Plan: Looking to 2030
   https://cairngorms.co.uk/wp-content/uploads/2023/08/Blair-Atholl-Struan-Community-Action-Plan-2023-final.pdf
- Dalwhinnie Community Action Plan: Looking to 2030 https://cairngorms.co.uk/wpcontent/uploads/2024/03/DalwhinnieCAP2023Report.pdf
- Dulnain Bridge Community Action Plan: Looking to 2030 https://cairngorms.co.uk/wp-content/uploads/2025/04/Dulnain-Bridge-Community-Action-Plan-2024-1-2.pdf
- Kincraig Community Action Plan: Looking to 2030
   https://cairngorms.co.uk/wp-content/uploads/2024/11/Kincraig-and-locality-Community-Action-Plan-2024.pdf
- Kingussie Community Action Plan: Looking to 2030 https://cairngorms.co.uk/wp-content/uploads/2025/05/Kingussie-Community-Action-Plan-2025.pdf
- Strathdon Area Community Action Plan 2016
   https://cairngorms.co.uk/documents/strathdon-community-action-plan-2016



- Dee Catchment Management Plan Summary https://www.deepartnership.org/wp-content/uploads/2020/06/DCMP-SummaryFORWEB.pdf
- Dee Catchment Partnership Delivery Plan 2022 2027
   https://www.deepartnership.org/wp-content/uploads/2020/06/DCP-Delivery-Plan-2022.pdf
- Spey Catchment Management Plan 2023- 2030
   https://speycatchment.org/spey-catchment-management-plan/
- Cairngorms National Park Local Development Plan 3: Strategic Flood Risk Assessment 2024 https://cairngorms.co.uk/wp-content/uploads/2024/03/Cairngorms-Strategic-Flood-Risk-Assessment-2024.pdf
- Our Sustainable Future Together: Long-Term Strategy
   https://www.scottishwater.co.uk/-/media/ScottishWater/Document-Hub/Key-Publications/Strategic-Plan/Long-Term-Strategy/Our-Sustainable-Future-Together\_Scottish-Water-Long-Term-Strategy.pdf
- Scottish Water Strategic Plan A sustainable future together https://www.scottishwater.co.uk/-/media/ScottishWater/Document-Hub/Key-030220StrategicPlanASustainableFutureTogether.pdf
- Scottish Water Climate Change Adaptation Plan 2024
   https://www.scottishwater.co.uk/-/media/ScottishWater/Document-Hub/Key-Publications/Climate-Change/290224ScottishWaterAdaptationPlan.pdf
- Scotland's National Water Scarcity Plan 2020
   https://www.sepa.org.uk/media/219302/scotlands-national-water-scarcity-plan.pdf
- Framework for Nature Networks in Scotland
   https://www.nature.scot/doc/nature-networks-framework



- Nature Networks Toolbox https://www.nature.scot/home/nature-networks-toolbox
- Identifying a Cairngorms National Park Nature Network 2025
   https://cairngorms.co.uk/wp-content/uploads/2025/06/Identifying-a-Cairngorms-Nature-Network.pdf
- NHS Grampian Biodiversity Strategy 2025 2030
   https://www.nhsgrampian.org/siteassets/about-us/sustainability/nhsg-biodiversity-strategy-2025-2030\_compressed.pdf
- NHS National Services Scotland Environmental and Sustainability Strategy 2022 2040
   https://www.nss.nhs.scot/media/4014/nss\_environmental\_sustainability\_strategy\_20 22-40\_accessible.pdf
- Crofters (Scotland) Act 1993
   https://www.legislation.gov.uk/ukpga/1993/44/contents
- Stalled Spaces delivering community and environmental benefits through temporary greenspace scoping report https://drive.google.com/file/d/1p32OCLwQQhxTjlhwll5uupdcWBOioDgW/view
- Pollinator Strategy for Scotland
   https://www.nature.scot/doc/pollinator-strategy-scotland-2017-2027
- Scottish Outdoor Access Code https://www.outdooraccess-scotland.scot/
- NatureScot SiteLink https://sitelink.nature.scot/home
- Protected site condition
   https://informatics.sepa.org.uk/ProtectedNatureSites/



- Special Areas of Conservation https://opendata.nature.scot/datasets/7e07a1bb1e294d109c40d2327e3c316d\_0/explore
- Special Protection Areas
   https://opendata.nature.scot/datasets/bc43e7d54a9a49c1a5e72d00a8b7c84e\_0/explore?location=53.770587%2C-6.472151%2C5.20
- Ramsar Wetlands of International Importance
   https://opendata.nature.scot/datasets/d7c76ec074a04de69f7e917eab247822\_0/exp
   lore?location=53.770587%2C-6.472151%2C5.20
- Sites of Special Scientific Interest https://opendata.nature.scot/datasets/b243da0bc2164849b80f9c8b347edd18\_0/ex plore?location=57.371953%2C-7.698272%2C6.85
- National Nature Reserves
   https://opendata.nature.scot/datasets/746f08f7aab34b7aaf1a7e9341d90b5b\_0/exp lore?location=56.994985%2C-3.440291%2C9.65
- Biogenetic Reserves
   https://opendata.nature.scot/datasets/snh::biogenetic-reserves/explore?location=57.043129%2C-3.668104%2C8.83
- Royal Society for the Protection of Birds Reserves
   https://opendata rspb.opendata.arcgis.com/datasets/6076715cb76d4c388fa38b87db7d9d24\_0/explore?location=57.034550%2C-3.626738%2C9.23
- National Forest Estate Forest Parks Great Britain
   https://www.data.gov.uk/dataset/1cfb57ae-72a9-4ab3-95a5-e22d3b2c134f/national-forest-estate-forest-parks-gb
- Nature30 Sites
   https://www.nature.scot/nature30



- Scottish Core Paths
   https://data.spatialhub.scot/dataset/core\_paths-is
- The Speyside Way https://www.speysideway.co.uk/route/
- The Deeside Way https://www.deesideway.org/
- Sustrans National Cycle Network (Public)
   https://data-sustrans-uk.opendata.arcgis.com/datasets/Sustrans-UK::national-cycle-network-public-1/about
- Aberdeenshire Core Path Plan https://www.aberdeenshire.gov.uk/paths-and-outdoor-access/core-paths-plan/core-paths-plan-maps/
- Highland Council Core Path Plan
   https://www.highland.gov.uk/info/1225/countryside\_farming\_and\_wildlife/161/outdo or\_access/4
- Perth and Kinross Council Cycle Network Masterplan
   https://www.pkc.gov.uk/media/42246/Perth-Cycle-Network-masterplan/pdf/Perth\_Cycle\_Network\_Plan\_\_Final\_.pdf?m=1529077074197
- Cairngorms Nature Action Plan 2019 2024 Final Report 2024
   https://cairngorms.co.uk/wp-content/uploads/2024/11/Final-Report-\_Cairngorms-Nature-Action-Plan-2019-2024.pdf
- Habitat Map of Scotland
   https://opendata.nature.scot/datasets/a3e4f1f2eb2b481fa15c58d831b96250\_0/expl ore?location=57.265342%2C-3.786169%2C13.64
- Scotland Land Cover Map 2022 EUNIS Level 1
   https://opendata.nature.scot/maps/ca7378e2d92f478c9d11b7cc86df3c46/explore?location=57.509112%2C-4.968950%2C6.64



- Scotland Land Cover Map 2022 EUNIS Level 2
   https://opendata.nature.scot/maps/snh::scotland-land-cover-map-2022-eunis-level-2/about
- Scotland Land Cover Map Change 2020 2022
   https://opendata.nature.scot/maps/ccbdc1dce9c54893b58a4ec12497f04e/explore?location=57.035025%2C-3.389146%2C7.37
- National Vegetation Classification (NVC)
   https://opendata.nature.scot/maps/ceef41b67381493a8d2d1633e5ceb2f8/about
- The Geological Conservation Review https://opendata.nature.scot/datasets/68c862b5d3a1437bb4b477dcd4cd8ffc\_0/explore?location=54.090193%2C-6.472151%2C4.75
- Peatland ACTION peat depth and condition
   https://opendata.nature.scot/datasets/68c862b5d3a1437bb4b477dcd4cd8ffc\_0/explore?location=54.090193%2C-6.472151%2C4.75
- Scotland's Soils Web National Soil Map of Scotland
   https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/
- Scotland's Environment Web BGS Bedrock
   https://www.bgs.ac.uk/map-viewers/geoindex-onshore/
- Scotland's Environment Web Superficial Layer https://www.bgs.ac.uk/map-viewers/geoindex-onshore/
- National-Scale Land Capability for Agriculture: https://soils.environment.gov.scot/maps/capability-maps/national-scale-land-capability-for-agriculture/
- Ordnance Survey Open Green Space layer
   https://www.ordnancesurvey.co.uk/products/os-open-greenspace



- National Forest Inventory 2023
   https://data forestry.opendata.arcgis.com/datasets/25690ca444d54a588394d61a985006b5\_0/e
   xplore?location=57.273977%2C-3.671366%2C11.44
- Native Woodland Survey of Scotland https://open-datascottishforestry.hub.arcgis.com/datasets/6d27b064fcba471da50c8772ad0162d7\_0/ explore
- UK Lakes Portal: https://uklakes.ceh.ac.uk/
- Scotland Greenspace Map: https://www.greenspacescotland.org.uk/greenspace-map
- Cairngorms National Park Grassland Mapping Project 2020 2022 Polygons https://opendata.nature.scot/datasets/snh::cnp-grassland-mapping-project-2020-22-polygons/explore?location=57.272032%2C-3.418130%2C14.07
- Cairngorms National Park Authority Biodiversity Duty Report https://cairngorms.co.uk/wpcontent/uploads/2021/02/2018\_2020CNPABiodiversityDutyReport.pdf
- Ordnance Survey Master Map Water Network
   https://www.ordnancesurvey.co.uk/blog/mastermap-water-network
- Scottish Environment Protection Agency Riparian Vegetation Planting Opportunities (25m)
   https://map.environment.gov.scot/sewebmap/?layers=riparianVegetationPlantingOp portunities
- Scottish Environment Protection Agency River Recovery Potential https://map.environment.gov.scot/sewebmap/?layers=riverRecoveryPotential



- Scottish Environment Protection Agency Recommended Riparian Corridors https://map.environment.gov.scot/sewebmap/?layers=recommendedRiparianCorridor
- Scottish Environment Protection Agency Obstacles to Fish Migration
   https://map.environment.gov.scot/sewebmap/?layers=obstavlesToFishMigration
- Scottish Environment Protection Agency Loch Classification https://map.environment.gov.scot/sewebmap/?layers=lochClass
- Scottish Vacant and Derelict Land Survey 2023
   https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/202
   4/06/scottish-vacant-derelict-land-survey-2023/documents/scottish-vacant-derelict-land-survey-2023/scottish-vacant-derelict-land-survey-2023/govscot%3Adocument/scottish-vacant-derelict-land-survey-2023.pdf
- Scottish Vacant and Derelict Land data Scotland https://data.spatialhub.scot/dataset/vacant\_and\_derelict\_land-is
- Open Mosaic Habitat on Previously Developed Land https://www.nature.scot/sites/default/files/2025-06/naturescot-commissioned-report-606.pdf
- Scottish Environment Protection Agency water classification hub https://www.sepa.org.uk/data-visualisation/water-classification-hub
- Carbon rich soils
   https://opendata.nature.scot/datasets/snh::carbon-and-peatland-2016-map/about
- Carbon and Peatland map 2016
   https://map.environment.gov.scot/Soil\_maps/?layer=10
- Peatland condition
   https://storymaps.arcgis.com/stories/24bba98fd4294dbc9828abc0928186f0



- Peatland ACTION completed reported hectares
   https://opendata.nature.scot/datasets/snh::peatland-action-completed-reported-hectares-non-spatial/about
- Peatland ACTION completed restoration footprints
   https://opendata.nature.scot/datasets/snh::peatland-action-completed-restoration-footprints/explore?location=57.029522%2C-3.534749%2C10.02
- Gardens and Designed Landscapes (Historic Environment Scotland)
- https://www.spatialdata.gov.scot/geonetwork/srv/eng/catalog.search#/metadata/50 3322b7-8efc-4816-b5c8-b696516baa31
- National Nature Reserves
   https://opendata.nature.scot/datasets/3d9110a3aa874a18b30aea6a69015013\_0/ex plore?location=57.230919%2C-3.042107%2C7.67
- Royal Society for the Protection of Birds Reserves
   https://opendata rspb.opendata.arcgis.com/datasets/6076715cb76d4c388fa38b87db7d9d24\_0/explo
   re?location=57.034550%2C-3.626738%2C9.23
- Wild Land Areas 2014
   https://opendata.nature.scot/datasets/6679cd5bc96c4c0ea41fde13ee89b9db\_0/explore?location=57.255894%2C-3.489864%2C8.96
- The Munros (Walk the Highlands) https://www.walkhighlands.co.uk/munros/
- The Corbetts (Walk the Highlands)
   https://www.walkhighlands.co.uk/corbetts/
- Curriculum for excellence through outdoor learning
   https://education.gov.scot/media/isxg4lb0/cfe-through-outdoor-learning.pdf



- NatureScot: Young People Learning Outdoors and Developing Skills https://www.nature.scot/professional-advice/young-people-learning-outdoors-and-developing-skills
- Outdoor Learning Directory https://outdoorlearningdirectory.com
- Buglife's Important Invertebrate Areas (IIAs)
   https://gis-data-hub-buglife.opendata.arcgis.com/
- Plantlife's Important Plant Areas (IPAs)
   https://www.plantlife.org.uk/protecting-plants-fungi/important-plant-areas/
- NatureScot Management of Road Verges for Biodiversity report https://www.nature.scot/sites/default/files/2022-08/final%20Publication%202013%20-%20SNH%20Commissioned%20Report%20551%20-%20The%20management%20of%20roadside%20verges%20for%20biodiversity.pdf

## Summary of evidence

## Policy context

## **National Planning Framework 4**

National Planning Framework 4 includes a specific policy (Policy 20 Blue and Green Infrastructure) that aims to protect and enhance blue and green infrastructure and their networks. Its outcomes are to ensure blue and green infrastructure are an integral part of early design and development processes; are designed to deliver multiple functions including climate mitigation, nature restoration, biodiversity enhancement, flood prevention and water management; and communities benefit from accessible, high-quality blue, green and civic spaces.

Green and blue infrastructure involves incorporating natural elements like parks, green spaces, and wildlife habitats to enhance biodiversity, mitigate climate change effects, and improve overall quality of life.

This could involve policies to protect and expand existing green spaces, create new greenspace through development, and establish ecological corridors. The blue element



focuses on water bodies, including rivers and lochs. This might include measures to protect water quality, manage flood risks, and enhance recreational opportunities along rivers.

Local development plans should be informed by relevant, up-to-date audits and/or strategies, covering the multiple functions and benefits of blue and green infrastructure. The spatial strategy should identify and protect blue and green infrastructure assets and networks; enhance and expand existing provision including new blue and/or green infrastructure. This may include retrofitting. Priorities for connectivity to other blue and/or green infrastructure assets, including to address cross-boundary needs and opportunities, should also be identified.

Local development plans should encourage the permanent or temporary use of unused or under-used land as green infrastructure. Where this is temporary, this should not prevent future development potential from being realised.

Local development plans should safeguard access rights and core paths, including active travel routes, and encourage new and enhanced opportunities for access linked to wider networks.

The following National Planning Framework 4 policies are listed as key connections to Policy 20 and are relevant to this evidence base:

#### Sustainable Places

Policy 1 Tackling the climate and nature crises

Policy 2 Climate mitigation and adaptation

Policy 3 Biodiversity

Policy 4 Natural places

Policy 5 Soils

Policy 6 Forestry, woodland and trees

Policy 7 Historic assets and places

Policy 8 Green belts

Policy 13 Sustainable transport

#### **Liveable Places**

Policy 14 Design, quality and place

Policy 15 Local Living and 20 minute neighbourhoods

Policy 18 Infrastructure first



Policy 19 Heat and cooling

Policy 16 Quality homes

Policy 21 Play, recreation and sport

Policy 22 Flood risk and water management

Policy 23 Health and safety

#### **Productive Places**

Policy 27 City, town, local and commercial centres

Policy 29 Rural development

National Planning Framework 4 confirms that infrastructure includes green and blue infrastructure and provides the following definitions:

- **Green Infrastructure** features or spaces within the natural and built environment that provide a range of ecosystem services
- Blue Infrastructure water environment features within the natural and built environments that provide a range of ecosystem services. Blue features include rivers, lochs, wetlands, canals, other watercourses, ponds, coastal and marine areas including beaches, porous paving, sustainable urban drainage systems and raingardens.

Green and Blue Infrastructure contributes to the following National Planning Framework 4 qualities of successful places:

- Quality 1 Healthy
- Quality 2 Pleasant
- Quality 4 Sustainable

Green and Blue Infrastructure contributes to the National Planning Framework 4 crosscutting outcomes:

- Reducing greenhouse gas emissions
- Improving biodiversity
- Lifelong health and wellbeing.

## Updated Scottish Government policy on protecting Ramsar sites 2025

Prior to the publication of the updated policy position in July 205, in Scotland, statutory protection of natural heritage sites was delivered primarily through designation either as a Site of Special Scientific Interest or as a Special Area of Conservation / Special Protection Area (European site) under the Nature Conservation (Scotland) Act 2004 and



The Conservation (Natural Habitats, &c.) Regulations 1994 (Habitats Regulations) respectively. Ramsar sites were therefore not afforded the same level of protection as these designations. However, from 9 July 2025, as a matter of policy, the Scottish Government considers that listed Ramsar sites in Scotland should be treated as if they were European sites for the purposes of land use change decision making.

This policy position is designed to reflect the requirements set out in National Planning Framework 4, as part of Policy 4c (Natural Places), which states that, 'All Ramsar sites are also European sites and / or Sites of Special Scientific Interest and are extended protection under the relevant statutory regimes.'

#### Nature30 Sites

The 30 by 30 target, to ensure that 30% of the world's terrestrial, inland water, coastal and marine areas are effectively conserved and managed by 2030 through ecologically representative, well connected and equitably governed systems of protected areas and other effective area-based conservation measures (OECMs), was agreed in 2022 as part of the Kunming Montreal Global Biodiversity Framework.

The Scottish Government has committed to achieving the 30 by 30 target. In Scotland it is being delivered through the network of existing protected areas consisting of Sites of Special Scientific Interest (SSSI), Special Protected Areas (SPAs), Special Areas of Conservation (SACs), Ramsar sites, and National Nature Reserves (NNRs), and OECMs as outlined in the 30 by 30 Framework. In August 2025 the Scottish Government announced that Scotland's approach to other effective area-based conservation measures will be known as Nature30 Sites.

Nature 30 sites are defined areas that are put forward by landowners/managers as being managed effectively, in such a way that produces benefits for biodiversity that are secured in the long-term. They are being introduced to complement existing Protected Areas and help recognise the safeguarding, restoration and enhancement of some of Scotland's most nature-rich areas.

Nature 30 sites are likely to include blue and green infrastructure and will be key sites within Nature Networks.

The qualifying criteria for Nature 30 sites in Scotland are:

- The site is not a Protected Area.
- The site has a legitimate governance authority.
- The site is geographically defined.



- The site is of importance for the in-situ conservation of biodiversity values.
- The governance and management of the site is expected to be sustained long term.
- The site is managed, and evidence is available that the management of the site is
  effective in delivering positive and sustained outcomes for biodiversity conservation.

### Cairngorms National Park Local Development Plan 2021

The Cairngorms National Park Local Development Plan (2021) includes several policies and supporting supplementary guidance relevant to blue and green infrastructure including:

- Policy 3: Design and placemaking
- Policy 4: Natural heritage
- Policy 5: Landscape
- Policy 8: Open space, sport and recreation
- Policy 9: Cultural heritage
- Policy 10: Resources
- Natural Heritage Non-Statutory Guidance
- Landscape Non-Statutory Guidance
- Policy 8 Open space, sport and recreation Non-Statutory Guidance
- Resources Non-Statutory Guidance

These policies are reviewed as part of the preparation of the local development plan. For further information, see:

 https://cairngormsldp.commonplace.is/en-GB/proposals/v3/policymonitoring?step=step1

# Scottish Government's 'Green Infrastructure: Design and Placemaking' 2011

This document is aimed at planners, landscape architects and developer, housebuilders and others involved in sharing out built and green environments. It sets out to a definition of green infrastructure which includes blue infrastructure features and provides examples of how green infrastructure can be considered at every scale of planning from the strategic framework level down to neighbourhood level, street level to the individual building. The second part of the document focuses on green infrastructure in site masterplanning and provides both local and international examples of how green infrastructure features deliver against the 6 qualities of successful places: Welcoming, Distinctive, Safe and pleasant, Easy to move around, Resource efficient and Adaptable.



#### Infrastructure Investment Plan 2021 – 2022 to 2025 – 2026

The Infrastructure Investment Plan outlines the strategic approach to delivering Scotland's National Infrastructure Mission to increase economic growth by increasing annual investment in Scotland's infrastructure. In delivering this vision, the Infrastructure Investment Plan focuses on three core strategic themes for guiding investment decisions in Scotland namely:

- Enabling the transition to net zero emissions and environmental sustainability.
- Driving inclusive economic growth.
- Building resilient and sustainable places.

The Scottish Government definition of infrastructure is wider than that used in other parts of the UK, including for example social and digital infrastructure. In recognition of the role that Infrastructure plays in supporting environmental, as well as social and economic outcomes, the Scottish Government proposed that Natural Infrastructure was added to the definition of Infrastructure, which was supported by 95% of respondents to the draft consultation. Investment in nature-based solutions builds resilience and delivers multiple benefits. For example, enhancing nature reserves and protected areas boosts biodiversity and can also increase recreational and tourism value. Improving landscapes and open space in housing encourages outdoor activity, delivers passive cooling and provides sustainable drainage. Planting trees and restoring peatland increases carbon storage.

Investment in natural infrastructure creates significant opportunities for improving biodiversity and reducing emissions, while also creating jobs and a wide range of health and wellbeing benefits, including improved urban air quality and protection from flooding.

Natural Infrastructure included in the investment plan includes:

- Increasing investment in forest cover (expansion of national woodlands, new woodland planting, and investment in tree nursery capacity)
- Increased peatland restoration to meet aim of 250,000 ha by 2050.
- Support for reuse of vacant and derelict land as part of a fair, green recovery.

## Cairngorms National Park Core Paths Plan 2015

The Cairngorms National Park Authority has a duty under the Act to prepare a Core Paths Plan. Section 17 (1) of the Land Reform (Scotland) Act 2003 states that the core paths network should be:



"... sufficient for the purpose of giving the public reasonable access throughout the area".

The Core Paths Plan helps people to enjoy and understand the special qualities of the Cairngorms National Park by identifying outdoor access opportunities. The path network will satisfy the needs of visitors and local people to get around, and link to the wider path network and beyond. The network is made up of a mixture of existing and new paths, which together provide a cohesive system.

Vision for the Core Paths Plan is:

'The Core Paths Plan helps to deliver the vision for the National Park: 'An outstanding National Park, enjoyed and valued by everyone where nature and people thrive together'. In particular, the Core Paths Plan will help people to enjoy and understand the special qualities of the Cairngorms National Park by identifying a network of paths which offer a wide range of high-quality outdoor access opportunities.'

The objectives of the Core Paths Plan are that the core paths network will:

- a) Help to conserve the Park's natural and cultural heritage and encourage people to enjoy it in a responsible way.
- b) Help those living and working on the land manage access.
- c) Help to deliver the priorities for each area identified in Active Cairngorms.
- d) Provide for a wide range of activities.
- e) Provide for a wide range of abilities.
- f) Include a wide range of popular routes.
- g) Include paths within, around and between communities and to public transport connections and places of local importance.

The Core Paths Plan is currently undergoing a review, and an update is due to be adopted in 2026.

## Crofters (Scotland) Act 1993

The Crofters (Scotland) Act 1993, as amended by the Crofting Reform etc Act 2007, Crofting Reform (Scotland) Act 2010, and Crofting (Amendment) (Scotland) Act 2013, forms the legislative framework that governs the use of croft land in Scotland. The act sets out the definition for crofts and crofters and sets out duties crofters must meet to occupy croft land, including duties relating to residency, maintenance, cultivation and use.



# Scottish Biodiversity Strategy to 2045: Tackling the Nature Emergency in Scotland

The Scottish Biodiversity Strategy sets out actions for addressing the twin crises; Global Climate Emergency and Nature Emergency. These priorities seek to halt the loss of biodiversity and help Scotland reach the goal of 'Nature Positive' by 2030 and to have restored and regenerated biodiversity across the county by 2045.

This Strategy identifies six objectives which have shaped the development of actions to deliver Scotland's high-level goals, continuing progress towards halting the loss of biodiversity and being nature positive by 2030. They are:

- 1. Accelerate restoration and regeneration.
- 2. Protect nature on land and at sea, across and beyond protected areas.
- 3. Embed nature-friendly farming, fishing and forestry.
- 4. Protect and support the recovery of vulnerable and important species and habitats.
- 5. Invest in nature.
- 6. Take action on the indirect drivers of biodiversity loss.

The Strategy's outcomes for land by 2045 are as follows:

- 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 to climate change.
- Harmful invasive non-native species (INNS) will be managed so that established invasive non-native species no longer degrade native habitats and species or impede their restoration and regeneration and new introductions are managed quickly and effectively.
- Biodiversity as a concept will be understood and valued across the population and embedded in educational curriculums



- Nature Networks across our landscapes will underpin the resilience and health of species and habitats.
- Farmland practices will have resulted in a substantial regeneration in biodiversity, ecosystem and soil health and significantly reduced carbon emissions while sustaining high quality food production.
- Management of deer ranges, grouse moors and upland agriculture will be contributing to the regeneration of biodiversity in upland areas.
- Forest and woodland management will have led to sustainable natural regeneration; a greater diversity of woodland species; increased woodland cover with a healthy understorey, enhanced woodland connectivity; and improved integration of trees into other land uses.
- Soil health will have been improved by tackling loss of organic carbon, erosion, compaction, and the impacts of grazing, air pollution and climate change, and will function as a nature-based solution to flooding, erosion and biodiversity loss.
- The actions we take to improve biodiversity will create new green jobs and economic opportunities to supporting thriving communities.
- Towns and cities will include nature-rich environments close to all communities, contributing to Nature Networks and measurable increases in urban biodiversity.
- Multi-functional urban nature-based solutions will enable people and biodiversity to adapt to our changing climate by cooling the urban environment and managing extreme rainfall events, with blue and green infrastructure designed and managed to benefit biodiversity, provide habitats and allow wildlife to move through urban areas.

The Strategy's outcome for rivers, lochs and wetlands by 2045 is as follows:

- The extent of restored catchments and improvements in ecological status of rivers, lochs and wetlands will have increased with waterbodies in good condition.
- Riparian woodland will have expanded reducing the average temperature of our rivers and burns, leading to increases in freshwater fish species and other wildlife.
- A substantial, widespread and ongoing programme of peatland restoration will have led to the majority of Scotland's peatlands being in good condition, a net sequester of carbon with thriving wildlife and biodiversity.
- The extent, condition, connectivity and resilience of wetlands, including floodplain wetlands and pond habitats will have significantly improved.
- Beavers, salmon recovery and riparian woodland will be established as key ecological components of restored rivers and wetlands.



Further information and implications of the Strategy are contained within the natural heritage evidence paper and Flood risk and water management evidence paper.

#### Scottish Biodiversity Delivery Plan 2024 – 2030

Five-year Delivery Plans will set out in detail the actions needed to deliver the 2045 term vision and its outcomes. The first Plan 2024 – 2030 was published in conjunction with the Scottish Biodiversity Strategy. Priority actions are described under the six objectives set out in the Biodiversity Strategy.

Relevant actions linked to Blue-green Infrastructure under each of the objectives include:

#### Objective 1: Accelerate restoration and regeneration:

- Introduce Statutory Nature Restoration Targets.
- Introduce a programme of Ecosystem restoration including:
- Using spatial evidence identify and facilitate six exemplar large scale landscape restoration partnership projects with significant woodland components by 2025 and establish management structures, with restoration work progressing by 2030.
- Implement Scotland's strategic approach for Scotland's rainforest which aims to improve its condition and health so that it can regenerate and expand whilst providing benefits to communities.
- Continue our Peatland ACTION programme investing £250 million over 10 years to restore 250,000 hectares of degraded peat by 2030.
- Develop and implement the Scottish Plan for Invasive Non-Native Species (INNS)
   Surveillance, Prevention and Control.
- Substantially reduce deer densities across our landscapes in parallel with ensuring sustainable management of grazing by sheep to improve overall ecosystem health.
- Enhance water and air quality and undertake water management measures to enhance biodiversity and reduce negative impacts.
- Ensure grouse moor management sustains healthy biodiversity.

#### Objective2: Protect nature on land and at sea, across and beyond protected areas:

- Ensure that at least 30% of land and sea is protected and effectively managed to support nature in good health by 2030 (30 by 30).
- Strengthen the role of National Parks and ensure they act as exemplars of biodiversity protection and recovery whilst continuing to support local communities.
- Fulfil the potential of National Nature Reserves for nature recovery.
- Expand and enhance Nature Networks and ecological connectivity.



- Champion new planning and development measures for protecting and enhancing biodiversity.
- Enhance biodiversity in Scotland's green and blue spaces.

#### Objective 3: Embed nature-friendly farming, fishing and forestry:

- Ensure increased uptake of high diversity, nature-rich, high-soil carbon, low-intensity farming methods while sustaining high-quality food production.
- Introduce an agricultural support framework which delivers for nature restoration and biodiversity alongside climate and food production outcomes.
- Ensure that forests and woodlands deliver increased biodiversity and habitat connectivity alongside timber and carbon outcomes.
- Implement Scotland's vision for sustainable aquaculture to minimise negative impacts on biodiversity.

## Objective 4: Protect and support the recovery of vulnerable and important species and habitats:

- Revise the Scottish Biodiversity List of species and habitats that Ministers consider to be of principal importance for biodiversity conservation in Scotland.
- Develop effective species recovery, reintroduction and reinforcement programmes.
- Manage existing and emerging pressures to improve the conservation status of seabirds, marine mammals, elasmobranchs and wild salmon.

#### Objective 5: Invest in nature:

- Promote our natural capital market framework.
- Publish a Biodiversity Investment Plan for Scotland by the end of 2024.
- Public funding streams that contribute to nature restoration will be designed in a way that they can be matched or blended with private finance or investment.
- Provide direction on, and investment in, green skills and local economic opportunities supporting nature-based education, nature restoration skills and volunteering.

#### Objective 6: Take action on the indirect drivers of biodiversity loss:

- Engage and strengthen the connection between people and communities and nature.
- Embed biodiversity and nature in curriculum development.
- Mainstream and integrate biodiversity policy across government and address unsustainable supply and demand to reduce biodiversity impacts.
- Address unsustainable supply and demand to reduce biodiversity impacts.



A full set of actions are set out in Annex 1 of the Delivery Plan.

#### Framework for 30 by 30 in Scotland

The Scottish Government 2020 Statement of Intent on Biodiversity outlined the commitment to protect at least 30% of Scotland's land and sea for nature by 2030 and commissioned NatureScot to develop and publish a National Framework and Implementation Plan for terrestrial delivery of 30 by 30 in Scotland. This commission covers the delivery of 30 by 30 on land (including freshwater and coastal sites) but does not cover marine, as the commitment has already been achieved in the marine environment, with 37% of Scottish waters lying within Marine Protected Areas. This project has been developed alongside that of Nature Networks and is key in the delivery of the Scottish Biodiversity Strategy and contributing to the wider Environmental Strategy. Effective delivery of this target will significantly contribute towards tackling the nature and climate emergency.

Terrestrial protected areas in Scotland currently cover 18.2% of land and freshwater and have been shown to play a vital contribution towards conservation efforts. They protect Scotland's most rare and vulnerable species and are also an important tool for managing natural capital and ecological processes that are necessary for the functioning of ecosystems and the services they provide.

The following sites are considered as contributing to the current 18.2% of land-coverage in Scotland:

- Sites of Special Scientific Interest (SSSIs)
- Special Protection Areas (SPAs)
- Special Areas of Conservation (SACs)
- Ramsar sites
- National Nature Reserves (NNRs).

The means by which these sites are identified, managed, and integrated into the wider landscape is key to their success and are considered within the framework. In Scotland 30 by 30 sites will include Protected Areas and Other Effective Area-based Conservation Measures (OECMs).

Land will only contribute if it is considered as being of particular importance for biodiversity, ecosystem function and services and if we can be assured, as a protected area or 'other effective area-based conservation measure' (OECM), that it will continue to be so in the long-term.



The draft framework sets out the vision for 2030 as:

'By 2030 at least 30% of Scotland's land will be protected or conserved for biodiversity, delivering for people and climate. Sites showcase the best in nature restoration, protection and in mitigating and adapting to climate change. They help protect the rare and vulnerable, as well as delivering diverse, complex, and resilient ecosystems that provide important services that benefit everyone far into the future. These 30 by 30 sites are integrated into the wider landscape, acting as the beating, nature-rich hearts of Scotland's Nature Network and beyond.'

#### Scottish Government Draft Planning Guidance: Biodiversity

In November 2023, Scottish Government published draft planning guidance on biodiversity to clarify understanding of National Planning Framework 4's Policy 3. Although labelled as 'draft planning guidance' it is intended that it should be used now to assist in the implementation and delivery of Policy 3.

Concerning local development plans, the draft guidance reiterates that local development plans should encourage, promote and facilitate development that addresses the global climate emergency and nature crisis, in order to reflect the significant weight that this carries within National Planning Framework 4.

It states that opportunities to promote nature recovery and nature restoration could include by facilitating the creation of nature networks; restoring degraded habitats or creating new habitats; and by incorporating measures to increase biodiversity, including populations and priority species.

It states that the Evidence Report stage of the local development plan preparation process is an opportunity to identify priority species and habitats within the plan area. Local areas of importance for biodiversity may also be identified.

The draft guidance highlights how local biodiversity action plans offer an ideal opportunity to link local development plan spatial strategies to agreed local priorities for protecting and enhancing local ecosystems, habitats and species. Within the context of the National Park, this is the Cairngorms Nature Action Plan.

It states that the local development plan preparation process offers an opportunity to take a more strategic, place-based and cross-sectoral approach to nature. In this approach wildlife sites, corridors, and stepping stones, landscape features,



watercourses, and green and blue spaces are identified and come together to form integrated nature networks, supporting ecological connectivity. The spatial strategy can help to prevent fragmentation or isolation of habitats and identify opportunities to restore and enhance links which have been broken, including as part of wider green networks and active travel routes.

The draft guidance also highlights the role Strategic Environment Assessment plays in the local development plan preparation process.

The terms 'enhance' and 'enhancement' are widely used in National Planning Framework 4. The guidance defines the key term enhancement as: 'In order for biodiversity to be 'enhanced' it will need to be demonstrated that it will be in an overall better state than before intervention, and that this will be sustained in the future. Development proposals should clearly set out the type and scale of enhancement they will deliver. Specifically for local development, NatureScot's 'Developing With Nature' guidance provides advice on information that applicants could include within a planning application in order to provide confidence that enhancement will be achieved.'

On biodiversity enhancement, the draft guidance sets out a number of core principles to help secure biodiversity enhancement and other wider policy objectives. These are applicable to development of all types and scale. The principles are:

- Apply the mitigation hierarchy, as defined in National Planning Framework 4.
- Consider biodiversity from the outset.
- Provide synergies and connectivity for nature.
- Integrate nature to deliver multiple benefits.
- Prioritise on-site enhancement before off-site delivery.
- Take a place-based and inclusive approach.
- Ensure long term enhancement is secured.
- Additionality.

These principles are applicable at both a planning application and development plan scale.

## NatureScot Developing with Nature guidance

NatureScot's Developing with Nature guidance provides guidance on securing positive effects for biodiversity from local development to support National Planning Framework 4's policy 3. It is not designed for National Developments or Major Developments or applications subject to an Environmental Impact Assessment (EIA). It is also not



designed for householder developments. It provides clarification on how the principles for biodiversity enhancement that are set out in Scottish Government's draft planning guidance may be considered and secured from ecological considerations and practical considerations. These will be dependent on the nature of the proposed development. Annex A in the document details a range of appropriate measures to enhance biodiversity. measures are grouped into themes of Planting for Nature, Providing Homes for Nature, Managing Water for Nature. Many of these support delivery of blue and green infrastructure including:

#### **Planting for Nature**

- Measure 1: Plants for pollinators
- Measure 2: Wildflower Meadow
- Measure 3: New and old Growth Orchards
- Measure 4: Trees, Scrub and Woodland
- Measure 5: Living Roofs Green, Brown and Blue
- Measure 6: Boundary Hedge

#### **Providing Homes for Nature**

- Measure 16: Wildlife Wall
- Measure 18: Wildlife Friendly Lighting

#### Managing Water with Nature

- Measure 19: Rain Garden
- Measure 20: Wildlife Swale and Ditch
- Measure 21: Biodiverse Sustainable Drainage System Ponds
- Measure 22: Ponds for wildlife
- Measure 23: Rivers and Burns
- Measure 24: Drain Escapes

The guidance also discusses the use of non-native plants in amenity plantings. It lists terrestrial and aquatic non-native plants that have the potential to become invasive, resulting in significant harm to nature.

## National Park Partnership Plan 2022 – 2027

The National Park Partnership Plan is the overarching management plan for the Cairngorms National Park. The Partnership Plan is also the regional land use framework for the National Park and is aligned with Scottish Government's commitment to trialling the regional land use partnership and framework approach as a route to achieving land



use change that contributes to Scotland and the United Kingdom's climate change targets.

It contains a number of objectives that support blue-green infrastructure policies including:

- Objective A1 Net Zero: Ensure the Cairngorms National Park reaches net zero as soon as possible and contributes all it can to helping Scotland meet its net zero commitments.
- Objective A2 Woodland expansion: Increase the amount of woodland in the National Park to support larger, more natural woodlands, expanding in places up to a natural treeline, providing connections across river catchments and around the central core of the mountains.
- **Objective A3 Peatland restoration:** Restore and manage peatland within the National Park to reduce carbon emissions and improve biodiversity.
- Objective A4 Deer and herbivore impacts: Reduce the negative impacts of red deer and other herbivores across the National Park to enable woodlands to expand, heather loss to be reversed, peatlands to recover and wider biodiversity and landscape enhancements to take place. Increase the sustainability of moorland management in the National Park to ensure greater species and structural diversity in moorland areas.
- **Objective A5 Moorland Management:** Increase the sustainability of moorland management in the National Park to ensure greater species and structural diversity in moorland areas.
- Objective A7 Fire Management: Ensure that all managed burning (muirburn)
  follows best practice as defined by the muirburn licensing scheme, supporting
  habitat restoration and recovery.
- **Objective A8 Farming:** Work with farms in the National Park to reduce their carbon footprint, conserve soil carbon, encourage sustainable production and deliver increased biodiversity on in-bye land.
- Objective A9 Freshwater systems: Restore and connect rivers to thriving wetlands and floodplains as part of a wider restoration of the National Park's freshwater systems, helping mitigate the impacts of climate change.
- Objective A10 Ecological network: Connect habitats and ecosystems across all different types of land use in the National Park to create an ecological network, which will bring wider landscape, biodiversity and people benefits.



- Objective A11 Ecological restoration: Improve ecosystem functionality and resilience across the National Park by increasing the area of land managed principally for ecological restoration.
- Objective A12 Cairngorms Nature Index: Develop a more complete understanding
  of the National Park's species, habitats and ecosystems, and help monitor long-term
  progress through a dedicated Cairngorms Nature Index.
- **Objective A13 Species recovery:** The Cairngorms National Park attracts an increasing amount of green finance per annum for projects that deliver multiple benefits (carbon, biodiversity, flood mitigation, community).
- **Objective A14 Green Investment:** Use private green investment in the National Park to fund nature's recovery and share the benefits between communities, landowners, workers and wider society.
- Objective B5 Community assets and land: Increase the number of assets in community ownership or management, the number of social enterprises that generate a profit and the area of land where communities are involved in management decision.
- Objective B7 Community-led planning and development: Communities have upto-date community action plans and are supported by a community-led local development funding programme, delivering the National Park Partnership Plan.
- Objective C7 Transport to and around the Park: Promote a modal shift towards sustainable and active travel in the way visitors and commuters get to, and everyone moves around, the National Park.
- Objective C8 Accessible path and cycle network: Improve path, cycle and outdoor
  access networks to give outstanding opportunities to experience the natural and
  cultural heritage of the National Park to the widest range of people, while minimising
  disturbance to vulnerable species, habitats and sites.
- Objective C9 High-quality visitor experience: Welcome visitors and provide a high-quality experience while managing their impacts through providing better infrastructure and high-quality ranger services.

## Cairngorms Nature Action Plan 2019 – 2024

The Cairngorms Nature Action Plan is a partnership that builds on the pervious Local Biodiversity Action Plan 2003 – 2013 and Cairngorms Nature Action Plan 2013 – 2018. It contains three overarching aims:

 Aim 1: Support landscape scale conservation and collaboration to deliver ecosystem restoration and sustainable land management, balancing environmental, social and economic factors.



- Aim 2: Deliver focused action to improve the conservation status of threatened or declining species.
- Aim 3: Engaging, inspiring and encouraging local communities and communities of interest to value and care for nature, be proud of the conservation work in the Cairngorms and want to do something to protect and enhance their natural heritage.

The plan sets out a number of objectives to deliver the three overarching aims:

#### Aim 1 objectives:

- Bigger, more natural woodlands, expanding up to a natural treeline, providing connections across catchments and around the central core of the mountains.
- More natural, dynamic rivers connected to functioning wetlands and floodplains.
- Restored peatlands stopping the loss of carbon, improving water quality and helping alleviate flooding.
- More sustainably managed moorlands with more structural and species diversity and pockets and strips of trees and shrubs on moorland edges, steep slopes, in gullies and around woodland remnants.
- More habitat suitable for breeding waders as part of agricultural systems.
- Wildlife-rich grassland and woodland on productive, profitable farms.

#### Aim 2 objective:

 Getting species back on a sustainable footing, where they are no longer reliant on targeted action, but have been recovered within a robust and resilient network of habitats.

#### Aim 3 objectives:

- Raising awareness and understanding of land management and clearly demonstrating the benefits that conservation brings for people as well as wildlife.
- More engagement with nature: more people involved in decision making, getting out and enjoying it and helping to look after it.

Work is underway to develop the next Cairngorms Nature Action Plan. It will be published in April 2026.

## Cairngorms National Park Forest Strategy 2018

Section A159 of the Town and Country Planning (Scotland) Act 1997, as amended, requires that planning authorities prepare a forestry and woodland strategy.



The Cairngorms Forest Strategy was adopted in 2018 and is a key document in the delivery of the National Park Partnership Plan. It provides strategic direction on future forest management and the restoration of woodlands in the Cairngorms National Park over the next two decades. Specifically, the Forest Strategy will:

- Help to deliver the forest related elements of the Cairngorms National Park Partnership Plan 2017 2022.
- Encourage new woodland creation that complements other land uses and the landscapes of the Cairngorms National Park.
- Identify key issues and opportunities affecting forests, woodlands and trees in the Cairngorms National Park and provide policy guidance.
- Assist in the appraisal of funding applications for woodland creation.
- Promote awareness of the value of encouraging more woodland creation in the Cairngorms National Park and encourage greater collaboration between agencies, the forest industry, landowners, land managers and communities.

#### The Strategy contains ten strategic objectives:

- Promote the creation of new woodlands that complement other land use
- Enhance the condition of existing forests
- Restore lost or vulnerable forest ecosystems
- Encourage natural regeneration of native forests
- Promote the creation and enhancement of productive forests
- Protect forests from disease and invasive species
- Increase employment in the forestry sector
- Encourage innovation in the use and marketing of native forest products
- Promote access and active enjoyment of forests
- Promote community involvement in forest management.

The Strategy identifies significant potential for woodland expansion in the National Park. The Strategy recognises that the National Park hosts a wide range of other open habitats important for the wildlife they support, the jobs they provide and the wider ecosystem services they deliver. These include farmland and moorlands providing habitat for wading birds; peatlands, essential for storing carbon; and species-rich grasslands all hosting a broad diversity of flora and fauna. If carried out sensitively, new woodland creation and management will complement and not conflict with these other important land uses.



The Park Authority wish to strengthen and further develop a forest habitat network across the Cairngorms, including between river catchments. This would allow a wide range of woodland species to disperse, recolonise and migrate more easily, while delivering a range of wider benefits such as locally sourced timber and other wood products, improved 'natural flood management', water quality improvements and carbon sequestration. The Park Authority and its partners need to do this with care to minimise the potential risks of the spread of disease, invasive species and wildfire.

The Park Authority and Scottish Forestry are currently drafting a supplementary note to the Forest Strategy to provide clarification on alignment with the National Park Partnership Plan 2022. This includes guidance on:

- Dealing with shallower but hydrologically connected peat.
- Preferred ground preparation techniques.
- Herbivore management and fencing.
- Incorporating community benefits.
- Locations for native or productive woodland.
- Support for natural regeneration.
- Early engagement on track works.
- Wildfire planning.

## **Pollinator Strategy for Scotland**

Pollinators are an integral part of our biodiversity. If we lose the pollination services provided by insects such as bees and flies, we risk damaging not only plants and animals but agricultural yields, our economy and our wellbeing. However, many of our pollinators are under threat. Current pressures include land-use changes, land management, pesticides, pollution, invasive non-native species, diseases and climate change.

This document sets out Scotland's response to these threats, identifies the issues and sets out what needs to be done through the Implementation Plan to deliver a healthy future for our pollinators.

The aim of the Strategy is to address the causes of decline in populations, diversity and range of our pollinator species, and to help them thrive into the future

#### The Strategy sets out 5 objectives:

• **Objective 1.** To make Scotland more pollinator-friendly, halting and reversing the decline in native pollinator populations.



- Objective 2. To improve our understanding of pollinators and their pollination service.
- Objective 3. To manage the commercial use of pollinators to benefit native pollinators.
- Objective 4. To raise awareness and encourage action across sectors.
- Objective 5. To monitor and evaluate whether pollinators are thriving.

#### The Outcomes: By 2027:

- Action to support pollinators will be firmly embedded in relevant strategies, policies and practices across Government and the public sector.
- our understanding of pollinator ecology, status and trends is improved to allow policies and practices to be informed by the best evidence.
- regulation of honeybee and bumblebee importation will minimise the risks of introducing new pests and diseases.
- local bee-based industries will be better supported.
- we will have a wide understanding of the value of Scotland's pollinating insects and strong public support to restore populations and habitats, monitor populations and research pollinator biodiversity.
- there will be a strong network of good-quality pollinator habitats in place.
- It can be demonstrated that Scotland's pollinators are thriving..

## NHS Grampian's Biodiversity Strategy 2025 - 2030

The aims of this strategy are high level, designed to steer NHS Grampian's actions, procedures, decisions, and processes towards enhancing the outdoor environment, benefitting all communities of life in the region. The strategy ultimately is about guiding actions at the local level, while acknowledging that site-specific plans will be unique based on local flora, fauna, and environmental factors.

#### The strategy aims to:

- Detail a vision and a set of principles that provide a framework for biodiversity conservation on our estate.
- Identify key actions requiring further investigation to carry out net gain for biodiversity on our estate.
- Emphasise the need for partnership working in biodiversity enhancement, capitalising on the ecological knowledge, skills, expertise, and resources that exists within the wider community.
- Highlight education, community action, and participation as integral to the biodiversity enhancement process.



 Ensure a biodiversity-positive perspective is filtered into future capital project planning and development

## NHS National Services Scotland Environmental and Sustainability Strategy 2022 – 2040

The Scottish Government has set targets for NHS Scotland and all public sector to be net zero carbon by 2040. National Services Scotland has reduced its emissions over recent years, reducing estate where practicable and implemented targeted sustainable practises.

This strategy aims to increase the pace of achievements through holistically embedding the principles of sustainability in all services.

The Strategy sets out a number of phased actions related to key environmental and sustainability themes. Those related to blue and green infrastructure are summarised here:

## Actions – Greenspace, Nature and Biodiversity By 2025

- Creation of bee colonies on suitable sites, working with local community beekeepers, encouraging schools' education with visits, and providing any honey back to food banks (example at NHS Glasgow).
- Generate a greenspace plan for each site with focus on improved access, utilisation, biodiversity, and natural environmental defences.

#### By 2030

- Encourage green health and use of outdoor spaces by visitors and staff.
- Create aesthetically pleasing estate, making our premises a desirable environment to attend.
- Work with local partnerships and local communities to explore opportunities on local proximal greenspace areas.
- Develop accessible walking routes on, around and near all existing sites.

#### By 2035

- Identify and promote local walkways and travel routes in greenspace areas both on and offsite.
- Establish a culture where greenspace is valued and utilised across our estate.



 Have established partnerships with communities, charities, and local public sector to promote shared greenspace.

#### Scottish National Adaptation Plan 2024 – 2029

The Scottish National Adaptation Plan sets out actions to build Scotland's resilience to climate change. The Adaptation Plan sets out a long-term vision and defines Scotland's priorities for action over the years 2024 – 2029.

Scottish Government's vision is for a resilient, inclusive and well-adapted Scotland as the climate continues to change. The Plan contains five outcomes, of which the following four are of direct relevance to blue and green infrastructure.

- Outcome One: Nature Connects (NC).
- Outcome Two: Communities (C).
- Outcome Three: Public Services and Infrastructure (PS).
- Outcome Four: Economy, Business and Industry (B).

**Outcome One: Nature Connects (NC)** is supported by six objectives, of which those relevant to blue and green infrastructure are summarised here:

#### Objective: Nature-based solutions (NC1)

Action to increase resilience to the impacts of climate change is delivered through nature-based solutions including street trees, parks, raingardens, green roofs, improved walking, wheeling and cycling and water ways. Water resource planning to support drought and flooding resilience, improve water quality and quantity, and protect biodiversity is a key part of improving Nature-based Solutions. Compared to technology-based solutions to climate challenges, nature-based solutions are often more cost-effective, longer lasting, realise multiple benefits and contribute to the aims of a just transition.

Public sector and responsible private sector investment, as well as collaboration with the third sector and communities is crucial to enable delivery of blue-green infrastructure at scale. It is also vital to ensuring that local communities feel the benefits of these kinds of changes. Key actions to encourage investment in blue-green infrastructure include a range of funding schemes to encourage investment in the restoration of Scotland's nature such the Nature Restoration Fund (NRF), Facility for Investment Ready Nature in Scotland (FIRNS) and the Water Environment Fund (WEF).



Freshwater habitats and species are particularly vulnerable to reduced water availability and higher water temperatures due to climate change. In Scotland, this puts species such as wild Atlantic salmon and their habitats at risk. Key actions include:

- Development of the Wild Salmon Strategy and its implementation plan which lists over 60 actions to be taken over a 5 year period to improve the condition of rivers and give salmon free access to cold, clean water. This will not only support salmon recovery but will benefit other biodiversity including the critically endangered freshwater pearl mussel.
- Support for projects to remove barriers and redundant structures in our rivers, such
  as dams and weirs which are no longer in active use, provide fish with more habitats
  to grow and feed and have resulted in the reestablishment of fish passages often for
  the first time since the industrial revolution. Access to these cooler upland streams
  will be of critical importance as water temperatures continue to rise as a result of
  climate change.

#### Objective: Landscape-scale approaches (NC2)

Working for climate resilience at a landscape scale involves land management. It involves bringing together interested actors working at a large scale, often around a catchment, estuary or other recognisable landscape unit. This is a scale at which natural systems tend to work best and where there is often most opportunity to deliver real and lasting benefits. In this way, it is possible to deliver environmental, social and economic benefits that are more difficult to achieve by managing small sites individually.

Collaborating across landscapes means land managers (public, private or third sector) can achieve greater success than working in isolation. Scotland's soils are at increasing risk from the impacts of climate change, including flooding and drought. As soils are found across different landscapes performing multiple ecosystem functions, a landscape scale approach to improving soil condition and quality is needed. There are a number of ongoing actions to protect our soils, including through peatland protection, management and restoration, sustainable forest management and the promotion of regenerative agriculture practices. This means reducing the disturbance of soils to conserve stored carbon, as well as addressing soils in poor condition.

#### Objective: Development Planning (NC3)

Development planning (including Local Development Plans and associated delivery programmes) takes current and future climate risks into account and is a key lever in enabling places to adapt. The Adaptation Plan highlights the adoption of National



Planning Framework 4 as a key driver for change and the current work local planning authorities are undertaking to prepare new local development plans.

The Adaption Plan highlights the statutory duty of the Scottish Environment Protection Agency (SEPA) in cooperating in the preparation of Local Development Plans, as SEPAs evidence is critical in planning for climate resilient places.

The Adaption Plan also highlights that Open Space Strategies (OSS) were introduced as a new duty on planning authorities through the Planning (Scotland) Act 2019. An OSS sets out a strategic framework of the planning authority's policies and proposals as to the development, maintenance and use of green infrastructure in their district, including open spaces and green networks.

# **Objective: Nature Networks (NC4)**

Nature Networks are an effective tool for improving nature restoration, biodiversity, climate resilience and mitigating climate change, by improving ecological connectivity between habitats. Such connected ecosystems are inherently more resilient, and offer a place for nature to adapt and thrive. The creation of improved areas for nature will also help to overcome rural/urban boundaries, connect green and blue space, and promote a myriad of health and social benefits. Nature Networks can deliver multiple positive outcomes for climate, the environment and health. However, nature-based solutions can potentially have negative consequences trade-offs by facilitating the spread of non-native invasive species or vector-borne diseases such as Lyme Disease.

# Objective: Natural Carbon Stores and Sinks (NC6)

Scotland's natural carbon stores can be broadly categorised into peatland, forestry and woodland, and blue carbon habitats, such as saltmarsh and seabed sedimentary carbon. Protecting, managing and restoring our natural carbon stores is crucial as part of our just transition to net zero – both for their carbon sequestration and storage potential, and for their multiple co-benefits such as flood resilience and improved biodiversity.

**Outcome two: Communities (C)** is supported by six objectives, of which the relevant ones are summarised here:

#### Objective: Regional and place-based collaborations (C1)

Responding to the Climate Emergency, and ensuring a just transition, requires partnership at all scales. The challenge is too big to face alone. For Scotland to flourish in a changing climate, we need to adapt together – central and local government, health



boards, public bodies, communities, business, third sector, and individuals. This objective aims to improve how Scotland agrees its priorities regionally, designs adaptation locally, and takes priority actions at a greater pace and scale.

## **Objective: Community resilience (C3)**

Building community resilience to extreme weather is increasingly important. When emergencies happen, the best recoveries will involve learning and equip us to deal with future disruptions in a way that is equitable and protects people with more vulnerabilities. Community resilience is defined by the Scottish Government as:

'communities and individuals harnessing resources and expertise to help themselves prepare for, respond to and recover from emergencies, in a way that complements the work of the emergency responders.'

It is based on a culture of preparedness, in which individuals, households, communities and organisations take responsibility to prepare for, respond to, and recover from emergencies.

This objective focuses on flooding and wildfires:

Flooding is Scotland's costliest climate hazard, with sea level rise accelerating and flooding from heavy rain events both increasing in intensity through climate change. People and communities experiencing social and economic disadvantage, and those in areas at risk of flooding may be more vulnerable. This requires Scotland to build greater community resilience to flood events, informed and supported by public sector action.

Several policies are described that aim to reduce the risk of wildfires across Scotland and provide an effective response to wildfire incidents. Almost all wildfires in Scotland caused by people either accidentally or deliberately. Over the past ten years the Scottish Fire and Rescue Service (SFRS) has handled, on average, approximately 180 outdoor fires each year classed as grassland / woodland / crops fires. Many resulted in significant damage to agriculture, forestry, biodiversity, recreational and sporting interests, threatening infrastructure, property, and life. Climatic conditions are projected to be warmer and wetter overall with more extreme weather events including periods of water scarcity. The change in weather can impact the creation of the fuel load and fuel moisture content, potentially impacting the wildfire risk throughout the year, as well as additional challenges in putting out fires. Wildfires can lead to large amounts of carbon being released into the atmosphere, contributing further to climate change.



**Outcome three: Public Services and Infrastructure (PS)** is supported by four objectives, of which the relevant ones are summarised here:

### Objective: Managing Scotland's water resources (PS3)

As the climate continues to shift, demand for water will continue to grow as the weather gets warmer and this will affect our crop management and food supply as well as putting pressure on our drinking water supply. More intense storms will increase the risk of sewer and surface water flooding in people's homes, businesses and other essential services which will impact the way we live. We need to adapt the way in which we plan, deliver and use our essential water, sewerage and drainage services to cope with these changes now. This needs to be done alongside building community resilience to flood events, informed and supported by public sector action. This will ensure that water resources and drinking water is secured, our environment is protected, and rainwater is managed in a way that reduces the impact on society, for future generations.

**Outcome Four: Economy, Business and Industry (B)** is supported by four objectives, of which the relevant ones are summarised here:

# Objective: Agriculture, forestry, fishing and aquaculture sector support (B2)

Scotland's agriculture, forestry, fishing, and aquaculture sectors are central to our nation's identity, and our economy. Combined, these industries contributed £2.4 billion to the Scottish economy in 2023 (GDP National Accounts, 2024). For many rural and island communities, the sustainability of the local community is inextricably linked to the agriculture, fishing and forestry, and aquaculture sectors. These sectors rely on natural resources and as a result are particularly vulnerable to climate change and biodiversity loss. As outlined in Outcome 1, protecting our natural capital that these industries rely on is a key adaptation action. Increased rainfall, droughts, changes in temperature and new pests and diseases may leave crop yields, livestock productivity, forestry health and fish stocks vulnerable or subject to change. There may however be opportunities relating to productivity in 122 forestry, fishing, and agriculture, with future changes in climate offering potential improvements in crop suitability, growing seasons and for new fish species. Adaptation action by these industries is needed to maintain business productivity and viability.

# Water-Resilient Places: A Policy Framework for Surface Water Management and Blue – Green Infrastructure 2021

Water Resilient Places focuses on addressing challenges presented by the current climate emergency, namely tackling surface water flooding. The framework focuses on actions to deliver surface water management and flood resilience in Scotland. Given the



complexity of surface water management, the aim is to switch from the current position, where a few organisations are tasked with dealing with water issues to the position where the issues are supported by a broader range of organisations. The framework has identified six key elements which are required to deliver water resilient places:

- Decision makers in all sectors contribute to water resilience.
- Integrated flood risk management and drainage approach.
- Blue-green infrastructure first approach and retrofit.
- Co-ordination of policy, standards, advice and support.
- Strategic drainage partnerships for towns and cities.
- Finance.

Twenty-one recommendations are made based on the above 6 key elements that should help improve surface water management in Scotland. Each recommendation has been considered in the context of facing up to the climate emergency; delivering great blue-green places to live (at all scales) that are adaptable to future conditions; and tackling surface water flooding.

**Recommendation 1**. A vision for blue-green cities for Scotland should be established.

**Recommendation 2**. A strategy and route map should be set out supported by the key policy changes that are required to drive the transition to blue-green cities and water resilience.

**Recommendation 3**. Scotland should channel support towards actions that contribute to creating great places that are resilient to future flooding and drainage challenges, and away from activities that add to our future flooding and drainage burden.

**Recommendation 4.** We should take a placemaking approach to achieving blue-green cities and water resilience involving partners in the public and private sectors, the third sector, individuals and communities.

**Recommendation 5.** Relevant decision makers, including public bodies as part of their climate adaptation duties, should take account of flooding and drainage within their climate planning. (Public sector bodies are legally required to reduce greenhouse gas emissions and support Scotland's adaptation to a changing climate.).

**Recommendation 6.** Climate impact assessments applying to public policies/activities should include assessing the impact of the proposed policy/activity on water resilience.



I.e. Considering if the activity adds to flooding and drainage issues, helps manage flooding and drainage or has no effect on flooding and drainage.

**Recommendation 7.** A guidance and support package should be made available to policy makers and investment decision makers to give them the tools to maximise water resilience and success for their activities. This should include a tool to assess whether their activity has a negative, positive or neutral effect on our water resilience.

**Recommendation 8.** The land-use planning process (development planning and development management) should, where appropriate, include a requirement for all sites/development proposals to be assessed and report on how they will contribute positively to the climate emergency and water resilience.

**Recommendation 9.** Surface water flooding issues should be solution-focused and addressed by coordinating across organisations and implementing the best integrated sustainable solution. (Overcoming current legislative responsibilities and debates about ownership and on-going maintenance.).

**Recommendation 10.** Working links between the flooding, water industry and climate policy teams in Scottish Government should be strengthened to improve coordination and encourage delivery of more and better blue-green actions.

**Recommendation 11.** Guidance and support should be produced to allow flood risk management prioritisation to factor in the wider benefits of blue-green actions such that progress can be made across all sources of flooding. Current benefit/cost analysis techniques do not adequately account for "other" benefits and favour fluvial and coastal actions.

**Recommendation 12**. How we measure our success in terms of reducing the impacts of flooding should be reviewed to encourage a wider range of actions. The current approach (Counting properties at risk and damages avoided) often favours fluvial and coastal protection schemes over surface water flooding management actions. This should include introducing new ways of accounting for the wider benefits that bluegreen actions bring to health, wellbeing, economic prosperity and our natural environment.

**Recommendation 13.** Place-making (and master-planning) should establish blue-green infrastructure needs from the outset where planning authorities' decisions are informed by a comprehensive water strategy where:



- The natural infrastructure is defined.
- Strategic flood risk and drainage assessments are carried out.
- A blue-green infrastructure plan is defined.

Recommendation 14. The drainage of surface water from all new sites wherever practicable should be by blue-green infrastructure. Land for blue-green infrastructure should be a site prerequisite, and all designs should presume no rainwater connection to sewer.

Recommendation 15. It should be a priority for existing developed areas to remove as much surface water from sewers as possible through disconnection, retrofitting and diversion to blue green infrastructure. (Incentives and guidance should be put in place to support this).

Recommendation 16. Scottish Government should establish a strategic stakeholder group dedicated to promoting and supporting the transition towards blue-green places and water resilience.

Recommendation 17. To support Recommendation 18 of the Infrastructure Commission for Scotland Key Findings Report, Scottish Government should consider how to bring together the quality, standards and value for money elements of flood risk management, coastal erosion and drainage actions, including how they are determined and regulated.

Recommendation 18. Larger towns and cities should be encouraged to establish drainage partnerships to lead a coordinated drive towards blue-green cities and water resilience. Membership of the drainage partnerships should include senior leaders of relevant organisations empowered to make cross-sector strategic commitments.

Recommendation 19. Scottish Government should consider how our transition to bluegreen places will be funded and where new sources of sustainable finance from a wider range of beneficiaries can be accessed to support the vision.

Recommendation 20. Funding of blue-green infrastructure and water resilience should come from a broader base of public and private contributors reflecting the wide-ranging benefits it provides.

Recommendation 21. Public expenditure should always take into account how to make investments climate positive and water resilient positive.21



# Stalled Spaces – delivering community and environmental benefits through temporary greenspace scoping report

This Greenspace Scotland scoping report looks at the potential for temporary greenspaces to deliver environmental and community benefits. With relevance to vacant and derelict sites, it also explores the potential to deliver blue and green infrastructure functions in 'stalled spaces' – those spaces which are already approved for another use, but where development has not yet began.

# Scotland's Forestry Strategy 2019 – 2029

Scotland's Forestry Strategy 2019 – 2029 has been prepared in line with the Forestry and Land Management (Scotland) Act 2018 and set out a 10-year framework for managing Scotland's commitment to expanding and restoring our woodlands and forests.

The existing commitment for forestry in Scotland includes:

- 21% (of the total area) increase in forest and woodland cover by 2032.
- Increase in use of Scottish wood products in construction by 3.0 million m3 by 2031 / 2032.
- Increase the amount of native woodland in good condition.
- Create 3000 5000 ha of new native woodland per year.
- Restore approximately 10,000 ha of new native woodland into satisfactory condition.
- Ensure protected sites are under good conservation management.

The Strategy contains a 50-year vision for forestry in Scotland:

'In 2070, Scotland will have more forests and woodlands, sustainably managed and better integrated with other land uses. These will provide a more resilient, adaptable resource, with greater natural capital value, that supports a strong economy, a thriving environment, and healthy and flourishing communities.'

This vision is supported by three objectives that must be delivered in the 10-years of the Strategy:

- Increase the contribution of forests and woodlands to Scotland's sustainable and inclusive economic growth.
- Improve the resilience of Scotland's forests and woodlands and increase their contribution to a healthy and high-quality environment.



• Increase the use of Scotland's forest and woodland resources to enable more people to improve their health, well-being and life chances.

In the Cairngorms National Park, the vision and objectives of the Strategy are supported by the National Park Partnership Plan and Cairngorms Forest Strategy 2018 (see page 57).

#### A Framework for Nature Networks in Scotland

This framework aims to catalyse the urgent and transformative action needed across Scotland to implement Nature Networks that help halt and reverse biodiversity loss. It promotes the basic principles which associated action and delivery, at all levels, should be founded upon.

It sets out a vision for Nature Networks: 'by 2030 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 local benefits, and meet the priorities of local communities for nature'.

One of the main drivers of biodiversity loss is land use change and resulting habitat fragmentation. Habitat fragmentation is the process by which larger areas of habitats are broken-up into smaller patches that become isolated from each other.

Fragmentation has a number of adverse effects on wildlife including that these 'islands' of natural habitat become too small to support viable populations of species. At the same time the gaps between them become too large or hostile for species to cross. As a result, the ability to adapt to wider-scale pressures, further land-use change, and climate change is lost.

Action must be taken to increase the total amount of biodiversity-rich habitats protected or conserved and ensure they are better connected. This is the aim of increasing our protected and conserved areas for nature to reach the 30 by 30 target whereby at least 30% of land and sea will be protected for nature by 2030 (see the 30 by 30 framework). Nature Networks will ensure that sites contributing to 30 by 30, and other important areas for biodiversity, are well-connected and so provide maximum benefits to biodiversity.



Scotland's Nature Networks are focussed on the terrestrial environment, improving connectivity on land and fresh water from our mountain tops to our coastal communities.

#### **Nature Networks Toolbox**

The Nature Networks Toolbox is a live resource for local authorities, partnerships, organisations, and groups. Its aim is to facilitate the effective design and implementation of Nature Networks at a local and regional level across Scotland.

#### Basic elements include:

- Key guidance for different sectors including local authorities, planning authorities and environmental and conservation organisations.
- Habitat guidance covering forest and woodland, grassland, freshwater and wetlands, peatland, coastal, urban and verges, hedges and other linear habitat features.
- Species guidance for pollinators, protected species and invasive-non-native species (INNS)
- Signposting to resources including case studies and best practice.
- Connectivity and opportunity mapping tools.
- Information on public and private funding, finance and investment.
- Improved functionality including the ability to create a personalised Toolbox and share its contents with partners and stakeholders.

NatureScot are responsible for the day-to-day management of the Nature Networks Toolbox, including updating the information, guidance and resources which it contains.

# Identifying a Cairngorms National Park Nature Network 2025

This supporting document sets out the approach of the Cairngorms National Park Authority to identifying a Cairngorms National Park Nature Network.

Nature Networks are a key delivery mechanism of the Scottish Biodiversity Strategy. They also contribute to Scotland's Environmental Strategy and align with international targets in the Global Biodiversity Framework, and efforts such as the European Union's Trans-European Nature Network. Nature Networks are embedded throughout the fourth National Planning Framework 4 as a key means of ensuring positive effects for biodiversity from development. It states that the spatial strategies of local development plans should better connect nature rich areas by establishing and growing nature networks to help protect and restore the biodiversity, ecosystems and natural processes.



One of the desired functions of the Cairngorms National Park Nature Network is for it to integrate with the Cairngorms Nature Index. The Cairngorms Nature Index has recently been developed as a method of baselining ecosystem health in the National Park and subsequently measuring trends in its condition over time. The Cairngorms Nature Index works with six broad ecosystem types:

- Woodlands
- Freshwater
- Mires and wetlands
- Managed lowland grasslands
- Managed uplands
- Montane.

The delivery of the nature network will include improving existing networks and the creation of new networks and will link with current National Park's conservation aims. Monitoring of the delivery and success of these Nature Networks will be done through the Cairngorms Nature Index.

A set of Nature Network objectives have been identified for five of the six broad ecosystems.

**The Woodland Network** will seek to better connect a core of nature-rich woodlands across the Cairngorms National Park by both creating new woodlands and enhancing existing woodlands.

- Woodland network objective 1: Strengthening connectivity through expansion.
- Woodland network objective 2: Enhancing ecological quality of existing woodlands.

The Freshwater Network (which includes Mires and wetlands as they are intrinsically linked) seeks to secure improved ecological quality of watercourses and large water bodies and strengthen connectivity across the network through identifying priority locations for enhancing and creating small waterbodies and ponds. Repair and expansion of wetlands and mires will further enhance the freshwater network at a catchment scale (i.e. 'better', 'more' and 'joined up').

- Freshwater network objective 1: Improving ecological quality of watercourses.
- Freshwater network objective 2: Improving ecological quality of large waterbodies.
- Freshwater network objective 3: Strengthening connectivity of a waterbody network.
- Mires and wetlands objective 1: Restore and expand fen, marsh and swamp habitat where opportunities arise.



The Lowland Grassland Network will seek to expand the coverage and improve connectivity of species-rich grassland, both at locations where it currently does not occur and within the fields it partly occupies, i.e. 'more' and 'bigger'. Current data sets for this network within the Cairngorms National Park are limited. To obtain a fuller picture of the status and condition of species-rich grassland across the National Park and further develop the network, surveys will be conducted in the Perthshire, Angus and Donside parts of the National Park.

The Managed Upland Network is a predominant feature of the National Park and are currently by far the most expansive and best-connected ecosystem in the National Park. The focus of the network is on enhancement to yield the greatest gains for ecosystem services, climate resilience, biodiversity gain and complement wider catchment restoration activities. The management of uplands is central to National Park Partnership Plan objectives for woodland expansion by natural regeneration, peatland restoration, reducing the negative impacts of red deer and other herbivores and ensuring greater species and structural diversity.

- Managed upland objective 1: Repair eroded and drained blanket bog.
- Managed Upland objective 2: Increasing structural and species diversity.
- Managed Upland objective 3: Reducing the impact of red deer and other herbivores

The Montane Network is made up of a variety of habitat types, including bare rock, alpine and subalpine heaths and grasslands at high altitudes. Aside from deer pressures, which are considered as part of the Managed Upland Nature Network that surrounds montane areas, the threats facing this ecosystem, such as climate change and recreational pressures and measures to tackle them lie out with the scope of this Nature Network. Montane woodland is incorporated into the woodland network.

# Cairngorms National Park Local Development Plan 3: Strategic Flood Risk Assessment

The primary aims of the strategic flood risk assessment are to ensure that future development is directed wherever possible towards areas of little or no flood risk and to ensure that new development does not increase flood risk elsewhere (for example by affecting the storage or conveyance capacity of flood plains).

Its main objectives are to:

• Identify where flood risk exists in the plan area at the Evidence Report stage, and therefore areas where new development should be located or avoided at the



Proposed Plan stage1, in accordance with Policy 22 of National Planning Framework 4.

- Identify areas where climate change is resulting in unmanageable flood exposure, and so where alternative land use is needed, in accordance with National Planning Framework 4.
- Identify where and how actions contained in the local flood risk management plan (including future flood protection schemes) affect the location of new development.
- Inform blue and green infrastructure audits and / or strategies in support of Policy 20
  of National Planning Framework 4.
- Inform the strategic environmental assessment of the Local Development Plan.
- Provide evidence to support the Local Development Plan in taking into account other relevant National Planning Framework 4 policies, to help take an integrated placebased approach to tackling the climate emergency and nature crisis.

As well as informing the Local Development Plan, the Strategic Flood Risk Assessment outputs can also be used to support a place-based approach to development and service delivery. For example, the Strategic Flood Risk Assessment could be used:

- By developers, communities (including for their Local Place Plans), individual applicants, and the local authorities that cover the National Park area to better understand flood risk in the area.
- To support wider infrastructure planning and delivery.
- To support the local authorities that cover the National Park area provide services such as emergency planning and resilience.

# Our Sustainable Future Together: Long-term strategy

This is Scottish Water's long-term strategy, which is designed to ensure that Scotland's water and wastewater services remain sustainable, resilient, and affordable for generations to come. The strategy contains three long term outcomes, designed to respond to the challenges of the climate crisis, population change and ageing assets. Each of these long-term outcomes is supported by a number of focus areas. These are summarised below:

# Long-term outcome: Scotland's tap water remains a source of national pride and is valued as a precious resource

The outcome has the following focus areas:

- Ensuring excellent water quality
- Ensuring a continuous supply of water



Relevant objectives of this outcome are that Scottish Water will:

- Work across their drinking water catchments to improve the resilience of the water environment, to help tackle the changes in raw water quality caused by climate change that can lead to unpleasant tastes and smells in drinking water.
- Reduce the amount of water abstracted and treated every day by 240 million litres, helping to make us more resilient to the worst drought Scotland has experienced.
- Consider localised solutions to reduce demand and maximise the water available from their existing sources in areas at risk of water scarcity, before developing new sources.
- Improve connectivity of their existing systems to increase flexibility to move water around and improve resilience in times of drought.

Long-term outcome: The quality of our rivers and seas has improved, and our communities are protected from sewer flooding, through collaboration with others The outcome has the following focus areas:

- Managing rainwater to reduce the discharges from our sewers
- Protecting and enhancing our water environment

Relevant objectives of this outcome are that Scottish Water will:

- Accelerate their approach to place-based solutions to manage rainwater, using a
  mixture of engineered and nature-based solutions to increase the resilience of our
  network and reduce pollution for localised and strategic drainage issues.
- Introduce a community fund to support small-scale, localised initiatives like planters and rain gardens in community buildings such as church halls, community halls, libraries and schools.
- Increase our emphasis on partnerships ensuring they work with public, private and third sector organisations, and involve householders and local communities to change how Scottish Water manage rainwater, creating place-based solutions which will help to increase the resilience of our sewer networks and reduce demand on treated water.
- Continue to work with stakeholders to ensure our approach to protecting the water environment focuses on improving the overall health of waterbodies in Scotland.
- Implement continuous improvement in the capability of their wastewater treatment work assets to deal with changing demand and minimise our impact on the environment.



• Improve the resilience of their wastewater systems so they can cope with expected climatic changes over the next 25 years, for example, changes in rainfall and sea level rise.

# Scottish Water has played a key role in enabling Scotland's sustainable economic and housing growth

The outcome has the following focus areas:

- Supporting economic growth
- Connecting new customers

Relevant objectives of this outcome are that Scottish Water will:

- Engage with the Scottish Government, local authorities and developers to encourage development in areas where there is existing capacity at their water sources and treatment works and seek to support developments using their existing assets and infrastructure where possible.
- Encourage the development of water efficient homes and businesses and provide developers with standard, low-carbon infrastructure, to make connecting to our assets easy and efficient for everyone involved.
- Continue to encourage the development of homes and businesses which capture
  rainwater for reuse and keep rainwater on the surface through sustainable drainage
  systems (SuDS) and blue-green rainwater management systems, and the use of
  permeable materials for driveways and car parks.

# Scottish Water Strategic Plan – A sustainable future together

The Strategic Plan sets out how Scottish Water will meet their customers' current and future expectations. It focuses on areas that Scottish Water have identified as being in need of transformation as well as those they aim to continually improve.

Key areas for transformation include:

- Eliminating the net emissions associated with Scottish Water's activities.
- Scottish Water's approach to investment planning and the long-term management of their assets.
- The robustness of water supply systems.
- The management of surface water.
- Embracing the circular economy.
- Activities whose cost can be transformed through simplification and technology.



 The way in which Scottish Water and supply chain partners work to deliver their services.

In addition, Scottish Water will continue to innovate and improve activities, including:

- How Scottish Water deliver their water and wastewater services.
- The quality of services Scottish Water provide to their customers.
- Scottish Water's support for new housing development and economic growth.
- The efficiency of all Scottish Water activities.

# **Scottish Water Climate Change Adaptation Plan 2024**

The Plan outlines the efforts it will take to make services and infrastructure more resilient to extreme weather. With growing impacts on assets and services from more extreme weather events locally and nationally, the Plan highlights the steps that must be taken to go further and faster in adapting assets and services to ensure they remain reliable, resilient and sustainable. The Plan focuses on areas which are likely to face further disruption unless action is undertaken. It describes the consequences on water supplies, water quality, sewer systems, infrastructure and the environment without adaptation. The Climate Change Adaptation Plan outlines several issues, including:

- Drought
- Deteriorating water quality
- Customer flooding and environmental pollution
- Waste water and environmental quality.

The plan also outlines a range of scenarios as to how services for customers can be protected through adaptation and working with others and outlines projections for impacts on water and wastewater services to 2050 and 2080.

# Scotland's National Water Scarcity Plan 2020

Scotland's National Water Scarcity Plan sets out how water resources will be managed prior to and during periods of prolonged dry weather. This is to ensure the correct balance is struck between protecting the environment and providing resource for human and economic activity. It sets out:

- The high-level principles.
- The steps that the Scottish Environment Protection Agency (SEPA) and others are currently taking in preparation for periods of water scarcity.
- What assessment methods Scottish Environment Protection Agency will use to determine the most appropriate response to water scarcity.



- What action Scottish Environment Protection Agency will take during a period of water scarcity.
- What action Scottish Environment Protection Agency expect others to take.

There are no specific actions for the Proposed Plan, however the Plan highlights the need for planning to consider the risk of water scarcity in the development of its spatial strategy.

# Dee Catchment Management Plan

The Dee Catchment Management Plan describes the condition of the Dee catchment in terms of water quality, the type and extent of habitats and species in the catchment and important land management activities.

- The plan discusses the main impact of the catchment's water environment.
- It suggests the measures necessary to protect and improve the quality of the catchment's waters and their associated habitats and species.

A central feature of the Dee Catchment Management Plan is a set of 37 Action Cards, which addresses one of the 37 objectives listed in the management plan. Each action card:

- States the objective.
- Summarises the background to the objective.
- List the man issues.
- Summarises existing and recent initiatives.
- Stats the actions required for the objectives to be achieved.
- Suggests the partners most appropriate to carry out these actions.
- List the relevant legislation and guidelines.

These cards can be accessed via the Dee Catchment Partnership's website:

https://www.deepartnership.org/our-work/spreading-the-word/publications/

The objectives of the management plan relevant to blue-green infrastructure within the Cairngorms National Park are summarised here.

#### Water quality

 Improve water quality in rural areas by making planned and coordinated reductions in diffuse agricultural pollution.



- Ensure agricultural pesticides and sheep dip are stored, used and disposed of in accordance with regulations.
- Encourage and promote good environmental practice for woodland expansion and management in order to protect and enhance water quality and biodiversity.
- Promote best management practice for dealing with road and access track drainage.
- Manage surface water drainage sustainably, taking account of water quality, habitat and flood risk.
- Ensure existing foul and surface water drainage infrastructures are satisfactory and those serving new developments are planned sustainably.
- Improve effluent quality from private sewage treatment systems to ensure compliance with the requirements of the Special Area of Conservation interests.
- Control the storage and application of organic fertilisers to avoid direct and indirect water pollution.
- Control operational agricultural waste landfill sites to avoid pollution of watercourses.
- Limit the environmental impact of existing and closed landfill sites. Identify and remediate Contaminated Land.

#### Water resources

- Regulate abstraction to prevent harm to Special Area of Conservation interests and ecological status, especially during low flow periods.
- Manage the land so as to attenuate rates of runoff (thereby reducing the severity of floods and droughts).
- Coordinate flood alleviation schemes in the catchment. Seek to prevent new flooding problems.

# Development and engineering works

- Promote environmentally sustainable engineering works to the river channel and banks in order to maintain Special Area of Conservation interests and the biodiversity of the river.
- Remove or redesign man-made obstacles in order to facilitate fish passage.
- Ensure that changes of land use do not impact adversely on riverine habitats and species.

#### **Habitats**

- Encourage re-creation of lost lowland wetland habitats.
- Encourage re-creation of lost upland wetland habitats.



- Reinstate the functionality of active floodplains.
- Support the restoration of degraded areas of wet and riparian woodland and encourage their expansion through planting or regeneration on appropriate sites.
- Identify species-rich bankside grasslands and promote positive management to maintain their diversity.
- Manage the habitat of urban watercourses sustainably.

#### **Species**

- Conserve and enhance the population, distribution and range of genetic subpopulations of Atlantic salmon Salmo salar across the naturally accessible parts of the catchment.
- Implement measures to achieve agreed targets for the Dee freshwater pearl mussel Margaritifera margaritifera population.
- Maintain the population and current distribution of otter Lutra lutra throughout the river catchment.
- Control invasive non-native plant species such as giant hogweed, Japanese knotweed, Himalayan balsam.
- Control American mink in the River Dee catchment.
- Manage fishing ponds sustainably.
- Establish and implement a programme for monitoring and reporting the status of all fish species in the River Dee.

#### Access and recreation

 Ensure the catchment's water environment is protected from the impacts of recreational activity.

#### Sub-catchment management

Improve water and habitat quality in Loch Davan.

# Dee Catchment Partnership Delivery Plan 2022 – 2027

This Delivery Plan 2022 – 2027 sets out the blueprint for achieving restoration in the river Dee catchment over the 5 years of the plan. It sets a framework for Partnership projects that focus on benefits for climate, nature and people. The purpose of the delivery plan is to restore naturally functioning river ecosystems in the Dee catchment. It is looking to achieve restoration at scales that will:

Increase the quality, diversity, and extent of habitats for wildlife.



- Contribute to achieving net zero (carbon storage in peatlands, wetlands, floodplains, woodlands, grasslands).
- Increase climate resilience (floods and droughts) and opportunities for climate adaptation (movement of species).
- Support sustainable growth (agriculture, development, communities, tourism).
- Boost community wellbeing by creating a more natural and diverse landscape and providing opportunities to be more involved with the river environment.
- Contribute to the evidence for restoration techniques and projects.

Its priorities over the plan period are three interlinked areas of activity:

- A. Outreach: to increase support and involvement amongst communities, landowners and partner organisations.
- B. Restoration: to develop and deliver restoration projects and support land managers in implementing sustainable land management.
- C. Evidence: to establish the evidence base for undertaking effective river restoration and provide an exemplar for effective catchment management.

Each priority is supported by a range of objectives and actions. These are summarised as follows.

#### A. Outreach: Increase support for restoration projects

- A.1 Strengthen understanding catchment-wide of the need for, and benefits of, river restoration projects.
- A.2 Raise awareness among land managers of the importance of river restoration and opportunities.
- A.3 Create opportunities for people to contribute to the development, management and monitoring of restoration projects.

#### B. Restoration: Develop and deliver restoration projects

- B.1 Strengthen partner understanding, support and involvement.
- B.2 Target and design restoration projects for maximum multiple benefits.
- B.3 Deliver restoration projects and support others in doing so.

## C. Evidence: Evaluate and promote benefits of restoration projects

- C.1 Share knowledge with others undertaking river restoration.
- C.2 Develop restoration techniques.
- C.3 Evaluate effectiveness of restoration projects.



The proposed plan may support all of these priorities, either directly or indirectly.

# Spey Catchment Management Plan 2023 – 2030

The Spey Catchment Management Plan is a high-level document which reflects the activities and aspirations of the main partner organisations currently using, managing and protecting the many valuable resources the Spey catchment has to offer. The plan is presented as a set of eight priority themes with associated objectives to guide activities in the Spey catchment during the life of the Plan. It is intended to be a working document which will be regularly reviewed and updated to reflect important changes during the period. It will aim to address the biodiversity loss crisis and ensure that the catchment is well-adapted and resilient to climate change.

Priority themes and objectives include:

#### Theme: Water Quality, Quantity and Environment

- W1: Maintaining water status continue to maintain and enhance River Basin Management Plan water status in the Spey catchment.
- W2: Improving water status improve the status of water bodies failing to meet Good River Basin Management Plan status by 2027. Identify and address issues in 'un-named water bodies'.
- W3: Water quality address issues degrading water quality throughout the Spey catchment.
- W4: Water quantity manage abstractions to protect biodiversity and river functioning and improve resilience.

## Theme: Flood and Drought Management

- FM1: Sustainable flood management implement sustainable flood management via restoration of a more natural flooding regime and delivery of the Findhorn, Nairn and Speyside Local Flood Risk Management Plan.
- FM2: Natural Flood Management promote the use of natural flood management techniques at appropriate locations to contribute to flood management.
- FM3: Drought management increase awareness of the effects of droughts and promote the use of nature-based solutions to mitigate them.

#### Theme: Biodiversity

• B1: Riparian, river and wetland habitats – halt habitat loss, and restore and improve degraded habitats to enable biodiversity to thrive.



- B2: Designated species protect and enhance the Atlantic salmon, sea lamprey, Freshwater pearl mussel, and otter populations of the catchment, and improve the condition of water and wetland designated sites.
- B3: Other species conserve and enhance key animal and plant species in the Spey Catchment and support carefully managed re-introduction of 'missing' species where appropriate.
- B4: Invasive Non-Native Species (INNS) eradicate existing Invasive Non Native Species and prevent the introduction of new INNS within the catchment.

# **Theme: Land Management**

- L1: Diffuse pollution reduce the impact of diffuse agricultural pollution on the surface and ground water quality of the Spey catchment.
- L2: Slowing the flow explore appropriately funded Nature-based Solutions to manage water flows on land.
- L3: Re-naturalising rivers improve natural functioning of watercourses through farmland to benefit ecosystems, restore natural processes and contribute to natural flood management.
- L4: Farm wetlands retain, expand and enhance wetlands and natural ponds for their natural flood management and biodiversity benefits.
- L5: Peatland restoration promote peatland restoration as a crucial component of catchment management.

#### **Theme: Fisheries Management**

- F1: Fish stocks maximise the number of Atlantic salmon and sea trout smolts reaching the sea from the River Spey catchment.
- F2: Habitat quality restore and enhance riparian and instream habitat quality and diversity to optimise fish breeding and survival.
- F3: Barriers to fish migration and research further research impacts and implement effective practical river management strategies to ensure the conservation, protection and enhancement of Atlantic salmon and trout stocks.
- F4: Sustainable angling develop sustainable fisheries, maximising the economic value of angling and its role as a valuable form of outdoor recreation.

#### Theme: Forestry and Woodland

• FW1: Woodland expansion – deliver appropriate expansion of riparian and catchment woodland whilst contributing towards the objectives of integrated catchment management.



- FW2: Woodland habitats and biodiversity improve and expand riparian habitat and biodiversity through appropriate woodland design and management, and improve woodland habitat connectivity.
- FW3: Woodland and flow management expand and enhance riparian, floodplain and wider catchment woodland to reduce run off rates and sediment input and aid bank stabilisation.
- FW4: Forestry management encourage and promote best environmental practice for forest management in order to protect and enhance water quality and biodiversity.

#### Theme: Economic Development

- ED1: Built development balance economic growth with appropriate environmental protection and mitigation measures.
- ED2: Tourism realise the tourism potential of the River Spey whilst protecting the natural environment on which it depends.
- ED3: Natural capital and carbon support and facilitate use of emerging carbon and natural capital finance where it can provide opportunities for catchment management interventions with multiple benefits.

#### Theme: Communities, Education and Engagement

- C1: Flood and drought preparedness increase community resilience to the effects of flood and drought conditions.
- C2: Access and recreation promote responsible access on and beside rivers and lochs, with a focus on enhancing the experience and linking recreation to understanding and valuing the special qualities of the catchment.
- C3: Knowledge, awareness and skills increase knowledge and understanding of the natural river environment, support specialist career opportunities in all aspects of catchment management, and increase volunteer participation.
- C4: Cultural heritage promote and support research, recording and celebration of the history and culture of the River Spey.

#### Scottish Outdoor Access code

In Scotland, you can go on to most land to enjoy the outdoors, as long as you behave responsibly. This is known as Scottish access rights and is different to the position in England and Wales. When you are enjoying the outdoors, you must follow the Scottish Outdoor Access Code.



Scottish access rights apply, for example, to hills and moors, forests and woods, beaches and the coast, rivers and lochs, parks and some types of farmland. There are also some common-sense exceptions, including houses and gardens, other buildings and their yards or compounds, school grounds and places which charge for entry. Access rights include things like walking, cycling, climbing, horse-riding, kayaking, swimming and watching wildlife, but do not include things like shooting, fishing or access with motor vehicles.

## The Scottish Outdoor Access Code is based on three key principles

- Respect the interests of others.
- Care for the environment.
- Take responsibility for your own actions.

The Code provides more detailed guidance on a range of different activities. Land managers must manage their land and water in a way that respects access rights, and the Code also provides guidance to help them do this.

More information on the Scottish Outdoor Access Code can be found here:

https://www.outdooraccess-scotland.scot/doc/scottish-outdoor-access-code

# **Community action plans**

Many communities within the National Park are involved in preparing community action plans. These are important documents that set out the aspirations of the local communities and will continue to be taken into account in the preparation of the proposed plan. The following action plans identified issues and / or priorities relating to blue and green infrastructure.

#### Blair Atholl Community Action Plan: Looking to 2030

The Action Plan lists a number of community priorities and objectives which relate to blue and green infrastructure:

Priority: Sustainable Community spaces, delivering for community needs

 Memorial Park: invest in the space for future generations through accessible paths, upgrade of activity areas and planting. Establish 'friends of the Park'.

Priority: improve village visual appearance

• Resolve the Lade issue: rebuild the weir.



#### Priority: Allow Nature to Thrive

 Improve biodiversity at various locations: more planting and awareness raising (includes more wildflower planting, development of community garden and wildflower meadow at park).

## Priority: active travel

- Better Path network linking Blair Atholl to House of Bruar.
- Path extension to Calvine.
- Improve footpaths around village for all abilities.

# Priority: Bring vacant buildings back into use

• Invest in old buildings/sites (school / garage / surgery) for community benefit

#### Priority: increase opportunities to attract tourism and business to the local area

Village trail for visitors.

# Dalwhinnie Community Action Plan: Looking to 2030

The Action Plan lists a number of community priorities and objectives which relate to blue and green infrastructure:

Priority: Reduce energy consumption as a village / for households

- Local green waste recycling plot for locals' garden waste.
- Turn off streetlights to create a dark skies destination.

#### Priority: Improve village's visual appearance

- More planting in village: trees, shrubs, flowers.
- Replace damaged young trees along main road.

# Priority: Active Travel

- Find solution to reinstall ancient drover' route across Ben Alder Crossing.
- Cycle Track link to Laggan.
- Path out of Dalwhinnie leading to the Pitlochry cycle track. Bus stop on A9.
- Defined walking path around village for locals & visitors to appreciate village.

# Priority: Improve opportunities for local development

 Address planning issues for the village to help proposed business and residential development in and around A889. This is related to flooding from the River Truim.



#### Dulnain Bridge Community Action Plan: Looking to 2030

The Action Plan lists a number of community priorities and objectives which relate to blue and green infrastructure:

Priority: Develop / connect more local pathways and cycleways to other villages

- Nethy Bridge.
- Carrbridge.

Priority: Priority biodiversity in the village and woodlands

- Plant different types of native trees in underused open land- without obscuring the views.
- Plant more wildflowers to attract insects.
- Allow some grass to grow long in the summer months to allow a variety of flowers to bloom e.g. in the eastern end of the park.

## Kincraig Community Action Plan: Looking to 2030

The Action Plan lists a number of community priorities and objectives which relate to blue and green infrastructure:

Priority: Improve local path networks (active travel)

- Badenoch Way through Insh and Inveruglas.
- Path from Insh House to where cycle path round parallel to Uath Lochan lane so that walkers and cyclists can stay off the land and avoid tourist traffic and timer lorries.
- Safer walk to school route.
- Linked up cycle path between the bridge and lock Insh water sports.
- Footpath up Suie Hill.

Priority: Provision of community owned green spaces to improve biodiversity

- Allotments.
- Community orchard & community garden.
- Green gym.
- Wildflower areas / hedges.

### Priorities: Insh

 Support Insh community to maintain its crofting heritage, projects to improve biodiversity and manage climate change.

Kingussie Community Action Plan: Looking to 2030



The Action Plan lists a number of community suggestions and objectives which relate to blue and green infrastructure:

Suggestions: Continue improvements to active travel links

- Improve cycle pathways and facilities (access to Kincraig and Newtonmore)
- Improve footpaths and walking route (to Ruthven and Drumguish and around Kingussie).

Suggestions: Improve use of and access to green spaces

- Bring local land into community ownership.
- Manage local land and greenspace sustainably (work in partnership to encourage conservation of estate and local land, support community-run conservation projects, create community food growing opportunities and local food supply chains).

Suggestions: Continue improvements to active travel links

- Improve cycle pathways and facilities (access to Kincraig and Newtonmore)
- Improve footpaths and walking route (to Ruthven and Drumguish and around Kingussie).

Suggestions: Continue improvement work on Gynack Gardens

• More wildlife-friendly, structural and perennial planting (community orchard, more native plants, wildlife corner).

Suggestions: Explore further community energy opportunities

• Community wind, solar or hydro scheme to provide community income.

#### **Strathdon Area Community Action Plan 2016**

The Action Plan lists a number of community priorities and objectives which relate to blue and green infrastructure:

Theme: Assets and Facilities

 Community playing field – explore feasibility of having a playing field for community and school use, suitable for football and other sports, close to amenities, school and preferably with some lighting.

Theme: Local attractions and tourism

 Pathways – local groups to identify projects including signage, access, path development, improvement and promotion.



Theme: Infrastructure and transport

• Infrastructure between settlements- Improve / develop footpaths and cycle paths, particularly those linking settlements.

Theme: environment

- Biodiversity Identify projects for protection, management and enhancement of wildlife and wild areas.
- Access and environment set up land industries and communities forum.

Strathdon Community Action Plan has undergone a review and an update is due to be published later in 2025.

# Baseline of blue and green infrastructure matters

This section summarises a number of matters relating to blue and green infrastructure which comprises evidence relating to:

- Blue and green infrastructure in the natural environment including watercourses, forests and other habitats, protected areas, nature networks and core paths
- Blue and green infrastructure in the built environment including open space used by communities such as parks, sports and recreation areas, growing spaces; urban green infrastructure such as green roofs and walls, water management infrastructure such as reservoirs, water treatment works and sustainable drainage systems (SuDS).

It provides an audit of the blue and green infrastructure within the Cairngorms National Park. Consequently, it has links with many other policy areas covered in the evidence report. Key links are with the following topics: natural heritage<sup>1</sup>, climate change<sup>2</sup>, land use soil and resources<sup>3</sup>, local living and 20-minute neighbourhoods<sup>4</sup>, landscape<sup>5</sup>, play recreation and sport<sup>6</sup>, sustainable transport<sup>7</sup>, health and safety<sup>8</sup>, economic

<sup>&</sup>lt;sup>1</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

<sup>&</sup>lt;sup>2</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/climate-change

<sup>&</sup>lt;sup>3</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-and-resources-survey

<sup>&</sup>lt;sup>4</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/local-living-and-20-minute-neighbourhoods

<sup>&</sup>lt;sup>5</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/landscape-in-the-national-park-survey

<sup>&</sup>lt;sup>6</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/v3/play-sport-and-recreation

<sup>&</sup>lt;sup>7</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/sustainable-transport-survey

<sup>&</sup>lt;sup>8</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/health-and-safety-survey



development<sup>9</sup>, flood risk and water management<sup>10</sup> and tourism<sup>11</sup>. Cross-referencing is provided where relevant.

# Blue and green infrastructure ecosystem services

Ecosystem Services are the direct and indirect contributions ecosystems provide for human wellbeing and quality of life. Ecosystem Services are commonly categorised into four groups: Provisioning (e.g. water, food production), Regulating (e.g. the control of climate and diseases), Cultural (e.g. aesthetic values, recreational opportunities), and Supporting services (e.g. crop pollination, soil creation). All of these are underpinned by biodiversity. Some ecosystem services arise from actions and interventions by people; therefore it is useful to think of ecosystem services as co-produced by ecosystems and society. Blue and green infrastructure provides and is integral to a wide range of ecosystem services including:

- Timber and other forest products
- Air purification
- Storm water management
- Active travel routes
- Water quality
- Noise reduction
- Carbon sequestration
- spaces for wildlife
- food and drink
- Amenity and place making
- Outdoor recreation
- Reduced urban heat.

<sup>&</sup>lt;sup>9</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/economic-development-survey

<sup>&</sup>lt;sup>10</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/flood-risk-and-water-management-survey

<sup>&</sup>lt;sup>11</sup> See: https://cairngormsldp.commonplace.is/en-GB/proposals/tourism-in-the-national-park-survey



## Blue and Green infrastructure in the natural environment

The following section details protected sites and priority habitats that support blue and green infrastructure within the Cairngorms National Park.

#### **Protected sites**

Around 52% of the Cairngorms National Park is protected by some form international or national nature designation (Figure 1). These are:

- Sites of Scientific Interest
- Special Protection Areas
- Special Areas of Conservation
- Ramsar sites
- National Nature Reserves.

All protected sites are relevant for blue and green infrastructure and are also considered in the Natural Heritage section and the Land use, soil and resource section of the Evidence Report:

- https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey
- https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-andresources-survey



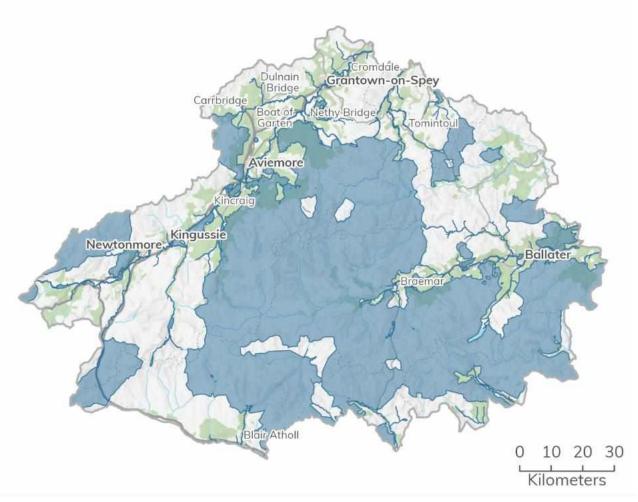


Figure 1 Designated sites (Sites of Special Scientific Interest, Special Areas of Conservation, Special Protection Areas, Ramsar sites and National Nature Reserves) within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.

#### **Special Areas of Conservation**

There are 23 Special Areas of Conservation (Figure 2), which are designated to protect one or more special habitats and / or species. Combined, they cover around 1,600 km² of the National Park's area. There has been a slight increase in the number of features assessed to be in favourable condition, from 71 in 2010 to 99 in 2024. There has also been a decrease in features assessed as unfavourable, from 59 in 2010 to 26 in 2024. Unfavourable features include habitats such as blanket bog, bog woodland, dry heaths and wet heathland with cross-leaved heath. Monadhliath is the only Special Area of Conservation with no features in favourable condition, with its single qualifying feature of blanket bog having been most recently assessed in 2020.



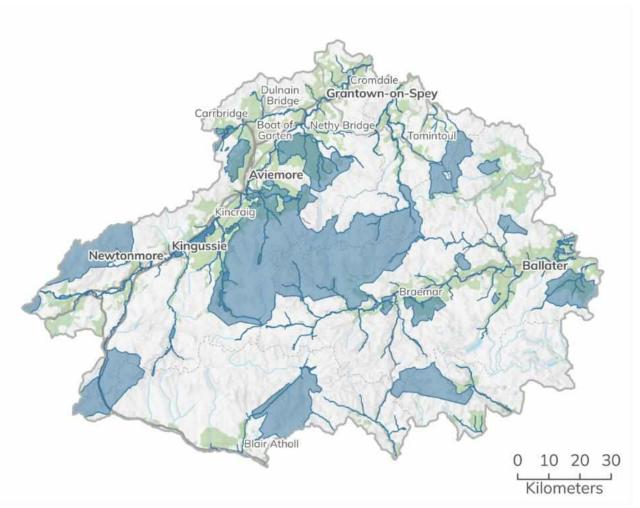


Figure 2 Special Areas of Conservation within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.

# **Special Protection Areas**

There are 15 Special Protection Areas within and overlapping the Cairngorms National Park boundary, covering around 1,730 km² of the National Park's area (Figure 3). As of 2024, 20 features of the Special Protection Areas have been assessed as favourable, one feature as recovering, 18 features as unfavourable and one feature has not had an updated assessment. The data indicates that there has been an increase in unfavourable features, with 8 features assessed as unfavourable in 2010. Species which have declined include the dotterel.



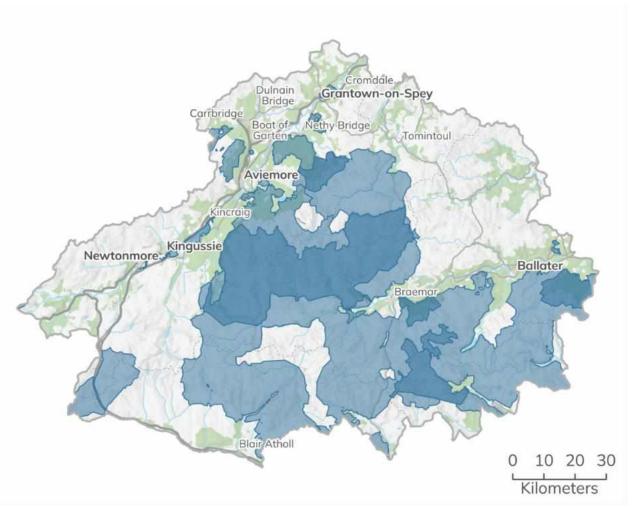


Figure 3 Special Protection Areas within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.

#### Ramsar sites

There are three Ramsar sites within the National Park boundary (Figure 4), which are designated to conserve and protect wetlands. Muir of Dinnet is the only Ramsar site with no features in favourable condition, with its single qualifying feature of non-breeding greylag goose having been most recently assessed in 2012. The River Spey – Insh Marshes Ramsar site also has features in unfavourable condition, namely its wetland woodland and breeding wigeon features. Otter is assessed as being in favourable condition, but declining, with the most recent assessment occurring in 2011. The spotted crake and wood sandpiper qualifying features have not been assessed.



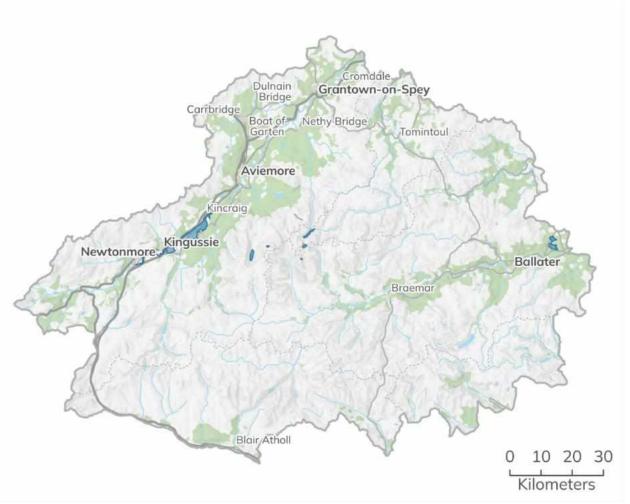


Figure 4 Ramsar sites within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.

# Sites of Special Scientific Interest

Sites of Special Scientific Interest (Figure 5) are areas of water and land that best represent Scotland's natural heritage and are designated to protect biological and geological. There are 59 Sites of Special Scientific Interest within and overlapping the Cairngorms National Park boundary, covering around 1,120 km² of the National Park's area. There has been a slight increase in the number of features assessed to be in favourable condition, from 147 in 2010 to 202 in 2024. There has also been an increase in features assessed as unfavourable, from 26 in 2010 to 34 in 2024. There are three Sites of Special Scientific Interest which have no features in favourable condition:

- Aldclune and Invervack Meadows, for which lowland calcareous grassland is the qualifying feature.
- Blair Atholl Meadow, for which lowland calcareous grassland is the qualifying feature.



• Creag Dhubh, for which upland birch is the qualifying feature.

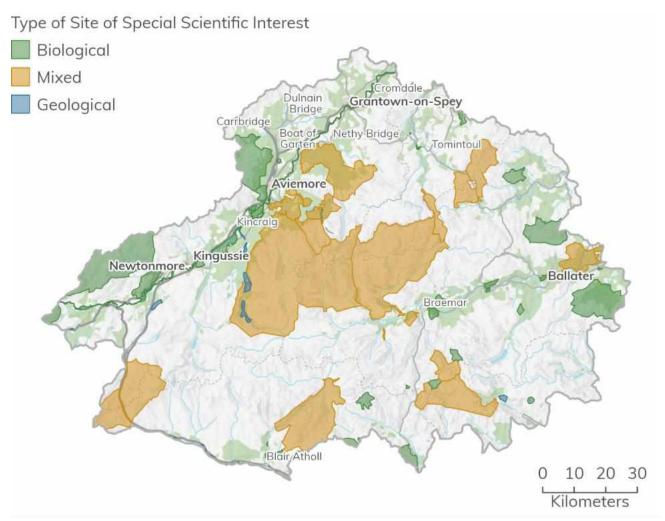


Figure 5 Sites of Special Scientific Interest within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.

#### **Natural Nature Reserves**

There are 9 National Nature Reserves (Figure 6) within the Cairngorms National Park. National Nature Reserves are statutory nature reserves designed under Part III of the National Parks and Access to the Countryside Act 1949. They are areas of land that have been set aside for nature and contain nationally or internationally important habitats and species. Most National Nature Reserves have some form of visitor facilities and are managed to ensure that recreational activities do not adversely affect the designated features.



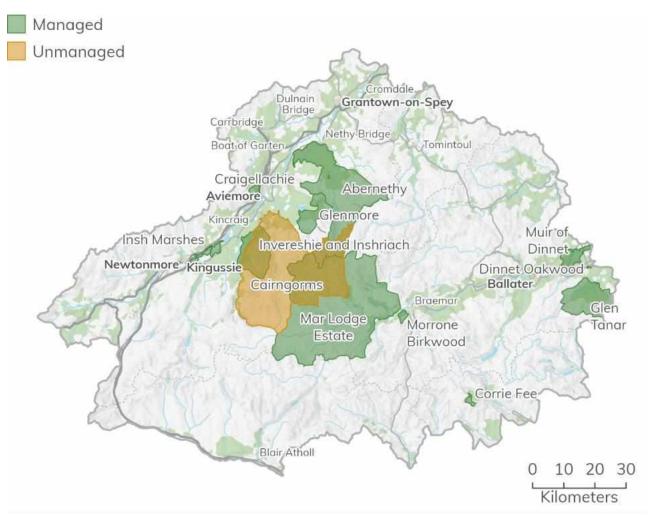


Figure 6 National Nature Reserves within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.

## Local and non-statutory designations

There are numerous non-statutory nature designations within Scotland. Many overlap with statutory designations. Those identified as being present within the Cairngorms National Park are:

- Biogenetic reserves (Figure 7).
- Royal Society for the Protection of Birds (RSPB) reserves (Figure 8).
- Woodland Trust Scotland sites (Figure 9).

#### **Biogenic Reserves**

Biogenetic reserve is a non-statutory designation made by the Council of Europe under Resolution 76 (17) on the European network of biogenetic reserves, and Resolution 79 (9) concerning the rules for the European network of biogenetic reserves.



Biogenetic reserves act as 'living laboratories' and are representative examples of various types of natural environment in Europe. They can consist of natural or seminatural habitats and their selection is based on their value for nature conservation and protected status based on four criteria: 'typical', 'unique', 'rare' and / or 'endangered' which can be applied to habitats or species.

The protected status must be adequate to ensure the conservation or management of the sites in the long term in accordance with fixed objectives.

There is a single Biogenic Reserve (Figure 7) within the Cairngorms National Park which overlaps the Muir of Dinnet National Nature Reserve, the Special Area of Conservation, Special Protection Area, Ramsar and Site of Special Scientific Interest designations.

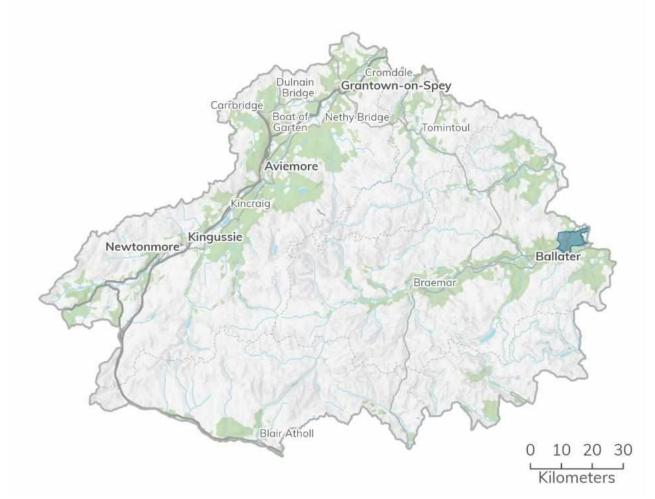


Figure 7 Muir of Dinnet Biogenetic Reserve. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Data © NatureScot 2025. Contains data © NatureScot 2025.



# Royal Society for the Protection of Birds Reserves

There are four Royal Society for the Protection of Birds (RSPB) reserves in the Cairngorms National Park (Figure 8), which are managed principally for conservation purposes. Covering a combined area of around 516 km<sup>2</sup>, the reserves are:

- Abernethy, which covers around 463 km<sup>2</sup>.
- Ballinlaggan, which covers around 0.7 km<sup>2</sup>.
- Crannach, which covers around 18 km<sup>2</sup>.
- Insh Marshes, which covers around 34 km<sup>2</sup>.

While the boundaries do not exactly match, Abernethy and Insh Mashes reserves are covered and protected by international and national designated sites. They are also part of the Cairngorms Connect nature restoration project. Only small areas of Crannach and Ballinlaggan are covered by statutory forms of protection. Unlike the other reserves, Ballinlaggan is a non-publicised reserve.

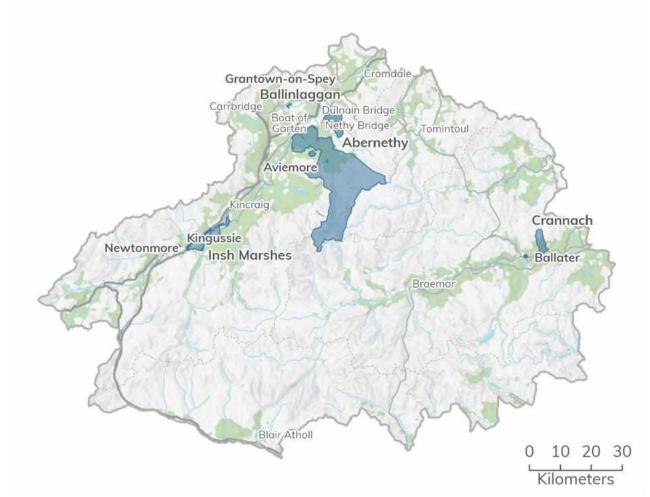


Figure 8 Royal Society for the Protection of Birds Reserves in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Royal Society for the Protection of Birds 2025.



#### **Woodland Trust Reserves**

The Woodland Trust Scotland have one site in the Cairngorms National Park (Figure 9). Glencharnoch Wood is a 14.7 ha site on the edge of Carrbridge and is part of a larger woodland network (Figure 14). The woodland is a mosaic of habitats typical of Strathspey pinewoods that have developed in the last 7,000 years following the last ice age.

The site is of particular importance for its high density of Scottish wood ant and hairy wood ant nests and is also habitat for crested tit, crossbill, tree pipet and redstart.

Glencharnoch Wood is not covered by any international or national designations.

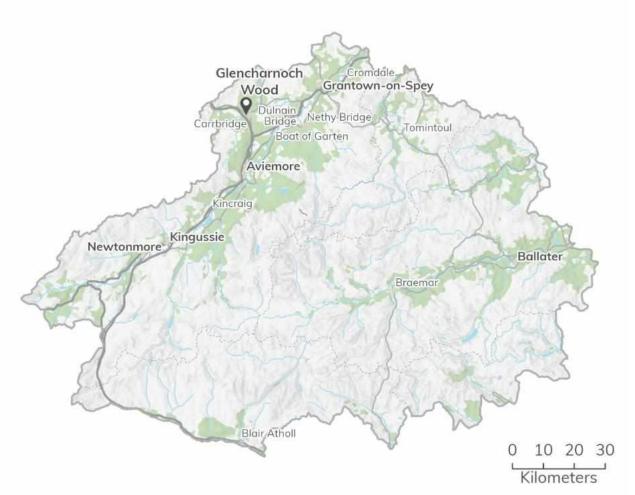


Figure 9 Woodland Trust Scotland sites within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.



# **Publicly owned land**

The Cairngorms National Park Authority does not own any land or property in the National Park, however other public bodies do, including the local authorities who will use the local development plan to determine planning applications.

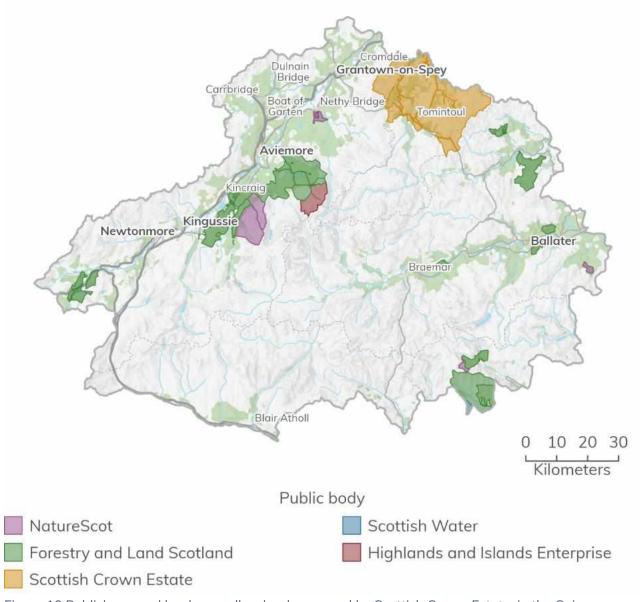


Figure 10 Publicly-owned land, as well as land managed by Scottish Crown Estate, in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Data © Scottish Government and NatureScot 2025.

In December 2024 Scottish Government published data on publicly-owned land, as well as land managed by Scottish Crown Estate. It should be noted that this data does not include land or properties owned by local authorities and there is no comprehensive publicly available dataset covering these assets. Figure 10 and Table 2 present this data, alongside additional data from NatureScot on land owned by Highland and Island



Enterprise. Approximately 9% of the National Park falls within the ownership of these organisations, compared to 11% for Scotland as a whole. This information may be useful for identifying opportunities for the delivery of blue and green infrastructure and nature networks.

Table 2 Publicly-owned land, as well as land managed by Scottish Crown Estate, in the Cairngorms National Park.

Public body	Area (hectares)
Forestry and Land Scotland	17,672.1
NatureScot	3,737.7
Scottish Crown Estate	17,539.6
Scottish Water	166.5
Highlands and Islands Enterprise	1,497.2

Forest and Land Scotland manage woodlands and Forest Parks across Scotland, including Glenmore Forest Park which is covered by a number of statutory international and national designations, including Special Areas of Conservation, Special Protection Areas, Sites of Special Scientific Interest and the Glenmore National Nature Reserves. The management of the Forest Park falls under the Strathspey Land Management Plan, which aims to balance management of designated and other priority biodiversity sites with a high-quality visitor experience by:

- Restoring native habitats and species on a landscape scale.
- Managing visitor access to provide high quality experiences whilst protecting vulnerable species and habitats and maintaining the scenic and wild qualities of the area.
- Working in partnership with stakeholders and neighbours.

The Land use, soil and resources section of the Evidence Report provide more information on publicly-owned land:

 https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-andresources-survey

#### Important Invertebrate Areas

Important Invertebrate Areas (IIAs) is a UK-wide programme led by Buglife, that aims to identify locations that hold nationally or internationally significant invertebrate populations and their habitats. They include habitats supporting a wide range of species ranging from moths and hoverflies to freshwater pearl mussels.



The initial selection process was based on analysis of over 45 million invertebrate records from 85 different recording schemes. Only species that have been assessed against the International Union for Conservation of Nature's red-listing criteria at a global scale and/or national scale were included in the selection process. Some Invertebrate Areas may potentially qualify based on the presence of a single, globally threatened species such as freshwater pearl mussels, while others qualify based on assemblages of rare, threatened and/or endemic invertebrate species.

Important Invertebrate Areas were initially mapped at a broad 10 km x 10 km scale, before being refined based on habitats and local expert knowledge to produce detailed fine-scale maps.

There are four Invertebrate Areas within the Cairngorms National Park (Figure 11):

- Dee Invertebrate Area
- Strathspey Invertebrate Area
- South Esk Invertebrate Area
- Tay, Tummel and Rannoch Invertebrate Area.

Fine-scale maps have so far been produced for the Strathspey Invertebrate Area and South Esk Invertebrate Area<sup>12</sup>. Profiles for each of the Invertebrate Areas summarising key species, habitats and threats are being produced.

<sup>&</sup>lt;sup>12</sup> See: https://www.buglife.org.uk/our-work/important-invertebrate-areas/using-iia-maps-and-profiles/



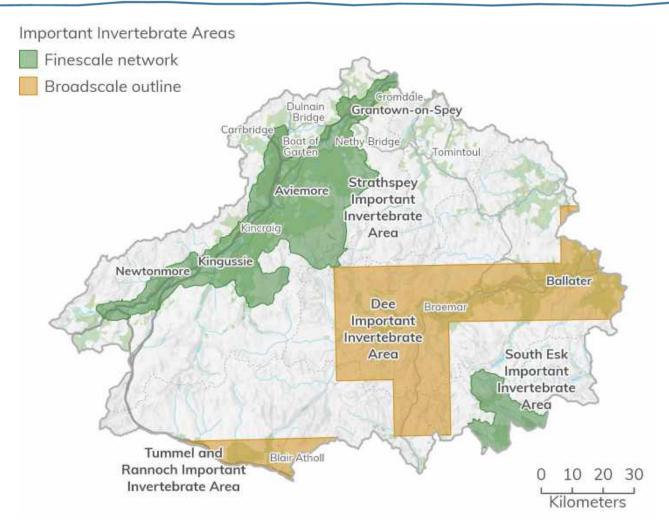


Figure 11 Important Invertebrate Areas within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data ©Buglife 2025.

#### **Important Plant Areas**

Important Plant Areas (IPAs) is a programme led by Plantlife. Important Plant Areas are key sites that have exceptional botanical richness; and/or support rare, threatened and socio-economically valuable plant species; and rare and threatened habitats. There are a cluster of sites which comprise the Cairngorms Important Plant Area within the Cairngorms National Park (Figure 12).



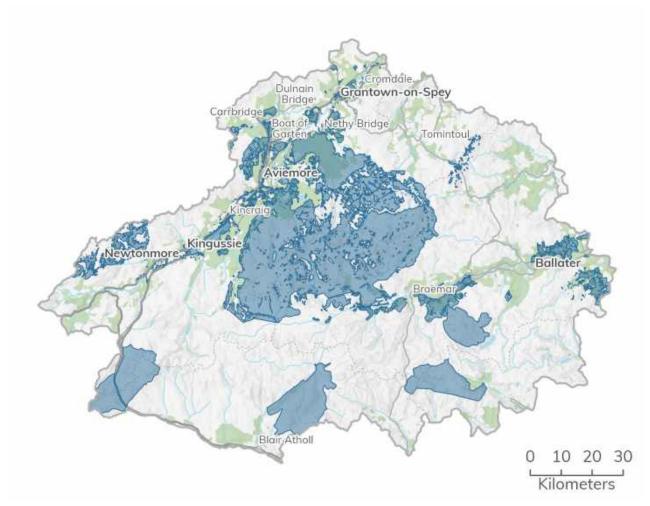


Figure 12 Important Plant Areas (IPAs) within the Cairngorms National Park. Density of croft holdings within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data ©Plantlife 2025.

#### Nature30 Sites

The Scottish Government has committed to achieving the 30 by 30 target to ensure that 30% of the world's terrestrial, inland water, coastal and marine areas are effectively conserved and managed by 2030. In Scotland it is being delivered through the network of existing protected areas consisting of Sites of Special Scientific Interest (SSSI), Special Protected Areas (SPAs), Special Areas of Conservation (SACs), Ramsar sites, and National Nature Reserves (NNRs), and Other Effective area-based Conservation Measures (OECMs) as outlined in the 30 by 30 Framework. In August 2025 the Scottish Government announced that Scotland's approach to Other Effective area-based Conservation Measures will be known as Nature30 Sites.

Nature 30 sites are defined areas that are put forward by landowners/managers as being managed effectively, in such a way that produces benefits for biodiversity that are secured in the long-term.



Each nominated Nature30 site is then assessed by NatureScot against set of criteria based on the International Union for Conservation of Nature (IUCN) guidance on Other Effective area-based Conservation Measures to ensure they align with robust international approaches, which has been informed by a group of stakeholders in Scotland, to tailor them to the Scottish context.

Nature 30 sites are likely to include blue and green infrastructure and will be key sites within Nature Networks.

There are currently (as of September 2025) no recognised Nature 30 sites in the Cairngorms National Park.

#### Cairngorms Nature Network

The National Park Authority is currently developing its approach to nature networks. One of the desired functions of the Cairngorms National Park Nature Network is for it to integrate with the Cairngorms Nature Index. The Cairngorms Nature Index has recently been developed as a method of baselining ecosystem health in the National Park and subsequently measuring trends in its condition over time. The Cairngorms Nature Index works with six broad ecosystem types:

- Woodlands
- Freshwater
- Mires and wetlands
- Managed lowland grasslands
- Managed uplands
- Montane.

The Cairngorms Nature Index will use typical indicator species for each of the ecosystems to indicate the current health of the ecosystem. The goal of the Cairngorms Nature Index will be to identify changes over time which in turn could be used to indicate whether developments within the National Park boundary are potential impacting on ecosystems, either negatively or positively. To date, only the freshwater ecosystem outputs have been published. For further information see:

https://storymaps.arcgis.com/stories/fdbca8769683464c91b1dc23818aa239

The delivery of the Cairngorms Nature Network will include improving already existing networks and the creation of new networks and will carefully link with current National



Park's conservation aims. This approach to identifying a Cairngorms Nature Network is set out in the following document prepared to support the Evidence Report:

 https://cairngorms.co.uk/wp-content/uploads/2025/06/Identifying-a-Cairngorms-Nature-Network.pdf

The Cairngorms National Park Nature Network is being developed concurrently and in association with the preparation of the next Cairngorms Nature Action Plan. Further engagement on draft Nature Network will take part as part of the consultation on the draft Action Plan in late 2025 / early 2026. The final Action Plan is programmed to be published in April 2026. Therefore, the timescales for the identification of the Cairngorms Nature Network aligns with timescales for the preparation of the Proposed Plan and it will be possible to identify and take account of the network within the Proposed Plan's spatial strategy. The Local Development Plan will seek to support the enhancement the Nature Network and protect it from fragmentation caused by potential development.

The Cairngorms Nature Index will be central to the identification of a nature networks within the Cairngorms National Park, and therefore the following sections detailing the priority habitats of the Cairngorms National Park has been aligned with these ecosystems.

#### Priority Habitats of the Cairngorms National Park

The Cairngorms National Park contains some of the United Kingdom's best examples of natural and semi-natural habitats, including a quarter of Scotland's native woodlands, extensive arctic-like plateaux, the headwaters of four of Scotland's major rivers, functioning floodplains and the some of the last few remaining fragments of mountain woodland (Figure 13). The foundations for ecosystem restoration, for habitats to reach their full ecological potential on a grand scale, are impressive.

The Cairngorms Nature Action Plan 2019 – 2024 lists a number of priority habitats, reflecting 'Agendas for Action' in the previous National Park Partnership Plan 2017 – 2022, 'Priority Projects' in the Scottish Biodiversity Strategy, ongoing work from the first Cairngorms Nature Action Plan 2013 – 2018 and consultation with partners on current issues. These are:

- Woodland expansion and enhancement.
- Freshwater and wetland restoration.
- Nature friendly farming.
- Moorland and peatland.



The habitats covered in the Cairngorms Action Plan correlate with the six broad ecosystem groupings of the Cairngorms Nature Index, but don't cover montane habitats.

It is recognised that there is a strong interrelationship between each of these habitats and the species that rely on them and that they should not be considered in isolation.

Detail about the priority habitats within the Cairngorms National Park is set out within the Natural heritage topic paper:

• https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

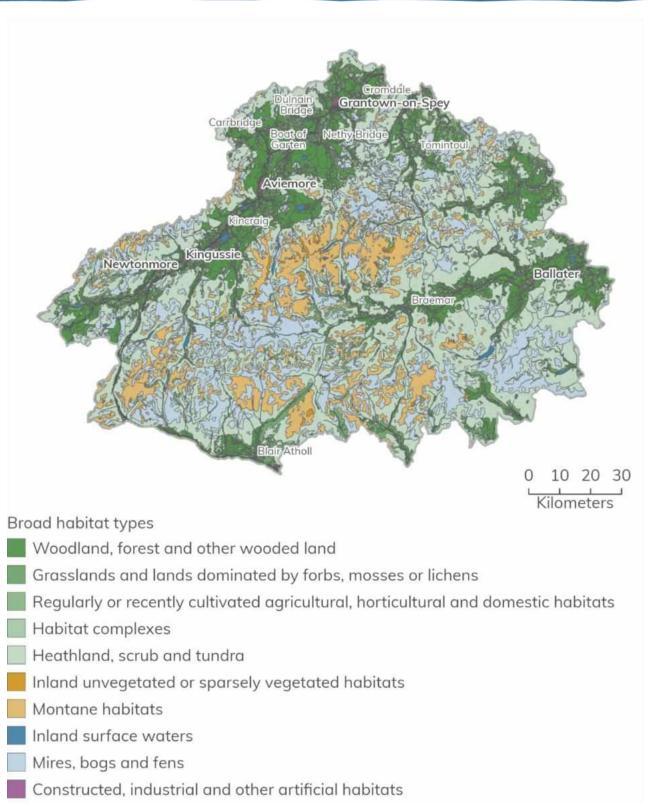


Figure 13 Broad habitat types found in the Cairngorms National Park as identified by the European Nature Information Systems (EUNIS). Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.



### **Priority Habitats – Woodlands**

Within the Cairngorms National Park, the estimated tree cover is approximately 16%. The National Park is home to many ancient woodlands, including Caledonian forest, which is predominately protected through Special Area of Conservation designation (Figure 2). Woodland is a key driver of ecological connectivity and there is a significant network of native forest connecting Strathspey, Strath Avon, Glenlivet, Donside, Deeside and the Angus Glens. This network is a widely recognised special quality of the park and supports many of the priority species identified within the Cairngorms Nature Action Plan. Although the park is only made up of 16% of woodland, it is estimated that approximately 79% of that woodland is comprised of native species such as Scots pine and native broadleaved species. As part of this, the National Park contains the most extensive tracts of Caledonian forest in Britain, as well as some of the best examples in Scotland of bog woodland, montane willow scrub and stands of aspen (Aspen is a Cairngorms Nature Action Plan priority species).

The priority actions for woodland habitats within the Cairngorms Nature Action Plan 2019 – 2024 is for their expansion and enhancement. The 2063 vision for woodlands within the Action Plan is for:

'Patches of forest and woodland, some miles across, some as small as football fields, link together through farmland and open ground. They are expanding up hillsides and into quiet areas, providing refuge for species to flourish, like the once critically endangered but now flourishing capercaillie. They are made up almost entirely of native trees: a patchwork of different woodlands, including productive plantations, all with rich understories, trees of all ages, clearings, bogs and deadwood scattered throughout. The UK's largest natural forests are considered an exemplar of woodlands managed for multiple benefits.'

No single dataset provides a complete overview of the extent and diversity of woodlands within the National Park, but a combination of the following datasets provides a good range of information that may be used to inform the Proposed Plan:

- National Forest Inventory
- Native Woodland Survey of Scotland
- Caledonian Pinewood Inventory
- Scottish Ancient Woodland Inventory
- HabMoS Mountain Woodland 2023 wild, relict or remnant
- HabMoS Mountain Woodland 2023 restoration sites
- Riparian woodland data from NatureScot
- Forestry Grant Scheme woodland creation claims



- Forestry Grant Scheme woodland creation options
- Forestry Grant Scheme Woodland Improvement Grant Habitats and Species –
   New Natural Regeneration Establishment claims
- Local authority Tree Preservation Orders
- Ancient Tree Inventory
- Woody linear features framework data
- Cairngorms National Park Authority aspen dataset

There may be issues with individual datasets relating to, for example, on the size of woodland that has been recorded (for example, smaller woodland areas can be missed), on how up to date the data is for example, the Native Woodland Survey of Scotland presents data collected between 2010 to 2015), or on the accuracy of the mapping, particularly when it has been based on historic mapping (for example, the Ancient woodland Inventory). However, as stated, in combination they provide the best available data on woodlands in the National Park and may be used to inform the Proposed Plan. A few key datasets are discussed below, but more details on the above datasets are discussed in the Natural Heritage Evidence Report.

Detail about the woodland habitats within the Cairngorms National Park is set out within the Natural heritage topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

## The National Forest Inventory

The National Forest Inventory woodland map (Figure 14) covers all forest and woodland over 0.5 hectares in size with a minimum of 20% canopy cover, or the potential to achieve it, and a minimum width of 20 metres. This includes new planting, clearfell, windblow and restock. The latest available inventory is for the year 2023.



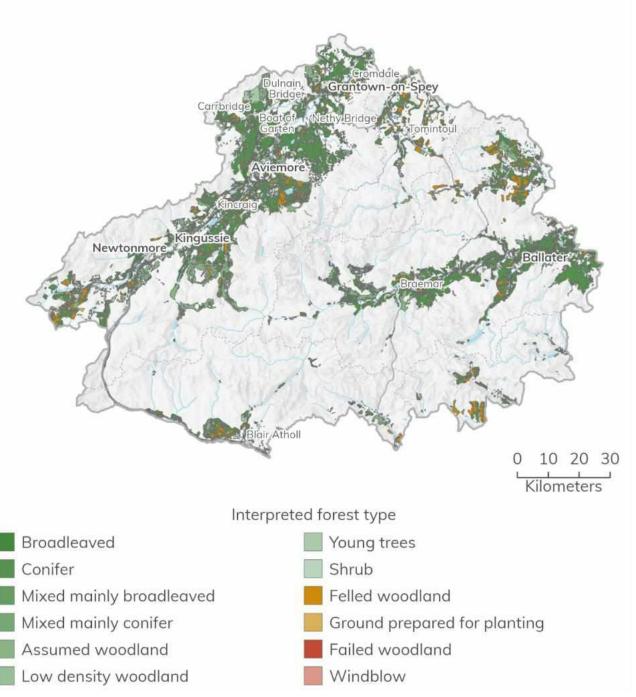


Figure 14 Forests and woodlands identified on the National Forest Inventory 2023 by their interpreted forest type in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Forestry Commission 2025.

Around 760 km<sup>2</sup> of the National Park's forests and woodlands are identified by the Inventory, of which approximately is classified as:

- 384 km<sup>2</sup> of coniferous woodland.
- 133 km<sup>2</sup> of assumed woodland.
- 94 km<sup>2</sup> of broadleaved woodland.



- 87 km<sup>2</sup> of felled woodland.
- 31 km<sup>2</sup> of young trees.
- 8 km<sup>2</sup> of mixed mainly broadleaved woodland.
- 7 km<sup>2</sup> of ground prepared for planting.
- 6 km<sup>2</sup> of windblow.
- 6 km² of mixed mainly conifer woodland.
- 3 km<sup>2</sup> of low density woodland.
- 2 km<sup>2</sup> of shrub.
- 0.7 km<sup>2</sup> of failed woodland.<sup>13</sup>.

# **Native Woodland Survey of Scotland**

The aim of the Native Woodland Survey of Scotland was to undertake a baseline survey of all native woodlands, nearly native woodlands and Plantations on Ancient Woodland Sites (PAWS) in Scotland in order to create a woodland map linked to a dataset showing type, extent and condition of those woods (Figure 15). The data presented in this report was extracted 25 November 2024 when it's most recent update was 22 July 2021.

<sup>&</sup>lt;sup>13</sup> Note that figures may not sum due to rounding.



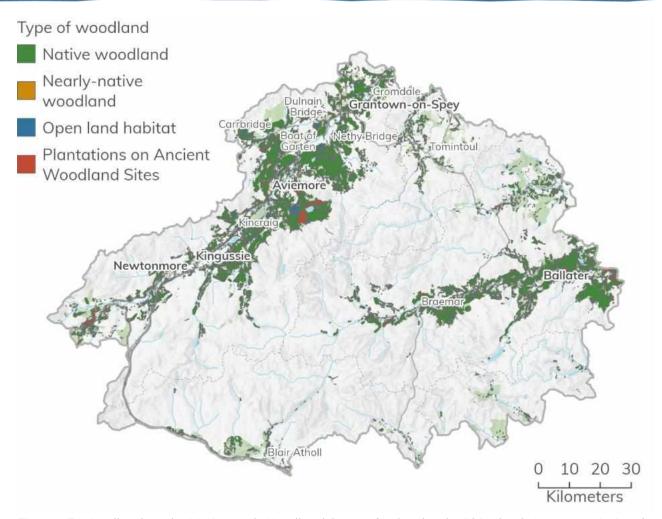


Figure 15 Woodland on the Native and Woodland Survey for Scotland within the Cairngorms National Park, categorised by type. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Scottish Forestry 2025.

Around 475 km<sup>2</sup> of the National Park's forests and woodlands are identified by the Survey, of which approximately is classified as:

- 430 km<sup>2</sup> of native woodland.
- 5 km<sup>2</sup> of nearly-native woodland.
- 23 km² of open land habitat.
- 18 km<sup>2</sup> of Plantations on Ancient Woodland Sites (PAWS).

# **Ancient woodland Inventory**

In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. Ancient Woods are important because:

- They include all remnants of Scotland's original woodland; their flora and fauna may preserve elements of the natural composition of the original Atlantic forests.
- They usually have much richer wildlife than that of more recent woods.



- They preserve the integrity of soil ecological processes and associated biodiversity.
- Some have been managed by traditional methods for centuries and demonstrate an enduring relationship between people and nature.
- Woods and veteran trees are ancient monuments whose value to the local community and historians may be as great as that of the older buildings in a parish.
- Once destroyed, they cannot be recreated.

Although there is no legislation specifically protecting ancient woodland, National Planning Framework 4 states that development proposals will not be supported where they result in any loss of ancient woodlands.

Around 340 km² of the Cairngorms National Park's woodlands are identified as being ancient according to the Ancient Woodland Inventory (Figure 16). Although not definitive due to historical mapping issues, the Inventory provides an indication of where ancient woodlands can be found in the National Park. Around 160 km² of ancient woodlands have been identified as being semi-natural. The data was last updated in October 2000, with no further updates planned.



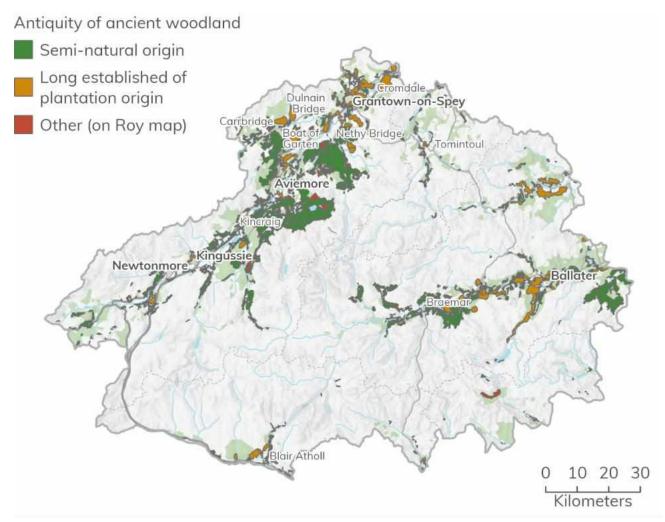


Figure 16 Forest and woodlands identified on the Ancient Woodland Inventory within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.

## Hedgerows and lines of trees

Hedges and lines of trees are important boundaries that connect and enclose habitats, buffer the effects of land management and enhance biodiversity. As noted, the datasets used in this report have their limitations, in particular, data on smaller areas of woodlands, hedgerows and / or individual trees is fragmentary with much lacking any form of identification. This can include trees of high value on field boundaries or along watercourses for example. Trees in urban and peri urban areas are important assets that need to be protected and encouraged, although they may not preclude development. Further information on the location and length of hedgerows and lines of trees within the Cairngorms National Park is available through the Woody Linear Features Framework dataset supplied by the UK Centre for Ecology and Hydrology (Figure 17). The dataset was derived from existing national datasets and created by a predictive model, which was developed at the Centre for Ecology & Hydrology in 2016. This unique dataset shows hedges / lines of trees on all land, not just agricultural.



These features are Priority Habitats in their own right and are extremely valuable, particularly in intensively managed landscapes. There are around 240 km of woody linear features identified on this dataset within the Cairngorms National Park.

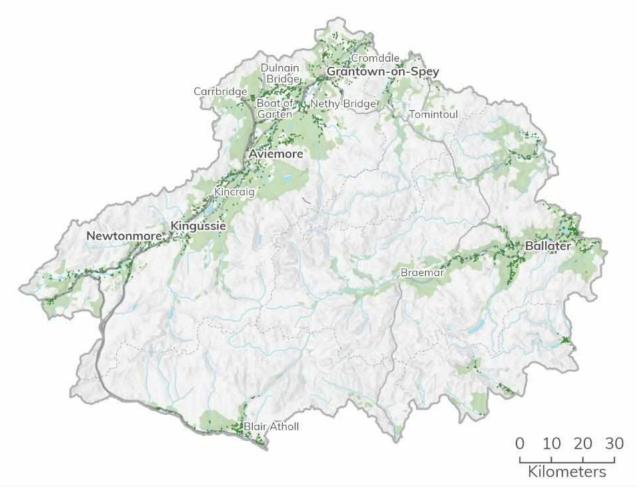


Figure 17 Features held on the Woody Linear Features Framework in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © UK Centre for Ecology and Hydrology 2025.

#### Potential for Woodland expansion

The National Park Partnership Plan 2022 – 2027, supported by the Cairngorms National Park Forest Strategy 2018 provides direction on future forest management and the restoration of woodlands within the National Park, including targets for woodland expansion (see pages 53 and 57). The Forest Strategy indicates that there is ecological scope and vast potential for woodland expansion in the Cairngorms National Park (Figure 18).

In accordance with Policy 6 of National Planning Framework 4, the Proposed Plan should take account of these potential areas in the formation of its spatial strategy and



the assessment of its potential development sites. Furthermore, the local development plan may support the delivery of new woodland and increase connectivity between existing woodland habitats, through its support for nature networks.

Information on the capacity of land for forestry, based on a range of factors, including soil, is covered in the Land use, soil and resources evidence paper.

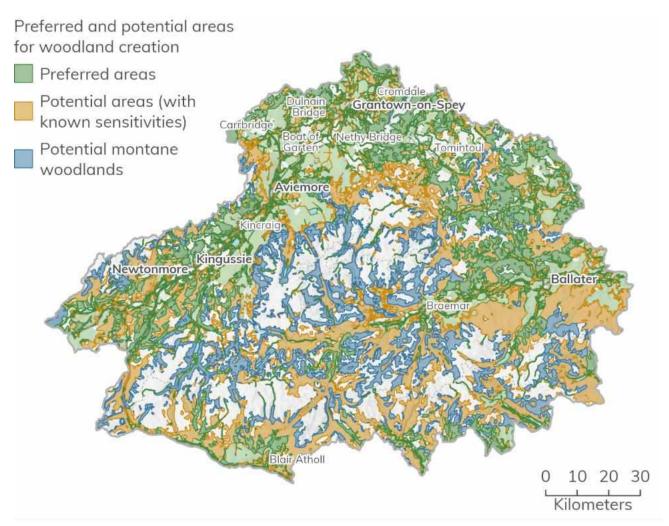


Figure 18 Preferred and potential areas for woodland creation in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.

# Riparian woodland

Native woodland on the riparian zone is a vital part of the water ecosystem. It helps regulate the temperature of the water by providing shade, deadwood falling into rivers can increase in-channel habitat diversity and hydrological dynamics, while falling leaves and insects feed the hungry animals below. It is linked closely with the freshwater and wetland priority habitats.



Riparian woodland data is hosted by NatureScot (Figure 19). It was mapped using a combination of existing open datasets, including the Native Woodland Survey of Scotland, Small woods dataset from Forest Research, National Forest Inventory, Ordnance Survey open rivers data and Scottish Environment Protection Agency open rivers data. It includes coniferous and broadleaved woodland, native and non-native. The data presented in this report was extracted 25 November 2024 when it's most recent update was 16 June 2023.

It is recognised that the summary data provided by Figure 19 is difficult discern. It can be viewed at greater deal via NatureScot's data portal:

 https://opendata.nature.scot/datasets/snh::riparian-woodland-2/explore?location=57.060601%2C-3.588487%2C10.40

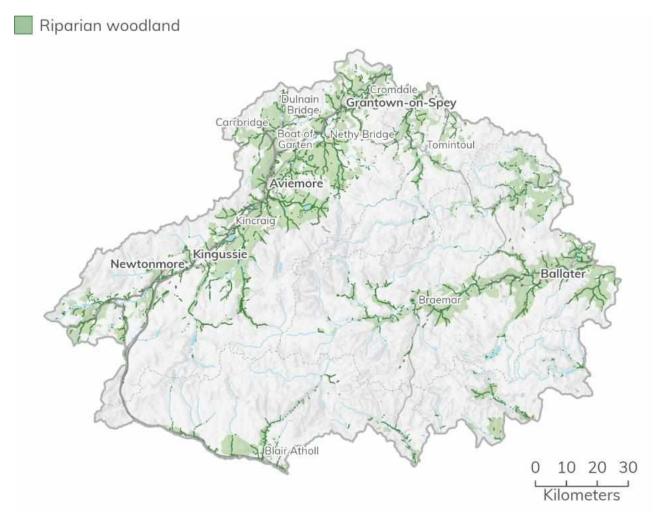


Figure 19 Mapping of riparian woodlands in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.



Due to the overlap with flood risk constraints, it is unlikely that riparian woodland is at significant risk from development. However, there are significant opportunities for enhancement following National Planning Framework 4's requirement for local development plans to conserve, restore and enhance biodiversity in line with the mitigation hierarchy, and for connecting habitat networks along catchments.

Further information of the potential for woodland expansion is provided by Scottish Environment Protection Agency's Recommended Riparian Corridor (Figure 20) and Riparian Vegetation planting opportunities (Figure 21) datasets.

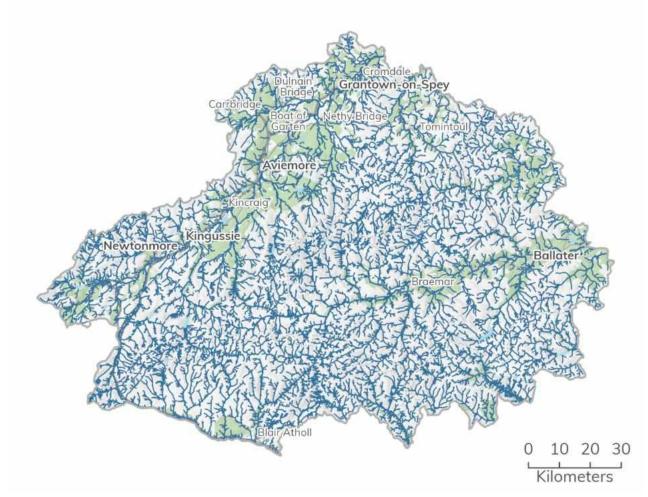


Figure 20 Recommended riparian corridors in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data @ Scottish Environment Protection Agency, 2025.

It is recognised that map of riparian vegetation planting opportunities (Figure 21) is difficult is difficult to interoperate at the scale of the National Park. It is included to demonstrate sufficiency of evidence. The data may be viewed in more detail via Scotland's environment web:



https://map.environment.gov.scot/sewebmap/

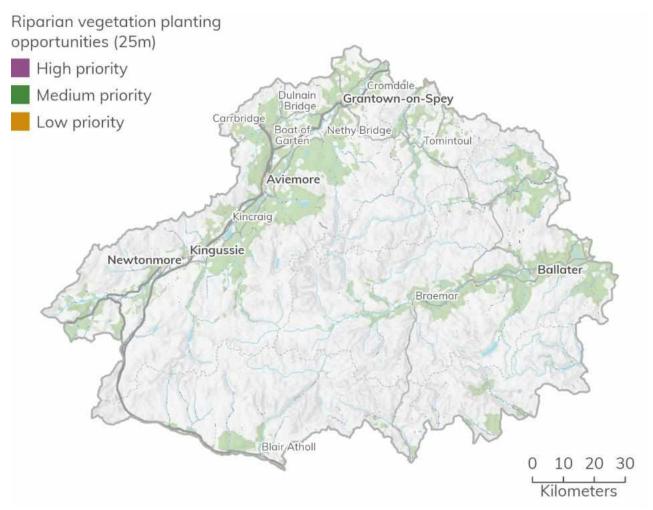


Figure 21 Riparian vegetation planting opportunities (25m) in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data @ Scottish Environment Protection Agency, 2025.

Further information on the capacity of land for forestry, based on a range of factors, including soil, is covered in the Land use, soil and resources evidence paper<sup>53</sup>.

#### Habitats – Freshwater, Mires and Wetlands

Many of the rivers and lochs within the Cairngorms National Park are internationally protected for nature conservation, primarily for the species they support including Atlantic salmon, freshwater pearl mussel, otter and lamprey species. The National Park contains part of eight river catchments (Figure 22) including:

- River Spey (the largest catchment in the National Park)
- River Dee
- River Tay



- River Don
- River Lochy
- River North Esk
- River South Esk.

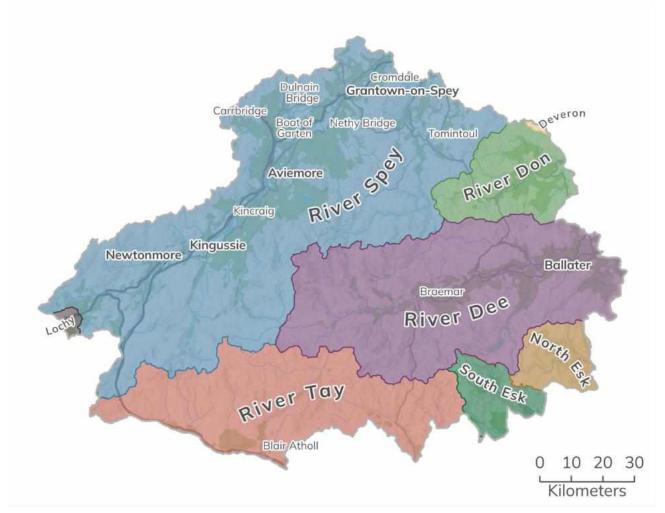


Figure 22 River catchments within the Cairngorms National Park. Contains Ordnance Survey data © Crown copyright and database right 2025 Contains data © Scottish Environment Protection Agency 2025; this Scottish Environment Protection Agency product is licenced under the Open Government Licence 3.0.

The National Park is also home to a mosaic of wetland habitats ranging from swamps, marshes, fens, bogs to wet woodlands and wet grassland, all of which provide a home to a rich array of wildlife (Figure 23 and Figure 24).

The extent of wetlands across many parts of the United Kingdom, including within the Cairngorms National Park has significantly declined with the drainage of many wetlands and subsequent changes in land use for agriculture, commercial forestry or



development. Other factors affecting freshwater and wetland habitats include pollution, dredging, channel straightening and constraint, and climate change.

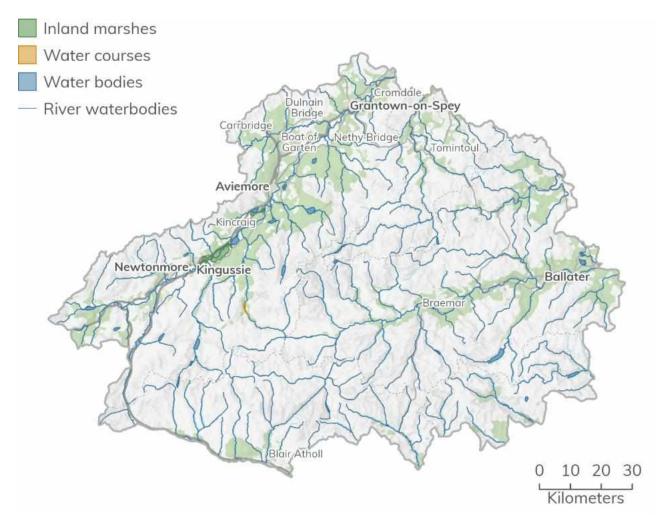


Figure 23 Freshwater and wetland habitats in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Scottish Environment Protection Agency 2025. Contains data © European Union, Copernicus Land Monitoring Service 2023, European Environment Agency (EEA).

Within the National Park, the most extensive wetland habitat is at Insh Marshes National Nature Reserve (Figure 6), on the River Spey floodplain between Kingussie and Kincraig. Insh Marshes are one of the most important wetlands in Europe, known to support a wide range of breeding waders and invertebrates.

Muir of Dunnet National Nature Reserve (Figure 6), near Ballater, is also an important site within the National Park. At the heart of the Reserve are Lochs Davan and Kinnord, with associated bogs and fens providing ideal habitat for a diversity of aquatic and wetland species ranging from rare water beetles to otters. During winter many of the



lochs within the National Park are important roost sites for migratory geese and other wildfowl.

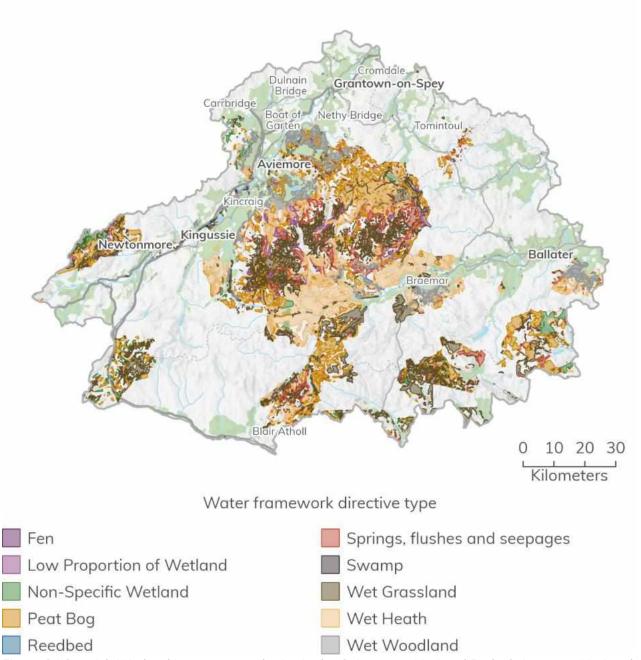


Figure 24 Scottish Wetland Inventory typologies in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Scottish Environment Protection Agency 2025.

The priority in the Cairngorms Nature Action Plan 2019 - 2024 is for freshwater and wetland restoration. The 2063 vision of the Action Plan for freshwater and wetland habitats is for:



'Rivers naturally meander and waters rise and fall seasonally across land grazed by livestock. Large, interconnected wetlands help prevent damaging flood events in the Park and further downstream. Natural processes in river catchments do not affect the productivity of land. The high-water quality status has been maintained or increased.'

Detail about the freshwater habitats within the Cairngorms National Park is set out within the Natural heritage topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

# **Catchment Water quality**

Scottish Environment Protection Agency identifies 157 waterbodies within and overlapping the National Park boundary. Water quality within the Cairngorms National Park is generally very high and is on a trend of improvement. In 2023 around 98% of waterbodies were calculated as having high or good status, with only one waterbody, River Muick – Allt an Dubh Loch (ID number 23354), classified as poor. No waterbodies were classified as bad (Figure 25). Most waterbodies therefore meet the Water Framework Directive objective of good status.

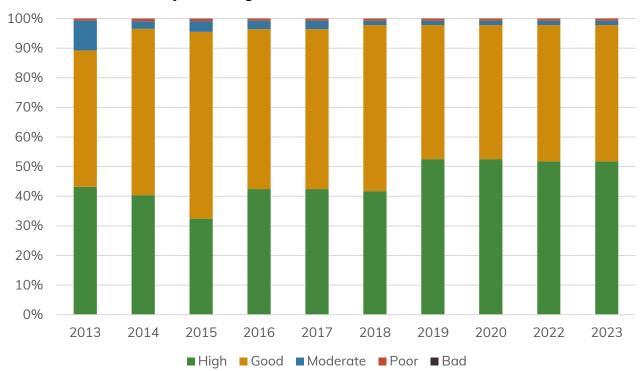


Figure 25 Proportion of waterbodies by water quality in the Cairngorms National Park, 2013 – 2023 (Scottish Environment Protection Agency, 2024).



The pressure identified by Scottish Environment Protection Agency on Allt an Dubh Loch, which is a tributary to the River Muick and is within the River Dee Catchment area, is acidification from the burning of fossil fuels, for example through acid rain and the acidification of soils. Scottish Environment Protection Agency record that action has been completed to address the pressure, but it is expected that ecological recovery will take longer.

Water quality is however but one criterion used by Scottish Environment Protection Agency in coming to an overall designation for the overall status of waterbodies. The Scottish Environment Protection Agency use a 'one out-all out' approach to designation, so if a waterbody performs poorly under one criterion that will set its overall classification. The overall status of waterbodies within the Cairngorms National Park quality is relatively good (Figure 26), with around 73% calculated to have achieved high or good status in 2023. The main reasons for waterbodies not achieving overall good status is the presence of a large number of barriers to fish and pressure on water flows and levels. Hydro electricity generation is the main cause of both pressures.



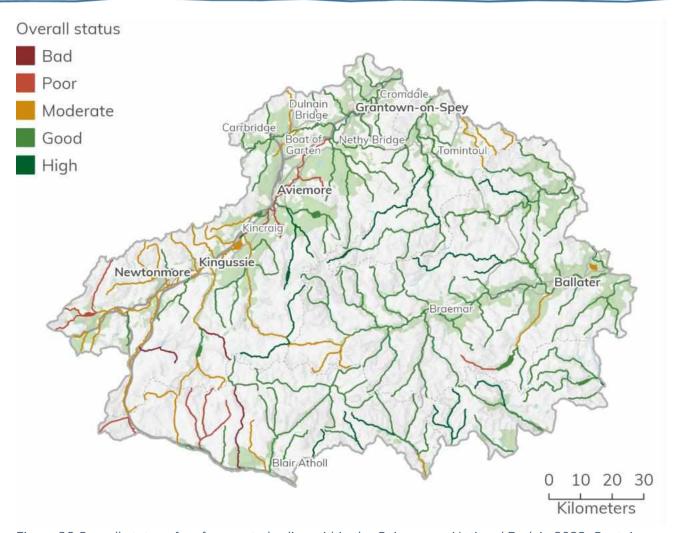
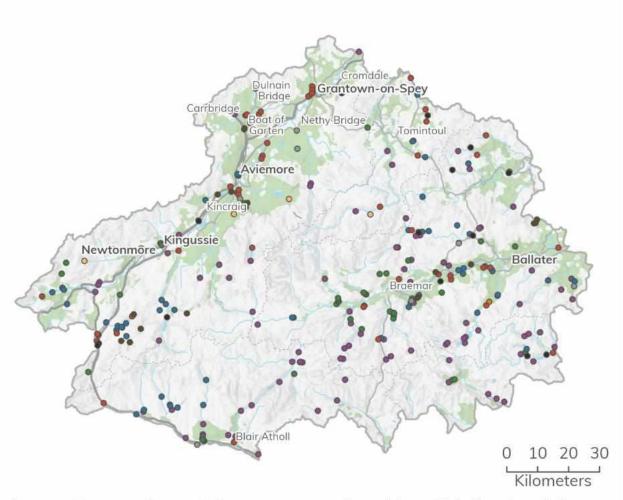


Figure 26 Overall status of surface waterbodies within the Cairngorms National Park in 2023. Contains Ordnance Survey data © Crown copyright and database right 2025. Contains data © Scottish Environment Protection Agency 2025; this Scottish Environment Protection Agency product is licenced under the Open Government Licence 3.0.

Data on fish barriers is available from Scottish Environment Protection Agency's Obstacles to fish migration dataset (Figure 27).





- Impassable natural waterfall
- Passable natural waterfall no fish pass Natural limit to migration
- Passable natural waterfall fish pass
- Impassable artificial barrier
- Passable artificial barrier no fish pass
- Passable artificial barrier fish pass
- Obstruction type unknown
- Barrier removed

Figure 27 Obstacles to fish in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Scottish Environment Protection Agency 2025.

Further information about the water quality habitats within the Cairngorms National Park is set out within the Flood risk and water management and Natural heritage topic papers:

- https://cairngormsldp.commonplace.is/en-GB/proposals/flood-risk-and-watermanagement-survey
- https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey



# Fishing and Water Sports

There are two main rivers in the Cairngorms National Park for fishing namely the River Spey and the River Findhorn. According to the 2019 – 2020 visitor survey, 1% of visitors to the Cairngorms area where there to take part in fishing activities. The most popular locations on the River Spey for fly fishing are at Grantown-on-Spey and Boat of Garten. There are also a number of fisheries in the Cairngorms National Park including:

- Craggan Golf Course (near Grantown-on-Spey)
- Rothiemurchus Fishing Centre.

Loch fishing is also popular in the Cairngorms National Park including Loch Morlich, Loch Dallas, Loch Avon and Loch Vaa. There are also lochs available for course fishing. The main Lochs available for course fishing are Loch Pityoulish and Loch Insh.

Sailing, windsurfing, paddle sports, rafting, swimming or gorge walking are all within easy reach of many of the towns and villages in the Cairngorms National Park including the Aviemore, Angus Glens, Royal Deeside, Glenlivet, Atholl and Glenshee areas. According to the 2019 - 2020 visitor survey, 1% of visitors to the Cairngorms area were taking part in canoeing and / or kayaking activities.

There are two main water sports centres in the National Park located at Loch Morlich and Loch Insh (Figure 28). There are a number of other lochs and riverside opportunities for unregulated water sport use across the National Park.



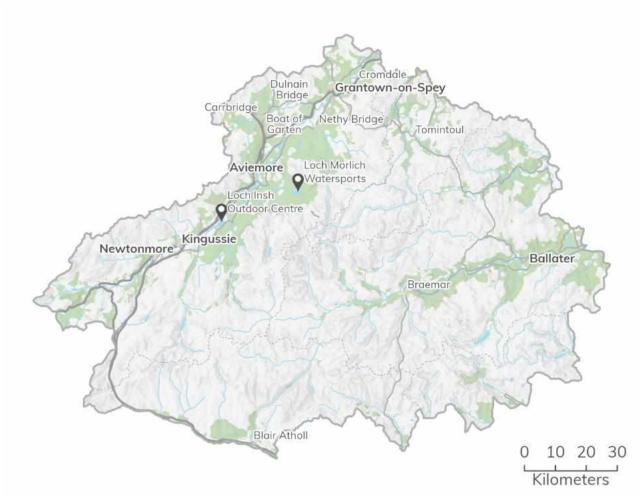


Figure 28 Map of the major outdoor water sports centres in the Cairngorm National Park. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100040965, Cairngorms National Park Authority.

More information relating to fishing and water sports is covered in the Tourism topic paper:

 https://cairngormsldp.commonplace.is/en-GB/proposals/tourism-in-the-nationalpark-survey

# Natural flood management

Natural flood management involves techniques that aim to work with natural hydrological and morphological processes, features and characteristics to manage the sources and pathways of flood waters. These techniques include the restoration, enhancement and alteration of natural features and characteristics, but exclude traditional flood defence engineering that works against or disrupts these natural processes.



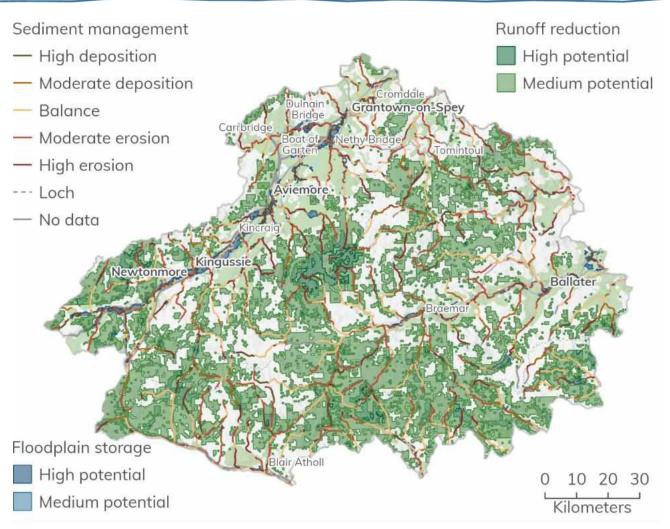


Figure 29 Opportunity areas for natural flood management within the Cairngorms National Park. Contains Ordnance Survey data © Crown copyright and database right 2025. Contains data © Scottish Environment Protection Agency and database right 2025. All rights reserved.

Scottish Environment Protection Agency's natural flood management data indicates areas where land use change to restore nature could reduce flood risk (Figure 29). As the Cairngorms National Park lacks a coastline it has not been necessary to consider estuarine surge attenuation or wave energy dissipation opportunities. Further information on potential natural flood management opportunities is available from the Ballater Flood Protection Study, while records of past and current interventions have been provided by the Spey Catchment Initiative, Dee District Salmon Fishery Board / River Dee Trust and Dee Catchment Partnership.

Further information on catchment and Potentially Vulnerable Area level natural flood management opportunities within the National Park is presented within the Strategic Flood Risk Assessment.



 https://cairngorms.co.uk/uploads/documents/Local-Development-Plan-Evidence-Report/Supporting-Documents/CNPA211-Local-Development-Plan-Scoping-Report-August-2025.pdf

It is recognised that the identification and protection of blue and green infrastructure and nature networks, and improving the connectivity between them, may play a part in delivering natural flood management. The Park Authority's approach to nature networks is contained within the evidence paper on Natural heritage.

#### **Beaver translocation**

Recent changes by the Scottish Government offering protection and encouraging the expansion of beavers has allowed beaver to be identified within the Cairngorms Nature Action Plan as a priority species.

On 5 December 2023 NatureScot approved the Park Authority's licence application to translocate Eurasian beavers to the Upper Spey catchment in the National Park. The first beavers were translocated a few weeks later with plans to translocate a maximum of 50 individuals over the next five years.

The translocation of beavers to locations within the catchment, and the projected growth and expansion of their population, presents a number of opportunities and risks for wetlands and their environment, some of which may impact on flood risk and land use planning. The main benefit of beavers comes from their dam building. Beaver dams impede the water flow (quantity and velocity) of water in a channel, which has multiple benefits, including increasing water storage and increasing the length of time taken for a flood to reach its peak and reduce the height of the peak and increasing water storage. According to Nature Scot, beavers have a potentially significant role in flood management and are advocating to Scottish Environment Protection Agency the opportunity for beavers to be part of natural flood management where appropriate.

It is acknowledged that beaver activity may also present risk, including:

- Increased erosion of bare banks through burrowing and lack of structural support of riparian vegetation, along with the undermining of mature tree species which may fall into river pulling root bulb and bank.
- The undermining of riverbanks may damage buildings and / or infrastructure.
- Increased water levels from damming or blocking watercourses or manmade structures such as culverts or bridges, may result in in damage to buildings and / or infrastructure.



Further detail on flooding and water management, and beavers is covered in the Flooding and Water Management evidence paper and the Natural Heritage evidence paper:

- https://cairngormsldp.commonplace.is/en-GB/proposals/flood-risk-and-watermanagement-survey
- https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

## **Catchment Geomorphic Risk**

The Geomorphic Risk Layer (Figure 30) was produced by Scottish Environment Protection Agency in 2017 to support the work of the National Flood Risk Assessment 2. This layer aimed to identify sections along the river network where channel adjustment was likely to be significant, to understand where infrastructure may be at risk due to channel mobility. There are two main uses for land use planning:

- It is not advisable to develop land next to the areas of risk identified by the layer due to the increased risk of the channel adjusting within this zone; and,
- Consideration of the potential risk posed to existing infrastructure adjacent to the areas of risk and the implications of this for future infrastructure provision and development.

The layer can help identify risk for future developments but also geomorphic risk for existing infrastructure that may be associated with new developments. Therefore, this risk should be assessed for both what has already been built and the proposed new development. By considering both, it can help mitigate future impacts.

In some cases, there may be options to mitigate this risk. However, hard engineering techniques are not recommended unless completely necessary and may increase the risk of erosion in adjacent reaches. Consideration of a riparian corridor within these spaces is a far more beneficial approach as it helps to mitigate this adjustment. Information on opportunities for riparian planting is presented within the Priority Habitats-Woodlands section (Figure 20 and Figure 21).

Note, the layer is based on data collected before 2017 and models run in 2013. Therefore, the data should be ground-truthed as changes may have occurred.

Data for the Cairngorms National Park is presented in Figure 30 however it is acknowledged that it is difficult to interpret at this scale. It is included in the evidence



report for the purpose of sufficiency. The data may be viewed in more detail on Scotland's Environment web:

https://map.environment.gov.scot/sewebmap/?layers=geomorphicRiskBuffer

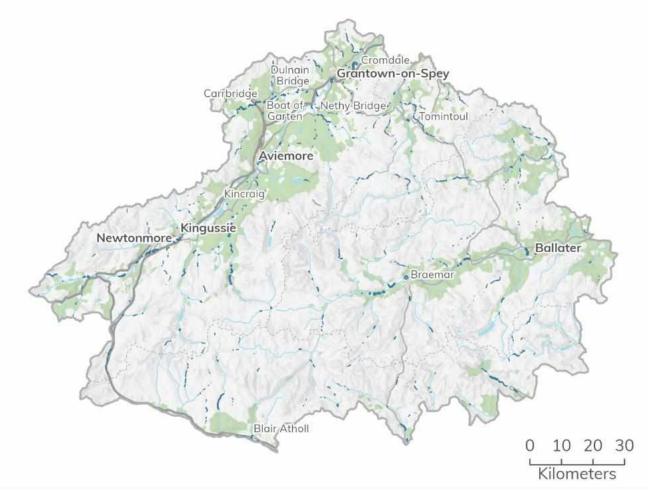


Figure 30 Areas at high geomorphic risk in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Scottish Environment Protection Agency and database right 2025. All rights reserved.

#### **Abstraction**

An abstraction is the removal or diversion of water from the natural water environment, by a variety of means, including pumps, pipes, boreholes and wells. Abstractions are regulated by the Water Environment (Controlled Activities) (Scotland) Regulations 2011 – more commonly known as the Controlled Activity Regulations (CAR) and their further amendments.

Responsible management of water resources requires ensuring that river flows, loch and groundwater levels can sustain aquatic environments, while also allowing use of



water for safe drinking, renewable energy and other agricultural and industrial purposes.

Large abstractions, such as those for agricultural production, distilleries and public water supplies, carry a higher risk of affecting the environment. Without regulation, these might lead to reduced flows of water, stranded fish and dried out wetlands. Abstraction of water poses the following risks:

- Drying out of rivers and wetlands.
- High variable flows of water below hydropower stations and water supply reservoirs, resulting in bare banks and potential stranding of fish.
- Changing water levels in reservoirs, leading to regular drying out of the shore line and preventing growth of plants and spawning fish.
- Death of fish from passing through turbines.
- Interference to the flow of sediment downstream of dams, which reduces the amount of gravel available (needed by fish to spawn).
- Interference with other users of the water environment (e.g. loss of dilution capacity and resulting deterioration of water quality, or loss of abstraction capacity).

All abstractions require authorisation, whether it is carried out on a permanent or temporary basis. The level of authorisation is dependent on the level of risk from the activity:

- Abstraction of less 10m³ of water per day from Inland waters and ground water are considered low-risk and do not require an application for authorisation, but are covered by a set of general binding rules which must be followed.
- Abstractions of between 10m³ and 50m³ per day from inland waters and ground water area considered low individual risk, but cumulatively may affect the environment, and therefore users require to register with Scottish Environment Protection Agency.
- For abstractions between 50m³ and 2,000m³ per day can have significant impacts on the environment and therefore a Simple Licence is required.
- For abstractions over 2000m³ per day a Complex Licence is required.

Scottish Water abstractions are designated as Drinking Water Protected Areas under Article 7 of the Water Framework Directive. The Protected Areas are categorised as surface water or groundwater. The entire National Park is covered by groundwater Drinking Water Protected Areas (Figure 31).



Twenty-four groundwater waterbodies have been identified within or overlapping the Cairngorms National Park (Figure 31). A number of these, namely Aberlour (150666), Cabrach (150627), Clachnaben (150705), Craigevar Castle (150642), and Northern Highlands (150701), cover very little of the National Park's geography relative to their size. They have however been considered within the Evidence Report for the sake of completeness.

Only one groundwater waterbody had an overall classification that did not achieve good status in 2023, namely Aberlour (150666), of which only a small part is located within the National Park. Pressures relating to salt water interaction are the cause, with the waterbody given an overall status of poor.

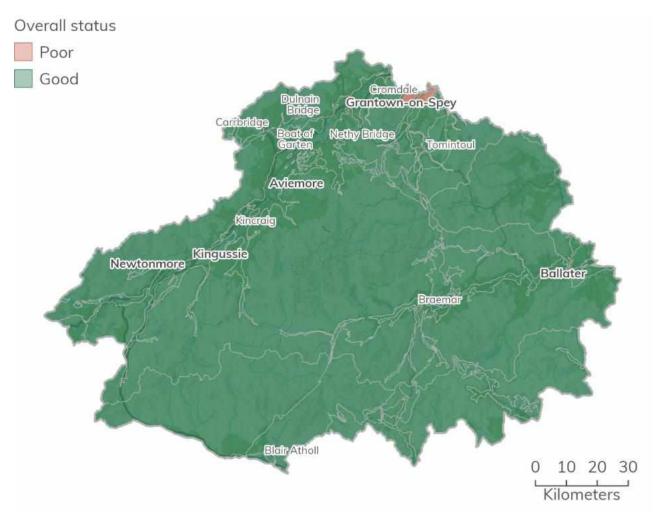


Figure 31 Overall status of groundwater waterbodies within the Cairngorms National Park in 2023. the National Park. Around 160 km2 of ancient woodlands have been identified as being semi-natural. The data was last updated in October 2000, with no further updates planned. Contains data © Scottish Environment Protection Agency 2025; this Scottish Environment Protection Agency product is licenced under the Open Government Licence 3.0.



Large areas of the Spey, Tay, Dee, Don, South Esk and North Esk catchments are covered by surface water Drinking Water Protected Areas (Figure 32).

To protect the quality of water within these areas, Scottish Water recommend that households and businesses take precautionary measures including:

- Store all detergents, oils, fuels and chemicals securely, do not leave any potential
  contaminants such as organic matter, biosolids, fertilisers manure or feedstuff next to
  watercourses as rainfall could wash them into ditches, streams, burns, rivers and
  lochs.
- Ensure vehicles and equipment that use oils, chemicals and fuels are maintained and any leaks or spillages are cleaned up and contained.
- Try to avoid driving through, or working in watercourses, where possible provide alternative drinking points for animals, and if unavoidable follow Scottish Environment Protection Agency guidelines.
- Make sure septic tanks / wastewater treatment works, household oil tanks, slurry and drains are operated and maintained correctly and do not leak into the environment and watercourses.
- Take particular care and follow instructions if using chemicals, pesticides and fertilisers such as weed killers and slug treatments.
- Dispose of all animal remains (including deer) as directed by Scottish Government stock disposal guidelines. If recovery is impossible, at least 50m away from, and down slope from watercourses.

A number of the National Park's settlements are located within surface water Drinking Water Protected Areas, including Aviemore, Ballater, Kingussie and Newtonmore.



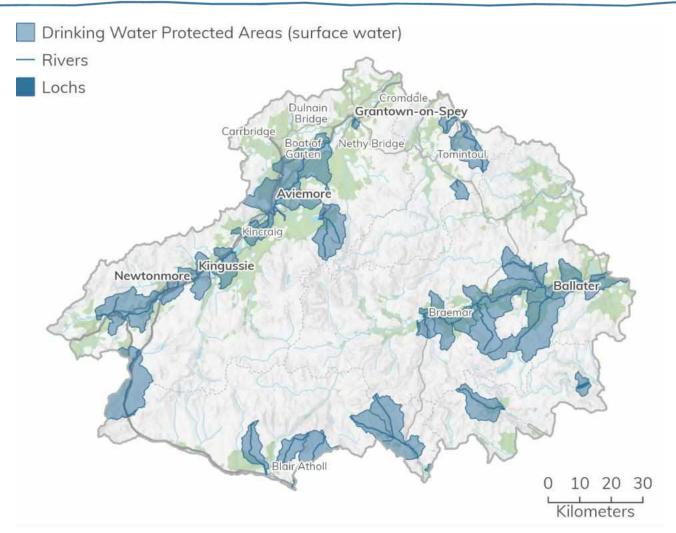


Figure 32 Surface water Drinking Water Protected Areas in the Cairngorms National Park. Contains Ordnance Survey data © Crown copyright and database right 2025 Contains data © Scottish Environment Protection Agency 2025; this Scottish Environment Protection Agency product is licenced under the Open Government Licence 3.0.

Further information on abstraction is set out within the Flood risk and water management topic paper:

 https://cairngormsldp.commonplace.is/en-GB/proposals/flood-risk-and-watermanagement-survey

### Habitats - Managed lowland grasslands

Significant areas of the Cairngorms National Park are managed primarily for agriculture, with farms and crofts (Figure 33). Generations of land managers have produced the landscapes and habitats that we see today. Lowland managed grasslands are home to many of the National Park's rare and endangered species, and management for biodiversity and the sustainable use of the area's natural resource is part of many land



managers' everyday business. The Cairngorms Nature Action Plan 2019 – 2024 seeks to build on this, by supporting land farmers and crofters working for wildlife by making nature-friendly farming a priority.

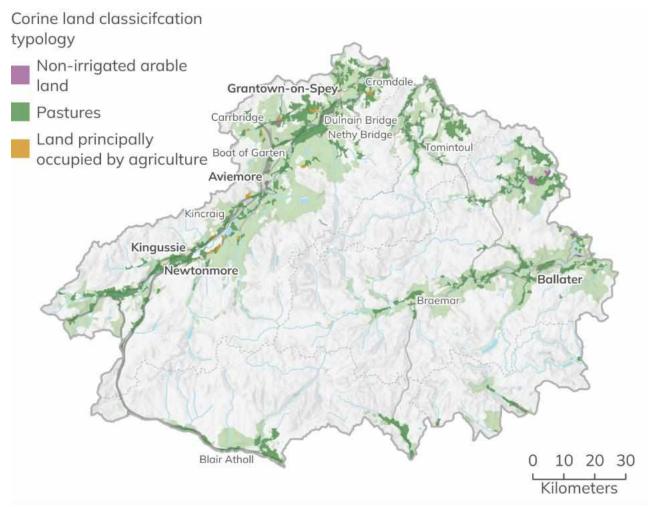


Figure 33 Agricultural land use typologies within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © European Union, Copernicus Land Monitoring Service 2025, European Environment Agency (EEA).

#### The 2063 vision of the Action Plan is for:

'A patchwork of productive land uses is good for wildlife. It supports thriving communities and reflects centuries of tradition. Delivering biodiversity benefit is an integral part of high-quality food production and does not impact on profitability. High quality grasslands support a healthy range of nationally and locally important species. Farmland wader populations have recovered and increased throughout the Cairngorms National Park, and the area is nationally recognised as a model of farmland management for conservation on productive land.'



Agricultural land in the UK is ranked based on its potential productivity and cropping flexibility determined by the extent to which its physical characteristics (soil, climate and relief) impose long term restrictions on its agricultural use. Land classified from 1 to 3.1 is prime agricultural land, while land classified as 3.2 to 7 is considered to be non-prime.

There are no areas of prime agricultural land within the Cairngorms National Park, although there are areas of land in Strathspey and Deeside within the 3.2 classification (around 1.2% of the National Park's total area), which denotes non-prime land that is limited by moderate climatic factors and may yield a moderate range of crops, with average production, but potentially high yields of barley, oats and grass. Most land within the National Park is classified as 6 or 7 (around 73%), which denote areas of 'rough grazing only' and 'very limited agricultural value' respectively (Figure 34).

Detail about the lowland habitats within the Cairngorms National Park is set out within the Natural heritage topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

More details on classification of agricultural land is provided in the Land-use, soil and resources section of the Evidence Report:

 https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-andresources-survey

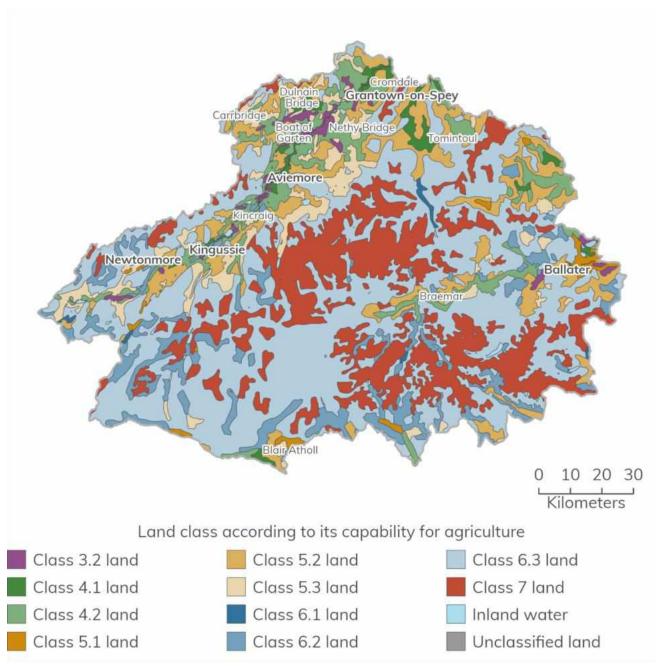


Figure 34 Land capability for agriculture within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © James Hutton Institute 2025.

# Species-rich grassland

Within the lowland grassland network are areas of species-rich grassland habitat. This habitat comprises open, grassy habitats that are normally maintained by traditional farming methods including grazing and hay collection. In many cases these will be remnant hay meadows, and can be important habitats for rare plants, fungi, invertebrates and many other species. These nectar and pollen-rich habitats are particularly important for pollinating insects. The composition of plant species can vary



depending on local geology, climate conditions and management. Species-rich grasslands were once common across the UK, but it is estimated that 97% of species-rich grassland have been lost in less than a century.

Expanding the extent of species-rich grassland and improving the connectivity of species-rich grassland is the objective of the Lowland Managed Grassland Nature Network. Figure 35 shows the location of species-rich grassland in the surveyed landscapes of the Cairngorms National Park.

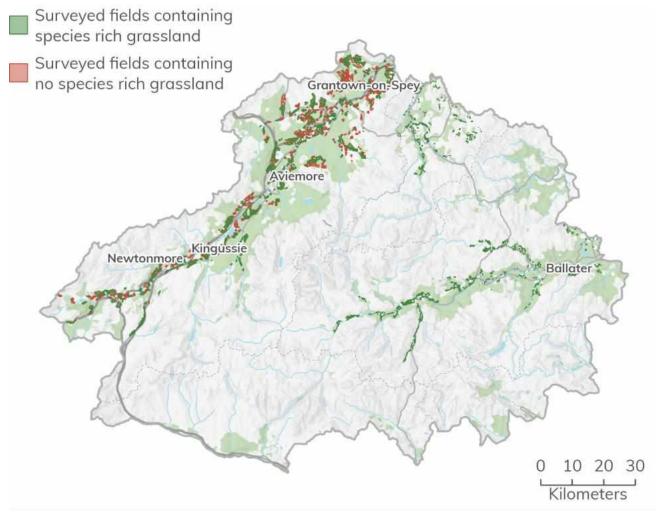


Figure 35 Species-rich grassland in surveyed parts of the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.

The Species-rich grassland data collected from Badenoch & Strathspey, Glenlivet and Deeside identifies the distribution of species-rich grassland in in-bye land (agricultural fields) (Figure 35). Only fields that had a higher likelihood of supporting species-rich grassland were surveyed, i.e. improved grasslands were not surveyed. To obtain a fuller picture of the status and condition of species-rich grassland across the National Park



and further develop the network, surveys will be conducted in the Perthshire, Angus and Donside parts of the National Park.

Detail about the species rich grassland within the Cairngorms National Park is set out within the Natural heritage topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

## **Buglife's B-Lines Pollinator Network**

Buglife's B-Lines is a network of wildflower and insect corridors, mapped and delivered through partnerships that aims to reverse the decline in pollinating insects. The B-Lines identify opportunity areas for the creation and restoration of a national network of wildflower-rich habitats. They are designed to reconnect fragmented habitats, enabling pollinators and other wildlife to move freely, and supporting nature's recovery. B-Lines mapping uses modelling to identify the best routes to connect existing habitat patches while considering how difficult the wider landscape is for pollinators to cross. This produces a map of the best lowland connections between habitats. Buglife then works with local experts and stakeholders to agree the local B-Lines network, guided by their local knowledge of habitats, landscapes and opportunities for creation or enhancement of blue and green infrastructure. Figure 36 shows the B-Lines network within the Cairngorms National Park.



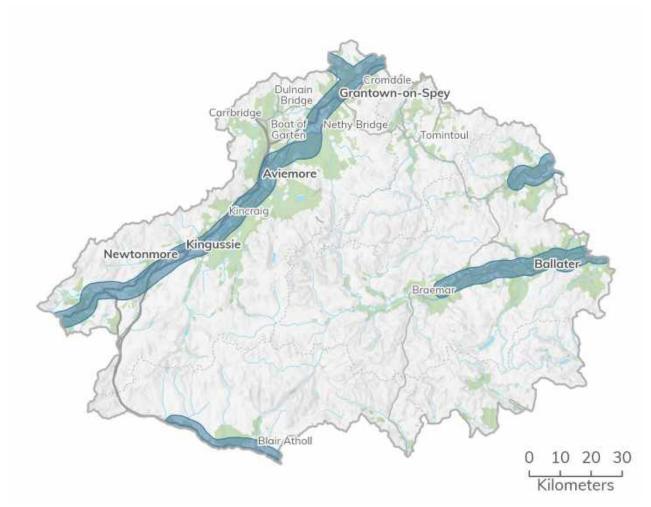


Figure 36 The B-Lines Pollinator Network in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Buglife 2025.

#### Road verges

Scotland has roughly 59,000 km of road, most of which has some form of roadside verge<sup>14</sup>. While the length of roads can be readily calculated, it is more difficult to calculate the full area represented by verges, the width of which can vary significantly along sections of road. When considering existing grassland networks there is no more integrated and connected network than that of roads and their verges. It's estimated that across the UK, that the road verge network is an equivalent area to our remaining lowland species-rich grassland and represents a nationally significant habitat resource of increasing importance to wildlife<sup>15</sup>.

<sup>&</sup>lt;sup>14</sup> https://www.nature.scot/sites/default/files/2022-08/final%20Publication%202013%20-%20SNH%20Commissioned%20Report%20551%20-

<sup>%20</sup>The%20management%20of%20roadside%20verges%20for%20biodiversity.pdf

<sup>&</sup>lt;sup>15</sup> https://www.plantlife.org.uk/wp-content/uploads/2023/03/Managing-grassland-road-verges\_2020.pdf



Verges perform several important functions including:

- An area for road users to stop in emergencies.
- Space to implement road maintenance.
- Access to network for buried services.
- Drainage ditch network (water on roads is a major hazard).
- Environmental buffer (from salt, oil and pollution).
- Buffering footpaths and sensitive or dangerous habitat from road users.
- Sightlines for road users this can have significant influence on management regimes.
- Well-being benefits from colourful flowers and glimpses of wildlife.
- Refuges for species unable to live on agriculturally improved land.
- Dispersal corridors for wildlife moving through the landscape in response to changes in land use and / or climate change.
- Linear connectivity between habitat fragments, effectively increasing the extent of habitat available to a species.

The most common form of management of roadside verges in Scotland is for one or more cuts each year, which partially mimics the management of hay meadows. Some verges can be relatively species-rich and associated with a diverse invertebrate fauna. The presence of trees, hedgerows, scrub and ditches along verges can also contribute to a mosaic or gradient of habitats.

Their relatively small area, variable width with frequent obstructions, proximity to traffic, and requirement for drainage or service access can be significant constraints for management, but opportunities exist for improved verge management to deliver more ecological benefits to tackle the climate and nature emergencies, and contribute to nature networks.

#### Crofts

A croft is a small agricultural land holding, averaging 5 hectares. Crofting is a unique land tenure system found only in the Highlands and Islands and in designated areas of Scotland. Around 9% of Scotland's land area is held under crofting tenure, resulting in 21,514 crofts in Scotland in 2022 / 2023, with around 35,000 people living in crofting households. There are 92 croft holdings within the Cairngorms National Park, all are within the area of The Highland Council (Figure 37).



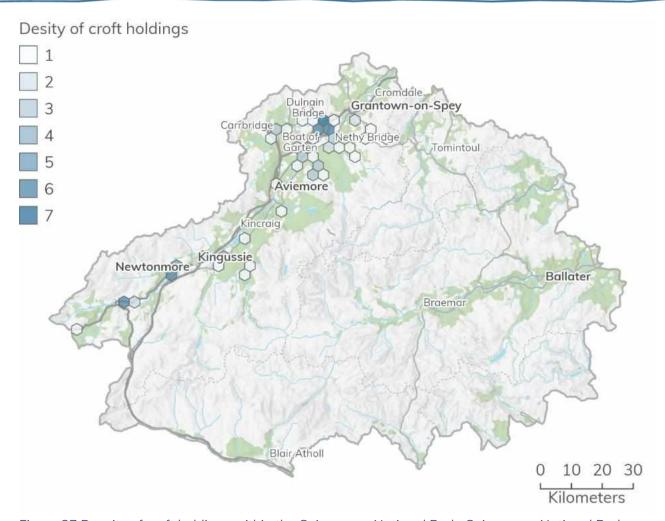


Figure 37 Density of croft holdings within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Scottish Government 2025.

The use of croft land is governed by specific legislation, namely the Crofters (Scotland) Act 1993, Crofting Reform etc Act 2007, Crofting Reform (Scotland) Act 2010, and Crofting (Amendment) (Scotland) Act 2013. Under this legislation, a crofter has a duty to cultivate the land or put it to a purposeful use. Cultivation includes activities such as keeping livestock or poultry, growing fruit, vegetables or other crops, growing fruit, vegetables or other crops, and planting trees and maintaining woodland. A purposeful use means any planned and managed use which does not adversely affect the croft, the public interest, the interests of the landlord or (if different) the owner; or the use of adjacent land. For example, this could include delivery of blue and green infrastructure such as forestry, using the land for tourism and generating renewable energy.

Crofts often share in common grazing, which may encompass large areas of land. Geographical data for the Cairngorms National Park is limited, however (Figure 38) presents data collected as of 2024. These areas may also encompass large areas of



peatland, some of which may require restoration, as well as areas suitable for woodland expansion.

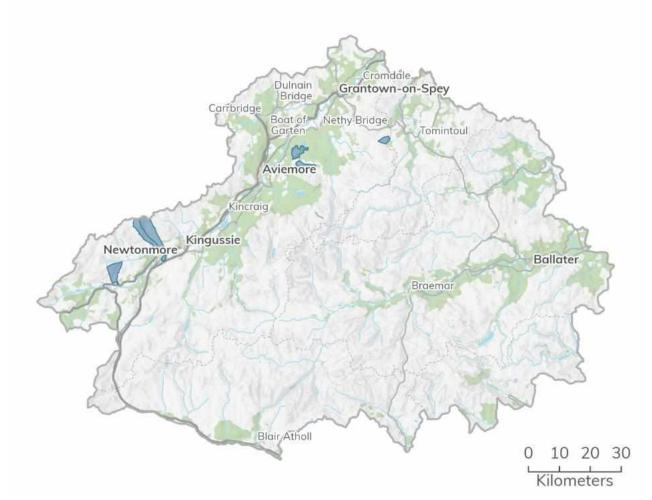


Figure 38 Mapped common grazing land in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Scottish Integrated Administration and Control System 2025.

Further information on crofting is set out within the Land use, soil and resources topic paper:

 https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-andresources-survey

#### Soil

Soils cover most of the natural world, forming the foundation of all terrestrial ecosystems and services. They support key processes in biomass production and mass exchange with atmospheric and hydrological systems. Nearly all of the food, fuel and fibres used by humans are produced in soil. Soil is also essential for water and ecosystem health. It is second only to the oceans as a carbon sink, with an important



role in the potential slowing of carbon change. Soil functions depend on a multitude of soil organisms, which makes soil an important part of our biodiversity.

Although soils are a continually evolving, living and dynamic medium responding to external pressures and management, some activities such as development or pollution can mean their recovery or reformation cannot take place within human timescales. This means soils are a finite and essentially non-renewable resource.

The State of Scotland's Soil Report 2011 identifies seven threats to soil functions:

- Loss of organic matter
- Sealing
- Contamination
- Change in soil biodiversity
- Erosion and landslides
- Compaction
- Emerging issues, such as genetically modified organisms, asbestos, nanoparticles and biochar.

The Land use, soil and resources section of the Evidence Report provides more details relating to soils within the Cairngorms National Park:

 https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-andresources-survey

## Habitats – Managed Uplands, Heathlands and Peatlands

This ecosystem comprises a mix of heathland, blanket bog, and semi-natural grasslands, which occurs in the upland areas of the National Park, which are, or have until recently been, managed for sporting and / or pastoral purposes (Figure 39).

Managed uplands are a predominant feature of the National Park and are currently by far the most expansive and best-connected ecosystem in the National Park. The focus of the network is on enhancement to yield the greatest gains for ecosystem services, climate resilience, biodiversity gain and complement wider catchment restoration activities.

The management of uplands is central to National Park Partnership Plan objectives for woodland expansion by natural regeneration, peatland restoration, reducing the



negative impacts of red deer and other herbivores and ensuring greater species and structural diversity.

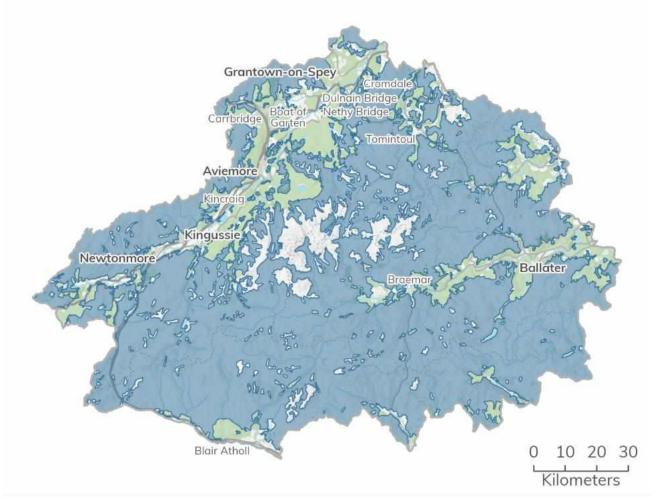


Figure 39 Managed upland ecosystem within the Cairngorms National Park. Data from Corine Land Cover 2018 dataset. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © European Union, Copernicus Land Monitoring Service 2025, European Environment Agency (EEA).

Detail about the upland habitats within the Cairngorms National Park is set out within the Natural heritage topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

## **Peatlands**

The soils of the Cairngorms National Park are particularly rich in soil organic matter because the cool, moist climate encourages the retention of decomposed organic materials, with peatlands containing the largest quantities of organic soil. These soils are important global reserves of soil carbon and support important habitats and species.



There are a number of peatland habitats within the Cairngorms National Park including blanket bogs, lowland raised bogs and fen peatlands. Blanket bog is the second most extensive habitat within the National Park and is susceptible to damage / degradation from human activity including drainage for agriculture and forestry and is impacted by grazing animals (e.g. deer and sheep). It is estimated that there are around 90,000 ha of impacted peatland in the National Park and 57,000 ha of this has experienced some form of erosion.

Figure 40 shows a measure of estimated peat depth while Figure 41 shows the distribution of carbon and peatland classes across the National Park. It gives a value to indicate the likely presence of carbon rich soils, deep peat and priority peatland habitat for each individually mapped area, at a coarse scale. Table 3 provides details on the carbon and peatland classes shown on Figure 41.

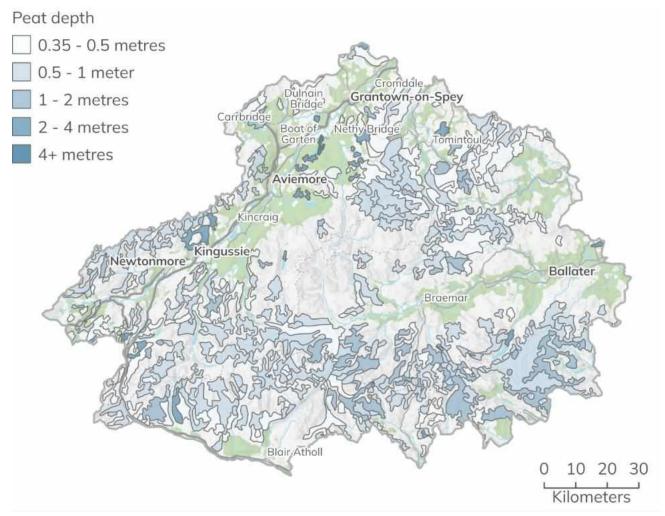


Figure 40 Depth of peat in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © James Hutton Institute 2025.



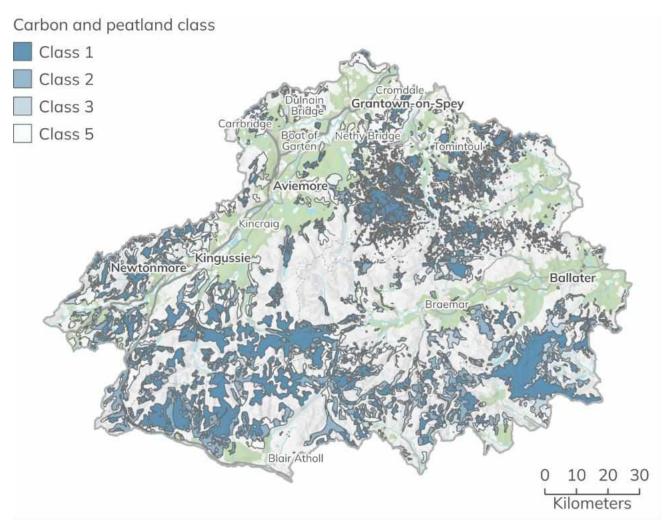


Figure 41 Carbon and peatland classes across the Cairngorms National Park (NatureScot, 2016). Table 2 provides information on the classes shown on this map. <sup>11</sup> Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © NatureScot 2025.

Table 3 Table 2 Definition of carbon and peatland classes.

Class	Class description	Indicative soil	Indicative vegetation
1	Nationally important carbon-rich soils, deep peat and priority peatland habitat. Areas likely to be of high conservation value.	Peat soil	Peatland
2	peat and priority peatland habitat. Areas of	Peat soil with occasional peaty soil	Peatland or areas with high potential to be restored to peatland



Class	Class description	Indicative soil	Indicative vegetation
3	peatland habitat but is associated with wet	,	Peatland with some heath
5	Soil information takes precedence over vegetation data. No peatland habitat recorded. May also include areas of bare soil. Soils are carbon-rich and deep peat.		No peatland vegetation

Peatlands are globally important in tackling climate change; they cover only 3% of the global land surface yet hold nearly 30% of the world's soil carbon<sup>16</sup>. A commissioned report by Small World Consulting estimated that that peatland covers over 133,500 ha in the Cairngorms National Park (29.5% of the Park's total land area)<sup>17</sup>. In terms of peatland management and restoration, the Cairngorms National Park Partnership Plan aims to have:

- A minimum of 38,000 ha peatland is under restoration management by 2045.
- 80% of all drains are restored by 2035.
- All erosion features are restored by 2050.

According to NatureScot's Peatland ACTION data, around 3,180 hectares of completed and in-progress restoration projects have been led by the National Park Authority between 2021 and 2024.

Peat restoration involves raising the water table nearer to the surface and reestablishing peat forming fen or bog vegetation. Peatlands damaged by drainage and other human activities can rapidly lose their stored carbon, predominantly in the form of carbon dioxide (CO<sub>2</sub>) release to the atmosphere. The report notes that peatlands are complex; they both emit and capture CO<sub>2</sub>, and the balance between these processes depends on the peatland's condition. Peatlands may also be either sources or sinks of methane, and sources of nitrous oxide. However, the evidence suggests that, overall, peatland restoration delivers greenhouse gas benefits by protecting stored carbon and

<sup>&</sup>lt;sup>16</sup> IUCN National Committee United Kingdom (2021) "About Peatlands"; https://www.iucn-uk-peatlandprogramme.org/about-peatlands

 $<sup>^{17}</sup>$  The estimate was based on the NatureScot Carbon and Peatland Map, See Appendix 10.9.8 of the Small World Consulting Report for details.



drastically reducing the amount of carbon dioxide emitted, even after factoring in the initial increase in methane emissions following re-wetting<sup>18</sup>.

More information on peat soils in the Cairngorms National Park is available in the Land use, soil and resources topic paper which is available here:

 https://cairngorms.co.uk/wp-content/uploads/2024/11/Land-use-soil-and-resources-Engagement-version.pdf

## Deer stalking and grouse shooting

The Cairngorms National Park is an important destination for those wishing to partake in grouse shooting and deer stalking. A number of estates in the National Park host these activities including areas around Aviemore, Angus Glens, Royal Deeside, Glenlivet, Atholl and Glenshee.

As well as grouse shooting and deer stalking, many of the estates also offer pheasant and partridge shoots on lower ground, as well as clay shooting.

According to CORINE 2018 data, approximately 2,000 km<sup>2</sup> (44%) of the Cairngorms National Park's landcover is moorland and heathland (Figure 42), although it is unknown precisely how much is used for grouse shooting. A methodology for mapping is being developed by the James Hutton Institute which should help fill this information gap<sup>19</sup>.

<sup>&</sup>lt;sup>18</sup> Carbon storage and sequestration by habitat: a review of the evidence (second edition). Natural England Research Report NERR094.

<sup>&</sup>lt;sup>19</sup> See https://sefari.scot/document/socio-economic-and-biodiversity-impacts-of-driven-grouse-moors-in-scotland-part-3-use-of

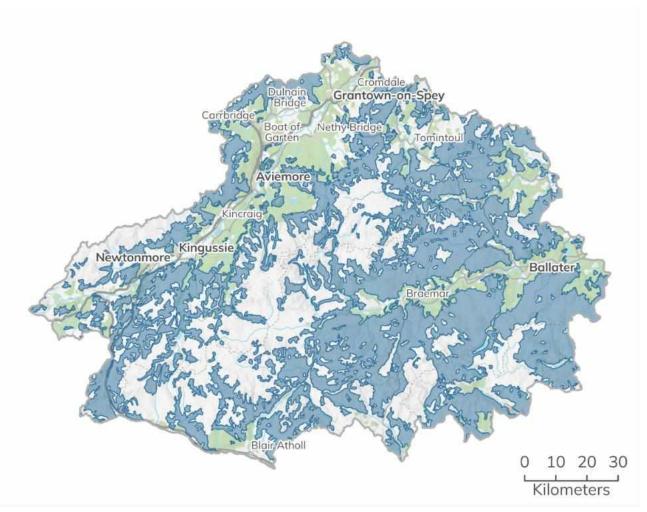


Figure 42 Heathland and Moorland within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © European Union, Copernicus Land Monitoring Service 2025, European Environment Agency (EEA).

#### Nature-based tourism

In addition to fishing and shooting the natural environment is a key tourism asset in the Cairngorms National Park and across Scotland with the scenery and landscapes being the highest motivation for people to visit Scotland<sup>20</sup>.

It was estimated that total visitor spending in Scotland attributable to nature-based tourism per year was around £1.4 billion (approximately 40% of total tourism spend) with around 39,000 associated full-time equivalent jobs<sup>21</sup>.

<sup>&</sup>lt;sup>20</sup> https://www.nature.scot/professional-advice/social-and-economic-benefits-nature/tourism

<sup>&</sup>lt;sup>21</sup> https://www.nature.scot/sites/default/files/2019-07/Publication%202010%20-

<sup>%20</sup>SNH%20Commissioned%20Report%20398%20-

<sup>% 20</sup> Assessing % 20 the % 20 economic % 20 impacts % 20 of % 20 nature % 20 based % 20 tour is m% 20 in % 20 Scotland.pdf



NatureScot's vision is for all visitors to have the opportunity to enjoy and appreciate Scotland's nature as part of a high-quality visitor experience. Information on how NatureScot are working to achieve this can be found here:

 https://www.nature.scot/doc/statement-naturescots-approach-and-contributiontourism

#### **Montane habitats**

Montane habitats are found in areas above the natural tree level (approximately 600m above sea level). These alpine and sub-alpine areas represent some of the most natural and undisturbed habitats in the United Kingdom.

Approximately 520 km² of the Cairngorms National Park is classified as montane habitat by the European nature information system (Figure 43). The National Park is home to a full range of submontane and montane habitats characteristic of the eastern Highlands, from native Scots pine woodland to subalpine and alpine heathland and grassland habitats. The massive summit plateaus and broad watersheds of the area's mountains, with a considerable land mass above 1,000 metres, allow prolonged snow cover in a variety of situations and in turn give rise to a greater range and extent of late snow-influenced vegetation than in any other mountain system in Britain.

The Cairngorms Mountains have the most extensive tracts of sub-alpine and alpine heath in Britain. They support a rich assembly of montane vascular plants, acid-tolerant montane plants, mosses, lichens and liverworts, including alpine and highland saxifrages, hare's-foot sedge, alpine foxtail, alpine blue sow-thistle and green shield-moss. They also support breeding populations of ptarmigan, snow bunting, dotterel, and golden eagle.



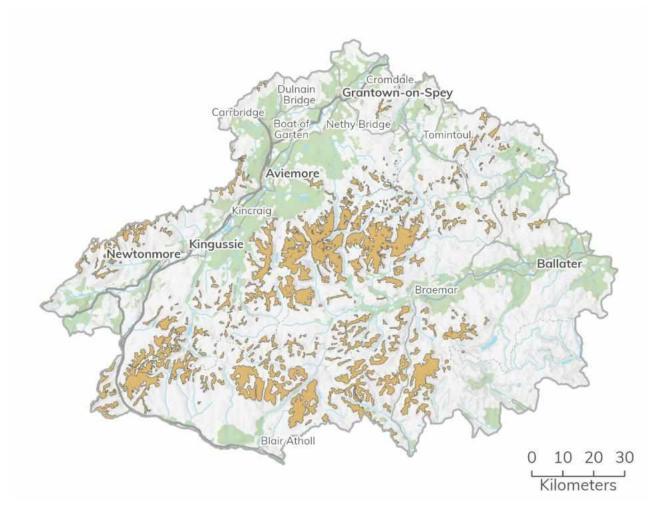


Figure 43 Montane habitats found in the Cairngorms National Park as identified by the European Nature Information Systems (EUNIS). Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Data © NatureScot 2025.

Pressures from recreation and disturbance, and climate change are the main threats these habitats in the National Park. There are few pressures for development beyond specific locations, for example those associated with the ski resort at Cairngorm Mountain<sup>22</sup>. The pressure for telecommunications masts may also present issues at certain locations<sup>23</sup>. These matters are unlikely to impact on the spatial strategy of the proposed plan, but may require consideration at the site assessment stage, should proposals within or close to these habitats be proposed through the call for sites

<sup>&</sup>lt;sup>22</sup> The management and development of Cairngorm Mountain is covered in the Sustainable tourism evidence paper. See: https://cairngorms.co.uk/wp-content/uploads/2024/11/Topic-paper-Tourism-Engagement-version.pdf

<sup>&</sup>lt;sup>23</sup> Matters relating to telecommunications masts are covered in the Landscape and Digital infrastructure evidence papers. See: https://cairngorms.co.uk/wp-content/uploads/2024/07/Topic-paper-Landscape-Engagement-version.pdf and https://cairngorms.co.uk/wp-content/uploads/2024/11/Topic-paper-Digital-Infrastructure-Engagement-version.pdf



process. The local development plan may also support the integrity of montane habitats through its support for nature networks.

Further information about the montane habitats within the Cairngorms National Park is set out within the Natural heritage topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

#### Snow cover

Snow cover is a key aspect of what defines the character of the Cairngorms National Park. Snow cover in the National Park has two primary functions. It supports the winter sports industry and has important implications for nature. The importance of snow cover in regard to tourism is documented in the Tourism topic paper which is available here:

 https://cairngorms.co.uk/wp-content/uploads/2024/10/Topic-paper-Tourism-Engagement-version.pdf

In terms of implications for nature, snow cover serves as a source of water into watercourses, and can act as an insulator and armour. High-altitude snow patches are a source of melt water feeding into watercourses and upland pools throughout the year. Long-lasting snow patches can also provide an insulating effect for montane watercourses, which can help to buffer the extremes of water temperatures at high altitudes. This can have impacts on the development of montane aquatic invertebrates such as the Upland Summer Mayfly (Ameletes inopinatus)<sup>24</sup>. North-facing snow patches, particularly in deep corries last longer into the year. This can have impacts on the temperature of watercourses, where watercourses on north-facing slopes can be significantly colder than south-facing watercourses at the same altitude. Some longlasting snow patches have become well-known landscape features. A snow patch on Braeriach within the Cairngorms known as the Sphinx was renowned being present all year round. Its said that it has only completely melted 11 times since the 1700s, with most of those being within the last 20 years including 2021, 2022, 2023 and 2024. The loss of the Sphinx is a striking indicator climate change and shows the vulnerability of these montane and upland habitats and species.

It can help to cushion exposed peat from heavy winter rainfall (kinetic energy) and the effects of frost heave, helping to prevent erosion and further degradation. In high north-



facing cories, some long-lasting snow patches have become well-known landscape features. The snow patch on Braeriach known as the Sphinx is renowned for being present all year round for decades, having only completely melted on 11 occasions, with most of those being within the last 20 years including 2021, 2022, 2023 and 2024<sup>25</sup>. The loss of the Sphinx is a striking indicator of climate change.

High-altitude snow patches provide a long-lasting source of melt water into watercourses late into the year. Snow cover over tributaries can also provide insulation which helps to buffer the extremes of water temperature. This can have impacts on the development of upland aquatic invertebrates.

As climate change is likely to reduce snow cover it can increase the risks of erosion and changes to surface thermodynamics (black-body albedo effect). Vegetation-cover also serve to protect peat. Conversely, however, less snow cover permits more peatland restoration working days.

Further information on the impacts of climate change is set out within the climate change topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/climate-change

### **Snowsports**

The Cairngorms National Park is home to three out of Scotland's five snowsports venues – Cairngorm Mountain, Glenshee and The Lecht (Figure 44). All three resorts now function with the aid of a snow factory. Supplementing these are three venues with dry ski slopes – Glenmore Lodge, Lagganlia Outdoor Centre and Loch Insh Watersports.

According to the 2019 – 2020 Cairngorms National Park visitor survey, 7% of visitors to the Cairngorms area were there to take part in skiing and/ or snowboarding. Of those surveyed in winter, 42% were visiting to take part in winter sports.

 $<sup>^{25}</sup>$  UK's long-lasting snow patch melts away for 10th time in 300 years - BBC News



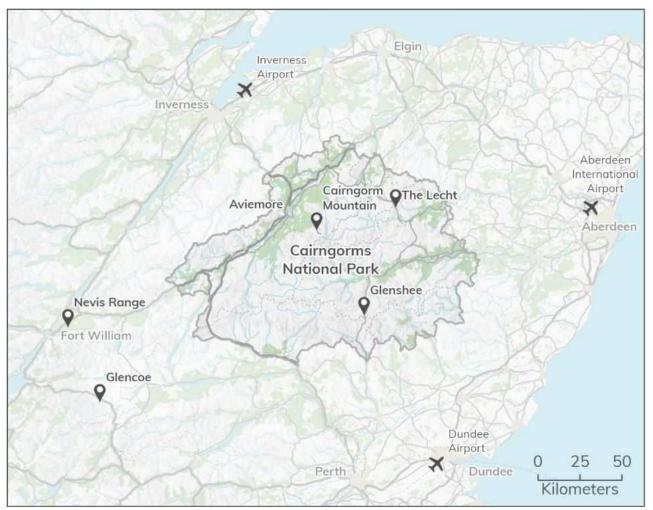


Figure 44 Map of mountain ski resorts in Scotland. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. All rights reserved. Ordnance Survey Licence number 100040965, Cairngorms National Park Authority.

### **Mountain Sports**

The mountainous terrain of the Cairngorms National Park is a particular draw for walkers and climbers. The popularity of 'Munro bagging' can present particular pressures on the infrastructure and environment of the area. Munros are mountains in Scotland that are at least 3,001 feet high (approximately 914 metres) and are named after Sir Hugh Thomas Munro, (1856 - 1919) who was the first to publish a list of all the qualifying peaks in the Journal of the Scottish Mountaineering Club in 1891. There are 282 Munros in Scotland, and more than 50 of them are within the Cairngorms National Park (Figure 45). Other popular hillwalking peaks include the Corbetts, which are peaks between 2,500 and 3,000 feet with at least a 500 ft prominence (154.2m).



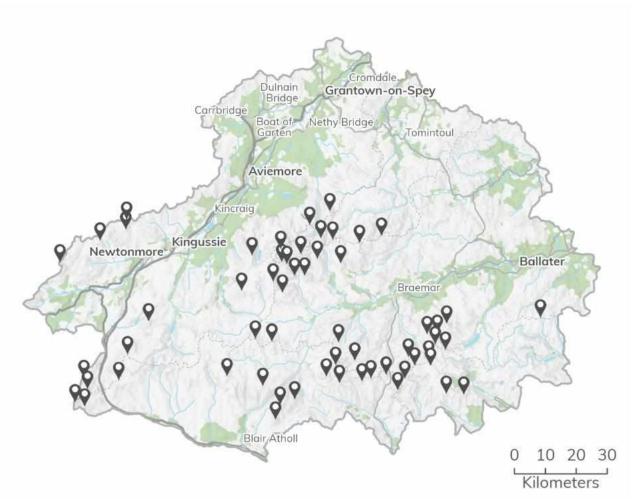


Figure 45 Munros within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. .

General information on 'Munro bagging' and routes in the Cairngorms National Park as well as across Scotland can be found here:

https://www.walkhighlands.co.uk/munros/

Further details on Munros is documented in the Tourism topic paper which is available here:

 https://cairngorms.co.uk/wp-content/uploads/2024/10/Topic-paper-Tourism-Engagement-version.pdf

## Minerals and aggregates

The Cairngorms National Park forms part of the Highland, North- East Scotland and Tay Area regions for the purposes of the Scottish Aggregates Survey 2019. This makes The



Park Authority unique among planning authorities within Scotland, as the boundaries of all other authorities are contiguous with boundaries of the regions. In 2019, it was estimated that across these regions:

- 1,237,000 tonnes of sand and gravel was extracted.
- 8,749,000 tonnes of crushed (hard) rock was extracted.

There are no active quarries or inactive quarries with planning consent within the Tay Area or North-East Scotland regions of the National Park. These encompass Angus, Aberdeenshire, Moray and Perth and Kinross local authority areas.

Figure 46 shows the location of quarries within the Cairngorms National Park that have planning permission and / or have planning applications pending decision. The following quarries currently have applications pending decision<sup>13</sup>:

- Alvie Quarry (Easter Delfour) (24/02574/S42)
- Meadowside Quarry (20/04784/S42)
- Granish Quarry (16/04604/FUL).

While Tullochgribban Quarry has consent to operate until 2042, it is not currently operational and is classified as long-term derelict land on the 2023 vacant and derelict land survey.

Further information is contained within the Land use. Soil and resources section of the evidence report:

 https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-andresources-survey



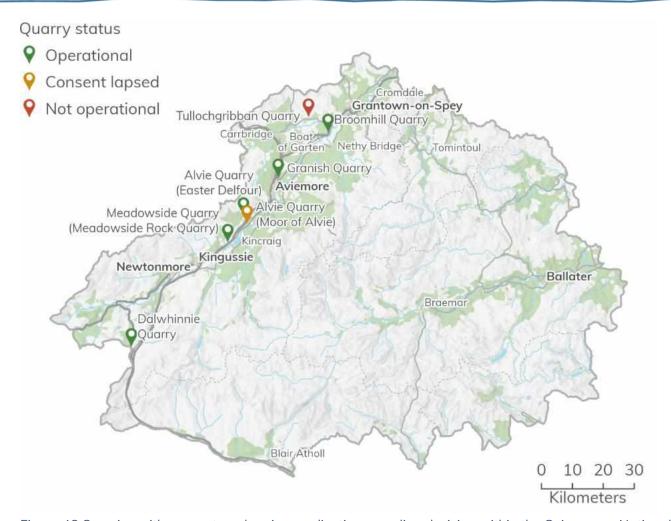


Figure 46 Quarries with consent or planning applications pending decision within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.

## Adaption and resilience to climate change

Human-induced climate change is recognised as a major driver of changes in ecosystems and the natural environment. There is increasing evidence of the impact of climate change on a variety of ecosystems and species in the UK. Adaptable species such as ringlet butterflies and tree bumblebees are among a suite of species that have greatly expanded their range northward through Scotland in the last 10 years to take advantage of suitable habitat corridors, milder winters and warmer summers. Conversely, species associated with montane and upland freshwater ecosystems are particularly vulnerable to increased temperatures, decreased snow-cover and the increased frequency of extreme weather events such as droughts.

Some upland aquatic species may be able to adapt to use cooler/ more temperature stable north-facing water courses, but other species such as the important populations of freshwater pearl mussels within the Cairngorms National Park, are far less adaptable



to rapid climate changes and the increased frequency of extreme climate events such as droughts, wildfires and intense flooding following storms.

Fragmented populations are more at risk from localised extinction events. Identifying mechanisms to improve connectivity between habitats through nature networks will help increase resilience to climate change and facilitate the movement of species through the landscape.

Blue and green infrastructure facilitates population connectivity and the movement of species across the landscape. Creation and management of new blue and green infrastructure can support nature networks and increase resilience of populations by improving connectivity. For examples, as previously mentioned in the woodland section, the planting riparian corridors along watercourses can provide shade and significantly lower water temperatures, while providing habitat and shelter for a wide range of species.

## **Invasive Non-native Species (INNS)**

The expansion of species ranges in response to climate change is not limited to native species. The spread of invasive non-native species (INNS), pathogens and diseases can have significant consequences for species and ecosystems and impact many environment-based economic activities such as fishing, farming and forestry.

Species at the northern edge of their current range are already taking advantage of warmer summers and milder winters to spread northwards through existing blue and green infrastructure. Climate change is not the only reason that an increasing number of new species are being recorded in Scotland. Many invasive non-native species have had a helping hand in circumventing natural barriers to their movement. Whether intentionally introduced (such as the grey squirrel and giant hogweed), or accidentally introduced (such as New Zealand flatworm), these species are adapted to different ecosystems, have often escaped their natural predators and pathogens that would check their spread. The busy global logistics network facilitates the movement of millions of packages around the world each day. Even with strict biosecurity measures in place it can be difficult to ensure that small arthropods, or light-weight plant seeds don't hitch a lift.

While creation of new blue and green infrastructure can deliver opportunities for improved connectivity between habitats and isolated populations, the increased connectivity can potentially also facilitate the spread of invasive non-native species and pathogens to new areas.



Non-native species can kill, harbour disease, or compete with native species. A number of invasive non-native species have been recorded in the Cairngorms National Park, including:

- Japanese knotweed (Fallopia japonica).
- Giant hogweed (Heracleum mantegiazzanum).
- Himalayan balsam (Impatiens glandulifera).
- Rhododendron (Rhododendron ponticum).
- American Skunk Cabbage (Lysichiton americanus).
- American Mink (Mustela vison).
- Grey Squirrel (Sciurus carolinensis).
- Rudd (Scardinius erythrophthalmus).
- Roach (Rutilus rutilus).
- Tench (Tinca tinca)
- Golden orfe (Leuciscus idus).
- Bream (Abramis brama).
- Harlequin Ladybird (Harmonia axyridis).
- New Zealand Flatworm (Arthurdendyus triangulatus).

The Park Authority is a partner in the Scottish Mink Initiative which aims to have river catchments within the Cairngorms (and throughout Scotland) free from mink to enhance water vole and ground nesting bird populations. The Park Authority also supports the Cairngorms non-native fish project to stop the deliberate or accidental release of non-native fish into the Dee or Spey catchments.

Pathogens can cause death or reduce viability of populations which has implications for habitat connectivity. For example, Red-band needle blight is a disease caused by the fungus Dothistroma septosporum which results in the premature loss of pine needles, with consequences for tree health and timber production. Currently in the Cairngorms National Park, the planting of Scots Pine next to existing stands is discouraged. This could have long term impacts on woodland structure and species composition.

Invasive plant pathogens can have wider impacts on ecological networks that are dependent upon susceptible species. For example, Ash die-back is caused by the fungus Hymenoecyphus fraxineus (previous known as Charla fraxineus) which results in die-back and mortality in ash trees. A suite of rare invertebrates and lichens are associated with ash trees, and in some cases they are completely dependent upon ash as their sole



foodplant. In 2023, records show that it was Ash die-back was recorded within the Badenoch and Strathspey area of the National Park (Figure 47).

There is evidence from Forest Research to suggest that some ash trees are resistant/tolerant to infection and can recover. Current advice<sup>26</sup> is that with the exceptions of felling for public safety or timber production, there should be a general presumption against felling living ash trees, whether infected or not so that resistant trees can be identified.

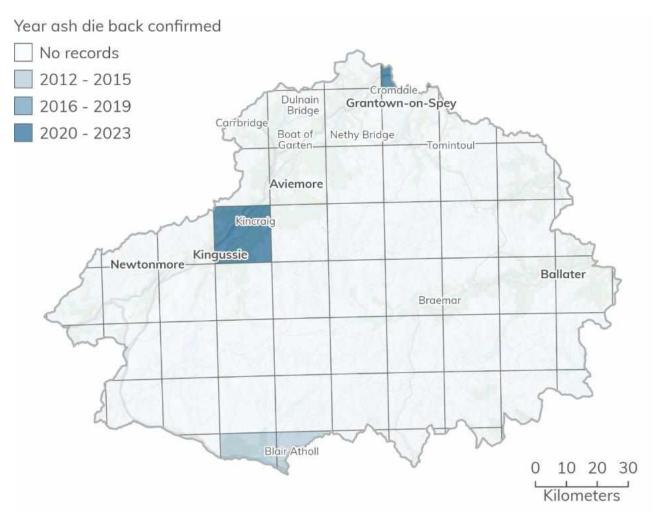


Figure 47 Ash dieback confirmed infection areas by 10 km<sup>2</sup> grid. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Forestry Commission 2025.

Phytophthora ramorum is a fungus-like oomycete that can cause serious disease in a range of trees and shrubs, particularly larch and oak. The highest incidence is in the

<sup>&</sup>lt;sup>26</sup> https://www.forestresearch.gov.uk/tools-and-resources/fthr/pest-and-disease-resources/ash-dieback-hymenoscyphus-fraxineus/



south-west of Scotland, but it has been recorded on the southern and eastern fringes of the Cairngorms National Park between 2016 and 2022.

The available data allows action to be taken in local problem areas but does not provide a systematic survey of invasive non-native species or the occurrence of pathogens and disease. It is clear however from data collected that problems are increasing. Preventing the spread of pathogens and invasive non-native species is essential, as control is very costly and requires long-term action.

Further information about invasive non-native species is set out within the Natural heritage topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/natural-heritage-survey

# Blue and green infrastructure in the built environment

The following section details open space around communities and built blue and green infrastructure within the Cairngorms National Park.

## Open space within the Cairngorms National Park

The topic paper on Play, recreation and open space contains a detailed audit of the open space within the Cairngorms National Park:

 https://cairngormsldp.commonplace.is/en-GB/proposals/v3/play-sport-andrecreation?step=step1

Some key points from this audit are summarised here as accessible open space provides a key component of blue and green infrastructure.

The level of information available regarding open space in each constituent local authority varies and is limited in some cases. During preparation of the Proposed Plan, regard will be had to any available open space strategy. The current situation is as follows:

- Aberdeenshire Council draft open space audit published in 2025 with data for Ballater and Braemar, within the Cairngorms National Park.
- The Highland Council no strategy or audit covering the Cairngorms National Park.
- Moray Council no strategy or audit covering the Cairngorms National Park (covers main towns in Moray only)
- Perth and Kinross Council no open space strategy.



The Play, Recreation and Sport topic paper undertakes a desk-based audit, based on Ordnance Survey open data greenspace, the woodland inventory and the Cairngorms National Park Local Development Plan 2021 and presents a National Park-wide overview of open space, and on a settlement-by-settlement basis. The National Parkwide overview is summarised here.

According to the Ordnance Survey open data greenspace layer, there are the following number of different types of greenspace in the settlements within the Cairngorms National Park<sup>27</sup>:

- Allotments or community growing spaces in one settlement (Note that additional community growing spaces are discussed in the next section).
- Bowling greens in ten settlements.
- Cemetery or religious grounds in 18 settlements.
- Golf courses in ten settlements.
- Other sports facilities in 13 settlements.
- Play spaces in 18 settlements.
- Playing fields in 13 settlements.
- Public parks or gardens in ten settlements.
- Tennis courts in five settlements.

In total these equate to 1,112 hectares of open space distributed across the Cairngorms National Park. This is set out in Table 4.

There are 6,022 hectares of woodland either within or within 800m of a settlement in the Cairngorms National Park. Some of the woodland in this dataset is also included in the Ordnance Survey greenspace data. The woodland is distributed as set out in Table 3.

The adopted Cairngorms National Park Local Development Plan 2021 identifies protected open spaces where they are important to the amenity, setting and overall fabric of settlements. They are protected from development. Some provide locally important habitat or landscape features, while others are important recreational resources within settlements. In total, 161 hectares of protected open space are

<sup>&</sup>lt;sup>27</sup> Open spaces are considered to be in the settlement if they are either within the settlement boundary designated by the Cairngorms National Park Local Development Plan or within an 800m buffer surrounding the settlement.



identified by the Local Development Plan in settlements across the National Park. This is distributed as set out in Table 4.

Table 4 Total amount of open space within each settlement in the Cairngorms National Park and total amount of woodland both within each settlement and within 800m of each settlement boundary in the Cairngorms National Park (source: Ordnance Survey Open Data Greenspace layer, Ordnance Survey MasterMap Topography layer and the Cairngorms National Park Local Development Plan 2021).

	Total amount of greenspace	Total amount of woodland	Total amount of protected open space
Settlement	(hectares)	(hectares)	(hectares)
Strategic settlements			
Aviemore	107.30	637.10	51.73
Ballater	46.37	345.69	8.54
Grantown-on-Spey	54.87	454.40	9.52
Kingussie	39.21	183.47	15.82
Newtonmore	49.78	167.68	18.30
Intermediate settlements			
Blair Atholl	20.93	177.62	4.92
Boat of Garten	40.94	312.92	7.87
Braemar	46.09	220.84	7.27
Carrbridge	19.46	497.89	1.23
Cromdale	2.11	102.91	1.27
Dulnain Bridge	0.36	171.95	0.57
Kincraig	4.44	201.83	1.20
Nethy Bridge	22.4	445.23	17.86
Tomintoul	4.60	119.34	8.37
Rural settlements			
Clova	0.08	32.22	-
Coylumbridge	-	292.97	-
Dalwhinnie	-	157.13	-
Dinnet	0.74	239.45	0.65
Glenlivet	1.48	52.29	-
Glenmore	2.57	505.60	3.06
Glenshee	0.23	38.00	_
Insh	-	205.25	-
Inverdruie	0.18	165.51	2.18
Killiecrankie	-	140.88	0.76
Laggan	375.5	37.08	-
Strathdon	2.95	116.59	
Totals	1,112,49	6,021.87	161.13



The Local Development Plan recognises that out with of these protected open spaces, many settlements also have networks of open spaces, paths and recreational spaces that are not specifically identified but will be material considerations in the determination of planning applications. Many of these are captured by the Ordnance Survey Open Data Greenspace layer.

Figure 48 shows the data for greenspace graphically. The strategic settlements are presented on the left-hand side of the graph, then intermediate settlements and then rural settlements.

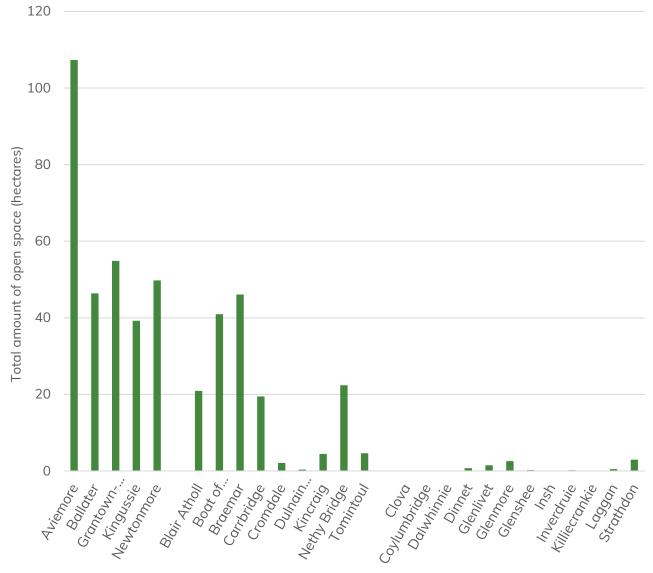


Figure 48 Total amount of open space within each settlement in the Cairngorms National Park (source: Ordnance Survey Open Data Greenspace layer).



Figure 49 includes the data for woodland within 800m of each settlement boundary (including woodland within the settlement) and the protected open space identified in the Cairngorms National Park Local Development Plan 2021.

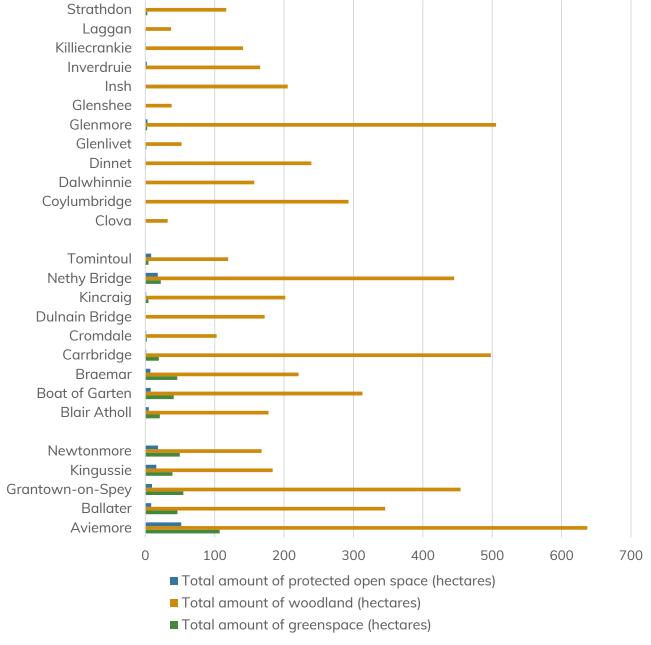


Figure 49 Total amount of protected open space<sup>13</sup> within each settlement, total amount of open space<sup>14</sup> and total amount of woodland within each settlement and within 800m of each settlement boundary in the Cairngorms National Park (source: Ordnance Survey Open Data Greenspace layer, Ordnance Survey MasterMap Topography layer and the Cairngorms National Park Local Development Plan 2021).



# **Community growing spaces**

While only one growing space (an allotment in Kingussie) is identified in the Ordnance Survey open data greenspace layer, there are other community growing spaces with the Cairngorms National Park including allotments, community orchards, school grounds and therapy gardens (Figure 50).

Community growing spaces deliver a number of ecosystem services including food production such supporting biodiversity and wider health benefits from physical and mental health.

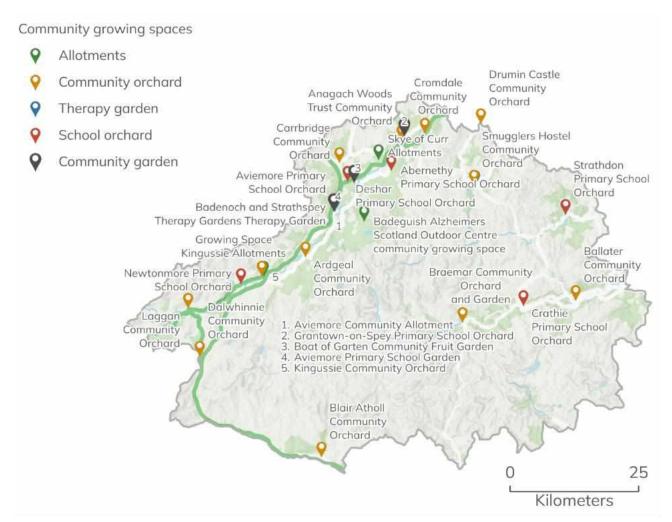


Figure 50 Map showing the community growing spaces in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.

#### **Allotments**

There are currently only three operating public allotments in the Cairngorms National Park which include:



- Kingussie -Manse Road, Kingussie, PH21 1JF. The allotments are owned by ARC (Kingussie) Ltd and are leased to The Kingussie Allotment Association.
- Skye of Cur Allotments initiated and run by Badenoch and Strathspey Community Connections.
- Glenlivet Estate Community Allotment, Tomintoul Office.

There is also growing space at Grantown High School which has a greenhouse. There is stated community interest in allotments in Aviemore and around Ballater and Crathie.

## **Orchards**

Following a hugely successful campaign in 2013 to find suitable locations for orchards, 18 sites within the Cairngorms National Park were identified and mix of 8 heritage varieties of apple, plum and pear trees were planted at each site.

The sites selected are as follows:

- Abernethy Primary School
- Anagach Woods Trust
- Ardgeal Community
- Aviemore Primary School
- Ballater Community
- Blair Atholl Community
- Braemar St. Andrew's Church
- Crathie Primary School
- Cromdale Community
- Dalwhinnie Community
- Deshar Primary School
- Glenlivet Community Drumin Castle
- Grantown-on-Spey Primary School
- Kingussie Community
- Laggan Community
- Newtonmore Primary School
- Strathdon Primary School
- Tomintoul Community Smugglers Hostel

## Therapy gardens

The Badenoch and Strathspey Therapy Gardens is a registered Scottish charity, with a mission statement:



'to provide social and therapeutic horticultural activities in a safe and supportive environment for all members of the community, where everyone will be treated with respect'.

The organisation delivers weekly gardening sessions with a variety of groups in Kingussie and Aviemore.

# **Community gardens**

There is a community garden in the Old Church grounds in Braemar.

More information on allotments, orchards, therapy gardens and growing spaces is discussed in the Health and Safety Topic Paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/health-and-safety-survey

## School grounds and outdoor learning

Outdoor learning is a key component of the Scottish Curriculum for Excellence. School grounds can be important public spaces that provide a wide range of benefits to pupils, teachers and local communities, as locations for learning, play, exercise, sport, socialising, food growing, a location for cultural and community events while supporting biodiversity from pollinators in school orchards to oystercatchers nesting on flat roofs and curlews feeding on football and shinty pitches.

There are eight local authority secondary schools and twenty-two primary schools that serve the population of the Cairngorms National Park. Two of the secondary schools, and fifteen of the primary schools are within the Cairngorms National Park (Figure 51).



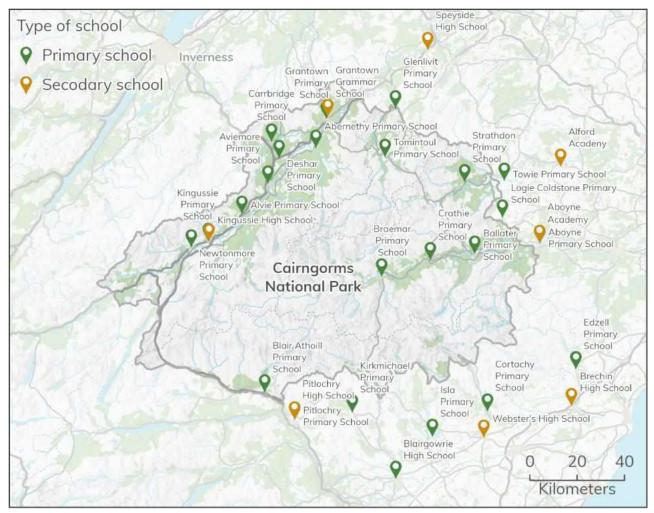


Figure 51 Local authority schools that serve the residents of the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.

Outdoor learning benefits children, young people and adults alike. Outdoor learning is highly valued in Scotland, and it is an integral part of the education system. Scotland explicitly includes the use of the outdoor environment as a necessary approach and context for delivering its education curriculum.

Outdoor learning can take place anywhere from school grounds to local green spaces, high streets to National Parks, from your front door to the rest of the world.

There are links to blue and green infrastructure through an Infrastructure First approach, and this can be met through the inclusion of green and blue infrastructure as part of school / education facility design which can provide several benefits. These are nature-based solutions to tackling climate change and biodiversity loss, active travel options, plus opportunities to connect with nature as part of learning. Nature-rich green spaces within educational facilities would also provide similar benefits.



Scottish Governments Curriculum for excellence through outdoor learning document outlines the integral role outdoor learning has in the new curriculum. It signposts ways for teachers, educators and their partners to plan for and use the outdoor environment to provide imaginative. Developments in outdoor learning are underpinned and supported through Glow and by the Learning and Teaching Scotland outdoor learning online resource<sup>20</sup>, which was initially developed in partnership with NatureScot, Forestry Commission Scotland and the Scottish Advisory Panel for Outdoor Education. The online resource provides support for all those involved in outdoor learning and provides detail on issues such as planning experiences and selecting locations.

Curriculum for Excellence through Outdoor Learning has set out a vision for all schools and educational settings to provide frequent and progressive outdoor learning opportunities which are clearly part of the curriculum. It is the responsibility of all involved in education to recognise the place of outdoor learning within the curriculum and plan accordingly to ensure that all children and young people in Scotland receive these opportunities as part of their learning journey.

NatureScot provides a Greenspace Map for Outdoor Learning below allows teachers, educators and others to quickly identify greenspaces close to their education establishment that may provide outdoor learning potential. The map is available here:

• https://www.nature.scot/professional-advice/young-people-learning-outdoors-and-developing-skills/learning-local-greenspace/greenspace-map-outdoor-learning

The map includes types of greenspaces that may provide some opportunity for outdoor learning. The types include natural sites, public parks, amenity spaces, play spaces, allotments, land that is changing its use (these can provide good temporary spaces for schools to use), institutional grounds, playing fields, golf courses and cemeteries. The greenspaces have been broadly categorised according to the likelihood of its value to outdoor learning.

The Outdoor Learning Directory is another online resource providing outdoor learning services and information provided by Scottish public bodies for environment forestry, heritage and education.

The Scottish School Ground Survey<sup>28</sup> was undertaken in 2025. The Scottish School Grounds Survey 2025 was sent to all schools across Scotland in February 2025 (20

<sup>&</sup>lt;sup>28</sup> See: https://ltl.org.uk/projects/scottish-school-grounds-survey/#about



years after the previous survey in 2005), inviting responses which focused on the provision and usage of school grounds. Over 1000 responses were received (equating to approximately 40% of Schools). The survey was undertaken by Professor John Kendrick who led the previous survey in 2005, and was supported by Learning through Landscapes, NatureScotland and Play Scotland.

The full results will be published later in 2025, but it is currently unclear how many schools servicing the Cairngorms National Park took part in the survey. Key statistics from the survey include:

- 16% of secondary and 15% of primary schools report that they have lost school grounds to building development in the last 20 years.
- 94% of secondary schools have a bike rack/storage area in 2025, compared to 55% in 2005
- 49% of primary schools reported that "all" their pupils were physically active in the playground at breaktime in 2025, compared to 31% in 2005.
- 78% of primary schools report that their grounds are being used to support learning in numeracy and mathematics.
- 82% of secondary schools report that their grounds are being used to support learning in the sciences.
- 31% of secondary schools consider that their grounds are either 'very useful' or 'essential' as a curriculum learning resource.
- 34% of primary schools have issues with flooding in the school grounds
- 50% of secondary schools have a polytunnel or greenhouse for food growing and 43% have an in-ground area for food growing.
- 85% of secondary schools would like more 'environmental' features in their grounds, such as habitats for wildlife, or nature trails
- 38% of settings have fewer than 5 trees on site.
- 36% of work to improve school grounds in primary schools is reported to have the purpose of 'enhancing biodiversity'.
- 35% of secondary schools report that their grounds are never used for staff development / professional learning.
- 25% of secondary schools report that pupils were involved in initiating school grounds improvements.
- Only 7% of secondary schools consider that their grounds are either "main" or "high" priority in their school Improvement plan.
- 57% of primary schools report restricting access to their school grounds for more than six days per year due to inclement weather.



- 71% of special schools access natural areas for outdoor learning that are in walking distance within the community.
- Only 11% of primary schools report that their school grounds are open for the use of the local community outside school hours.

Detail about education infrastructure is set out within the Education topic paper:

https://cairngormsldp.commonplace.is/en-GB/proposals/education-survey

## Green infrastructure – green roofs and living walls

Green roofs and living walls are vegetated roofs and walls. They generally include a multi-layer system designed to intercept and retain rainfall, reducing the volume and flow of run-off entering the surface water drainage network. These systems can also retain and treat contaminants in rainwater (particularly in areas with poor air quality), which can help to neutralise acidic rainwater.

There are multiple other benefits that come with green roofs and living walls such as:

- Reducing heating and cooling costs by keeping buildings warmer in the winter and cooler in summer.
- Acting as stepping stones for wildlife by linking areas of greenspace.
- Allowing the water to be fed into a grey water system for use within the building.
- Lowering urban air temperatures helping to combat the urban heat island effect.
- Contributing to a nicer, more pleasing environment to live and work.

There is limited data available on the current number and distribution of green roofs and living walls across the Cairngorms National Park. A green roof has been installed at the Cairngorms National Park Authority offices in Grantown-on-Spey offices. This biodiverse green roof has been planted with a range of native and pollinator-friendly plants, and supports a growing list of pollinator species and other wildlife visitors.

## Core paths and cycling and walking infrastructure

The National Cycling Network (NCN) is a UK-wide network of signed paths and routes for walking, cycling, wheeling and exploring outdoors. Sustrans states that their vision is to create a UK-wide network of safe and accessible traffic-free paths for everyone. The National Cycling Networks should:

- Be traffic-free or a quiet-way
- Be wide enough for all users
- Be cared for and well maintained



- Have a smooth surface
- Be clearly and consistently signed
- Be fully accessible to everyone
- Enable all users to crossroads safely and step-free
- Be attractive and interesting
- Feel safe.

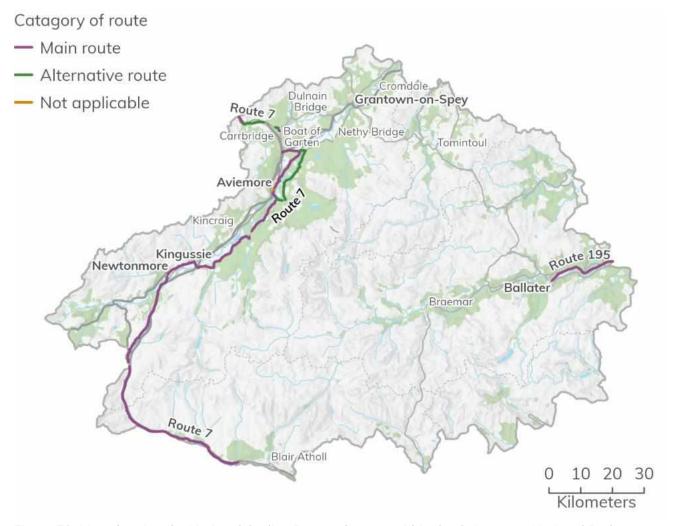


Figure 52 Map showing the National Cycling Routes that are within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.

In the National Park there are two National Cycling Routes (Figure 52). In many parts of the National Park, the trunk road network provides the only connection between settlements for all or part of the route, and therefore any cycle journeys must be on or alongside the road. This can mean that in the absence of segregated cycling infrastructure means, cycling does not feel like a safe option for everyday journeys for local residents or visitors, even where the distance involved would make this possible.



Further information about the active travel network is contained within the Tourism and Sustainable transport topic papers:

- https://cairngormsldp.commonplace.is/en-GB/proposals/tourism-in-the-nationalpark-survey
- https://cairngormsldp.commonplace.is/en-GB/proposals/sustainable-transportsurvey

#### Route 195

Also known as the Deeside Way, National Cycle Network Route 195 follows traffic-free paths and some short quiet-road sections along the former Deeside Railway line between Aberdeen and Ballater. It runs for 41 miles between Duthie Park, south of Aberdeen city centre, and the heart of the Victorian village of Ballater.

#### Route 7

Route 7 runs along the western side of the Cairngorms National Park to link Calvine, Dalwhinnie, Aviemore and Boat of Garten. The section of the route within the National Park, starts in the south at House of Bruar running north adjacent to the A9 linking the settlements of Calvine, Newtonmore, Kingussie, Kincraig, Aviemore and Boat of Garten.

There are breaks in the route around Kincraig, and between Boat of Garten and Carrbridge. Also, between House of Bruar and Pitlochry there is no dedicated cycle path linking the southern part of route 7 with the section starting in the National Park.

Community paths, upland paths and trails in the National Park also provide opportunities for both walking, wheeling and cycling. Main trails (Figure 53) include:

- The Speyside Way
- The Dava Way
- The Deeside Way
- The Cateran Trail.



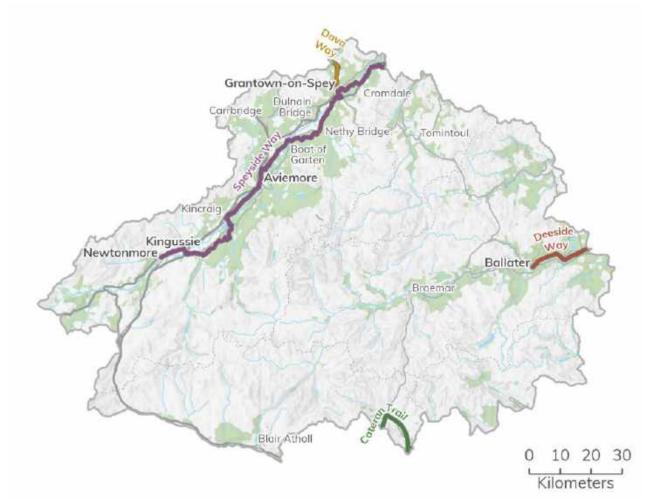


Figure 53 Long distance trails within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.

# Speyside Way

The Speyside Way is one of four official Long-Distance Routes in Scotland, the route links the Moray coast with the edge of the Grampian Mountains, following the valley of the river Spey, spanning a distance of approximately 85 miles / 137 km. It is one of four National Long-Distance routes formally designated under the Countryside (Scotland) Act 1967 and as such the local access authorities (Moray Council and the Cairngorms National Park Authority) have a statutory duty to manage the route. To fulfil this obligation the Park Authority have developed a plan for the future management and maintenance of the route which includes priorities for investment over the next five years. A copy of this plan is included in the Cairngorms Strategic Tourism Infrastructure Development Plan 2023.

## Dava Way

The Dava Way, another of Scotland's Great Trails, linking Forres in Moray with Grantown-on-Spey, a distance of 24 miles / 38 km. It follows the old Highland Railway



line and winds its way up to the Dava summit at 320m before descending into Strathspey. A small section of approximately 4 miles / 6 km at the southern end of the route lies within the Cairngorms National Park. This allows walkers to connect to the Speyside Way through Grantown on Spey. The route is managed and maintained by the Dava Way Association; a Scottish Charitable Incorporated Organisation (SCIO) run by a board of Trustees.

A range of improvements to the Dava Way and the Speyside Way in parts of Moray are included as part of Moray Council's Strategic Tourism Infrastructure Development Plan which focusses on enhancing all six long distance active travel / leisure routes in rural Moray.

# **Deeside Way**

The Deeside Way runs from near the centre of Aberdeen to Ballater. It largely follows the line of the Old Royal Deeside Railway through woodlands and farmlands, for a total distance of 41 miles / 66 km. Approximately 7 miles / 11 km of the route falls within the Cairngorms National Park running westwards from the National Park boundary to the current terminus in Ballater. Within the National Park the route is currently managed and maintained by Aberdeenshire Council with support from the Cairngorms National Park Authority. The Cairngorms National Park Partnership Plan 2022 includes a commitment to extend the route from Ballater to Braemar.

#### Cateran Trail

The Cateran Trail, one of Scotland's Great Trails, is a 64 mile / 102 km long route through Perthshire and the Angus Glens. This is a circular route divided into five stages, following old drove roads and ancient tracks across farmland, forests, and moors. A small section of approximately 6 miles / 10 km at the north end of the route passes through the National Park near Spittal of Glenshee. The route is managed and maintained by Perth and Kinross Countryside Trust who are engaged in a programme to install multi-user gates along the route to allow better access for all visitors as well as for landowners.

## Community paths

There are over a hundred community paths and trails across the National Park. As well as providing an important resource for local residents, these paths are an essential part of the infrastructure used by visitors to the National Park and are therefore well promoted through a series of community path leaflets. Responsibility for the management and maintenance of most of these paths rests with the landowner or land manager but in certain circumstances support is provided by the Cairngorms National



Park Authority. In a small number of cases the Park Authority is responsible for maintenance through management agreements (details can be found in Appendix 4 of the Strategic Tourism Infrastructure Development Plan 2023 – 2028).

# **Upland paths**

There are also many upland paths across the National Park and while in broad terms these are less heavily used than the community paths some are still subject to heavy use, most notably on some of the more popular hills. As their use is predominantly by more experienced walkers these are not as actively promoted by the Cairngorms National Park Authority, however many are commonly promoted through hillwalking guidebooks and websites. As with low ground paths, responsibility for their management and maintenance rests with the landowner or land manager but in certain circumstances support can be provided by the Park Authority.

# Core paths

One important means of access is via the National Park's public footpath network, of which the Core Paths network plays a significant role (Figure 54). The Cairngorms National Park Authority has a duty under the Land Reform (Scotland) Act 2003 to prepare a Core Paths Plan. Section 17 (1) Act states that the core paths network should be:

'... sufficient for the purpose of giving the public reasonable access throughout the area'.

The Cairngorms National Park Authority published its Core Paths Plan in 2015, which was developed in Partnership with the Local Outdoor Access Forum and Inclusive Cairngorms. The National Park Authority is planning to review and update the current Core Path Plan (expected in 2026) alongside ethe delivery of the next Local Development Plan. The aim of the Plan is to help people enjoy and understand the special qualities of the National Park through the identification of outdoor access opportunities. The path network should satisfy the needs of visitors and local people to get around, and link to the wider path network and beyond.

The network is made up of a mixture of existing and new paths, which together provide a cohesive system. The National Park now has a network that totals 1,073 km of core path, 88 km of which is on water (River Spey). Furthermore, over 300 km of the network has been signed and promoted with a further 100 km or so to be developed and improved.



The National Park Authority is the Access Authority for the Cairngorms National Park, whereas the Local Authority (Access Authority) areas that overlap are responsible for the core paths outwith the National Park boundary. In some instances, the core paths in the National Park connect via paths outside the boundary in another Access Authority. Where this happens the section of path out with the National Park is the maintained and managed by that Access Authority (Local Authority). The Local Authority Core Path Plans for Angus, Aberdeenshire, Moray, Highland and Perth and Kinross have therefore been included in the links to evidence section of this report.

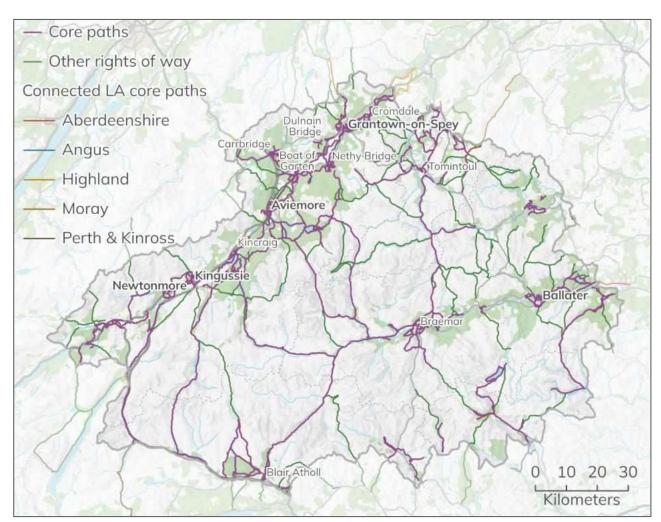


Figure 54 Map showing the public footpath network in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Improvement Service 2025.

Further detail on rights of way and hill tracks in the National Park is available from The Scottish Rights of Way and Access Society (ScotWays) national Catalogue of Rights of Way in Scotland (CROW) and Scottish Hill Tracks publication.



## Vacant and derelict land

Information on vacant and derelict land within the National Park is provided on by the Scottish Vacant and Derelict Land Survey, which is a national data collection undertaken to establish the extent and state of vacant and derelict land in Scotland. The data is collected from local authorities and the Loch Lomond and Trossachs National Park Authority. Sites within Cairngorms National Park boundaries are surveyed by the local authorities covering its area.

Vacant land is land unused for the purposes for which it is held and which is viewed as an appropriate site for development. To qualify as vacant land it must either have had prior development on it or preparatory work must have taken place in anticipation of future development.

Derelict land (and buildings) is land which has been so damaged by development, that it is incapable of development for beneficial use without rehabilitation. In addition, the land must currently not be used for the purpose for which it is held or a use acceptable in the local plan. Land also qualifies as derelict if it has an un-remedied previous use which could limit future development.

For both vacant and derelict land, site records must be at least 0.1 hectares in size to be included in the Scottish Vacant and Derelict Land Survey.

There are currently 11 sites, covering a combined area of 11.2 hectares, identified by the Scottish Vacant and Derelict Land Survey within the Cairngorms National Park (Figure 55).



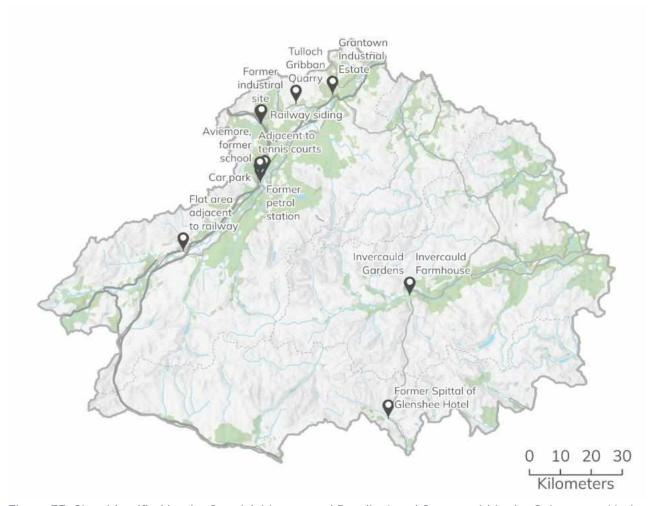


Figure 55 Sites identified by the Scottish Vacant and Derelict Land Survey within the Cairngorms National Park 2023. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Improvement Service 2025.

Of these sites 7.6 ha are classified derelict, 3.4 ha as vacant land and 0.2 ha as vacant land and buildings. One site, the former primary school in Aviemore, was granted planning permission for 12 affordable houses in August 2023 (2023/0056/DET).

Overall, less than 0.002% of the National Park's land is classified as derelict land, which suggests that it is not a significant issue for the area. While the overall land area is small, a key planning consideration is the proportion of the National Park's population living near to derelict land. It is estimated that around:

- 75% are living 1,000m+ from derelict land
- 18% are living 500m 1,000 from derelict land
- 8%<sup>3</sup> are living less than 500m from derelict land
- 3% have been living less than 500m from land which has been derelict long-term<sup>29</sup>.

<sup>&</sup>lt;sup>29</sup> Land that has been identified as being vacant and / or derelict prior to 2006.



Further information about vacant and derelict land within the Cairngorms National Park is set out within the land use, soil and resources topic paper:

 https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-andresources-survey

#### **Brownfield land**

National Planning Framework 4 defines brownfield land as land which has previously been developed. The term may cover vacant or derelict land, land occupied by redundant or unused buildings and developed land within the settlement boundary where further intensification of use is considered acceptable.

The currently adopted Local Development Plan 2021 contains allocations on brownfield land that fulfil a range of uses. Some of these sites are also identified by the vacant and derelict land survey. Approximately 70% of the land allocated within the adopted Local Development Plan is brownfield or was already developed and allocated to protect existing uses.

Brownfield sites qualifying as 'open mosaic habitat on previously developed land' are recognised as important sites for biodiversity due to the mosaic of habitats that can be present in proximity to each other, which can be particularly important for invertebrates. In urban areas brownfield sites can be key refuges and stepping stones for wildlife moving across the landscape. In rural areas abandoned quarries can be important wildlife sites, while dismantled railway lines function as green corridors and can be important off-road routes between communities.

Further information about brownfield land within the Cairngorms National Park is set out within the land use, soil and resources topic paper:

 https://cairngormsldp.commonplace.is/en-GB/proposals/land-use-soil-andresources-survey

#### **Built blue infrastructure**

## Reservoirs

All reservoirs that have the capacity to hold 25,000m<sup>3</sup> or more of water above the natural level of the surrounding land are required to be registered with Scottish Environment Protection Agency on the Controlled Reservoirs Register.



The register details the maximum volume of each reservoir, contact details for managers and each is assigned a risk category of high, medium or low. These designations are based on the consequence of an uncontrolled release of water and the effect that this could have on the surrounding area below the reservoir.

The risk designation that is assigned to a reservoir will direct the statutory level of engineering inspection and supervision that is required at that site, with low-risk reservoirs requiring a lower level of inspection than medium or high-risk reservoirs.

Thirteen reservoirs have the potential to inundate parts of the Cairngorms National Park (Table 5 and Figure 56). A reservoir can be assigned a high-risk designation because of the features that lie below it which could be impacted in the case of an uncontrolled release of water. The features that are considered include domestic properties, infrastructure, business premises, community, agriculture, cultural heritage and environment.

Table 5 Reservoirs on the Controlled Reservoirs Register that have the potential to inundate parts of the Cairngorms National Park in the event of a dam breach. Information taken from the Controlled Reservoirs Register, 2024.

Reservoir name	River	Risk	Maximum cubic
	catchment	designation <sup>18</sup>	capacity of reservoir at
			top water level (m³)
Loch An-t Seilich	Spey	High	4,500,000
Loch Cuaich	Spey	High	1,680,000
Loch Ericht	Spey	High	230,000,000
Loch Phoneis	Spey	High	200,000
Pattack Hydro Reservoir	Spey	High	195,916
Spey Reservoir	Spey	High	5,100,000
Pronie Loch	Don	High	75,000
Lochan on Bruar Water	Tay	Medium	40,000
Loch Garry Reservoir	Tay	High	1,880,000
Errochty Reservoir	Tay	High	32,500,000
Loch Tummel	Tay	High	36,400,000
Loch Garry Reservoir	Tay	High	1,880,000

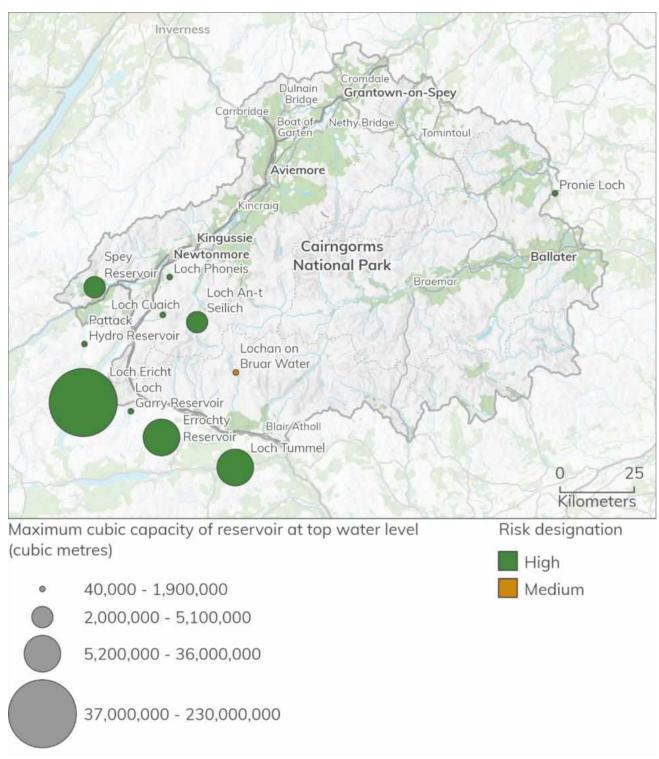


Figure 56 Reservoirs in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810.

Further information about reservoirs is set out within the Flood risk and water management topic paper:



 https://cairngormsldp.commonplace.is/en-GB/proposals/flood-risk-and-watermanagement-survey

## Flood management

Flood management involves a range of strategies aimed at reducing the risk and impact of flooding, encompassing both preventing floods and mitigating their effects. This includes measures like building flood defences, managing land use, and implementing natural flood management techniques. The information contained within this section is a summary of the information within the Strategic Flood Risk Assessment<sup>30</sup>. This is summarised in more detail in the Flood risk, and water management topic paper:

 https://cairngormsldp.commonplace.is/en-GB/proposals/flood-risk-and-watermanagement-survey

## Flood defences

Data held by the Scottish Flood Defence Asset Database and the local authorities that cover the National Park confirms that there are no formal flood defences within the Cairngorms National Park. There are locations where informal defences exist, which are considered where they are known and relevant to the Strategic Flood Risk Assessment; sources for this information include local authority flood management teams, the Ballater Flood Protection Study and Spey Catchment Initiative.

## Surface water management

There are currently no surface water management plans covering the National Park. The Local Flood Risk Management for Findhorn, Nairn and Speyside contains an action for the Highland Council to produce a Highland wide surface water management plan. This plan is currently being development and has been narrowed down from the whole Highland area to focus on a number of hot spots where a short list of potential interventions will be identified. The plan may inform the Proposed Plan if completed prior to the site assessment process.

Scottish Water is responsible for the drainage of surface water from roofs and paved ground surfaces within a property boundary, where that property is connected to the public network. It is active in carrying out targeted customer engagement campaigns, such as 'Nature Calls', which highlights that around 80% of blockages are due to the

<sup>&</sup>lt;sup>30</sup> See: https://cairngorms.co.uk/wp-content/uploads/2024/03/Cairngorms-Strategic-Flood-Risk-Assessment-2024.pdf



wrong items, including wet wipes and sanitary products, being flushed down toilets and entering the sewer network.

## Sustainable Drainage Systems

Sustainable Drainage Systems (SuDS) are a sequence of water management practices and facilities (not necessarily in an urban context) designed to manage surface water in a sustainable and more environmentally friendly approach than the conventional practice of routing run-off into watercourses. Sustainable Drainage Systems are generally employed to mitigate potential pollution incidents, reduce polluting activities or reduce impacts from polluting materials.

Sustainable Drainage Systems facilities are typically built infrastructure and can include:

- Permeable surfaces
- Filter strips
- Filter and infiltration trenches
- Swales
- Detention basins
- Bioretention systems / raingardens
- Wetlands and ponds.

Other facilities exist that often come as proprietary products with hydraulic controls or silt trap arrangements. These may also incorporate materials with properties able to encourage adsorption of certain polluting substances such as oils and toxic metals.

Under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 it is a general requirement for new developments (except for developments with a single dwelling, or where the discharge is directly into coastal wasters) with surface water drainage systems discharging to the water environment that such discharges pass through Sustainable Drainage Systems. This is to ensure that all reasonable steps are taken to protect the water environment. The Controlled Activities Regulations (CAR) provide regulation under general binding rules (GBRs) 10 and 11 for SUDS.

Data on the current number and distribution of Sustainable Drainage Systems within the Cairngorms National Park is not available, but the 2002 report 'Sustainable Drainage Systems in Scotland - the Scottish Sustainable Drainage Systems database'31

<sup>&</sup>lt;sup>31</sup> https://www.researchgate.net/publication/331132089\_SUDS\_in\_Scotland\_-\_the\_Scottish\_SUDS\_database



states that as of 01 January 2001 there were 767 Sustainable Drainage Systems in Scotland. The majority of these were filter drains, infiltration trenches and permeable paving systems.

In addition to water management, Sustainable Drainage Systems infrastructure can deliver significant biodiversity benefits and contribute to placemaking and community wellbeing through the inclusion of attractive wildlife-friendly planting in swales, raingardens and around Sustainable Drainage Systems ponds. The use of native plant species and sympathetic management regimes can enhance their value for wildlife including providing breeding habitat for priority species such as the Northern Damselfly and amphibians.

#### Risk from the sewer network

Scottish Water also seeks though investment and planned capital maintenance, to protect properties from flooding caused by overflowing or blocked sewers, with Section 16 of the Flood Risk Management (Scotland) Act 2009 placing a duty on Scottish Water to assess flood risk from sewerage systems. Mapping of this risk exists for two settlements within the National Park – Ballater and Newtonmore. The data largely mirrors Scottish Environment Protection Agency's pluvial flood hazard maps (particularly for bigger return periods), so this data can only be used by authorities for an internal sense check to identify areas of misalignment, which could be worthy of further investigation. This data cannot be published externally, due to the data sharing agreements in place, and therefore, while it has been considered as part of the Strategic Flood Risk Assessment, it is not featured in in the report. The Park Authority will continue to engage with Scottish Water over the risks posed by flood risk from sewerage systems through the preparation of the Proposed Plan.

#### Water treatment

Scottish Water have a requirement to identify and provide new strategic capacity for water and wastewater to meet demand of all new housing development and the domestic requirements of commercial and industrial development. Factors such as the total number of proposed developments, their scale and their distance from the treatment works may affect Scottish Water's ability to service them and therefore there is the potential that future growth investment may be required.

Further information about water infrastructure is set out within the Flood risk and water management topic paper:



 https://cairngormsldp.commonplace.is/en-GB/proposals/flood-risk-and-watermanagement-survey

## Water treatment works capacity

Scottish Water is responsible for the provision of public water services across Scotland and supplies the majority of drinking water to buildings within the Cairngorms National Park. Most of the populated areas within the National Park, including all settlements identified by the National Park Partnership Plan's spatial strategy, are served by Scottish Water's public water supply network.

Scottish Water have provided capacity information for the water treatment works serving properties in the Cairngorms National Park (Table 6). Because of the everchanging nature of capacity at Scottish Water's treatment works, a static numerical value can often distract or can lead to misinterpretation. For that reason, capacity indicators are presented at a very high-level. Capacity information will be more robustly detailed as and when a Pre Development Enquiries or formal Applications to Connect In are received by Scottish Water. The following descriptors apply in this instance:

- Capacity currently available
- Limited capacity available.

The 'limited capacity availability' descriptor indicates that some proposals / planning applications, depending on size, will need more investigation / additional information as part of any formal assessment.

Table 6 Scottish Water water treatment works capacity within the Cairngorms National Park (Source: Scottish Water, 2025).

Local authority area	Water treatment works reference	Water treatment works name	Settlements served by the works	Capacity status
Aberdeenshire	WTW000578	Ballater	<ul><li>Ballater</li><li>Dinnet</li></ul>	Capacity currently available
Aberdeenshire	WTW000744	Braemar	• Braemar	Capacity currently available
Aberdeenshire	WTW000490	Lumsden	• Strathdon	Capacity currently available
Aberdeenshire	WTW000577	Crathie	Crathie	Capacity currently available
Angus	WTW000582	Whitehillocks	No settlements	Capacity currently available



Local authority area	Water treatment works reference	Water treatment works name	Settlements served by the works	Capacity status
Highland	WTW000762	Aviemore	<ul> <li>Aviemore</li> <li>Grantown on Spey</li> <li>Kingussie</li> <li>Newtonmore</li> <li>Boat of Garten</li> <li>Carrbridge</li> <li>Cromdale</li> <li>Dulnain Bridge</li> <li>Insh</li> <li>Kincraig</li> <li>Nethy Bridge</li> </ul>	Limited capacity currently available
Highland	WTW000552	Dalwhinnie	Dalwhinnie	Capacity currently available
Highland	WTW000748	Laggan Bridge	• Laggan	Capacity currently available
Moray	WTW000470	Tomnavoulin	Glenlivet     Tomnavoulin	Limited capacity currently available
Moray	WTW000472	Blairnamarrow	Tomintoul	Limited capacity currently available
Perth and Kinross	WTW000563	Killiecrankie	<ul><li>Blair Atholl</li><li>Calvine</li><li>Killiecrankie</li><li>Pitagowan</li></ul>	Limited capacity currently available

# Private water supplies

As a rural area, many properties within the Cairngorms National Park are served by private water supplies. The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017 came into force in October 2017 and are regulated and enforced by Local Authorities. The main objective of the Regulations is to ensure the provision of clean, safe drinking water and to deliver significant health benefits to those using private water supplies.

Currently, information on the location of addresses served by private water supplies in the Cairngorms National Park is only available for Aberdeenshire and Moray local authority areas (Figure 57). Even within these areas, it is not necessarily complete but should be a dataset of properties which are not charged for the Sewerage Element.



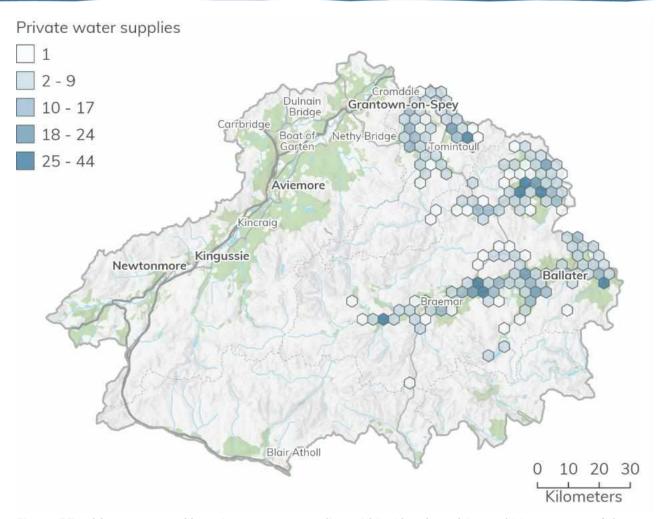


Figure 57 Addresses served by private water supplies within Aberdeenshire and Moray areas of the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Improvement Service, 2025.

In 2020 the Centre of Expertise for Waters published a study on the likely impacts of climate change on private water supplies in Scotland. In particular, the study looked at the consequences on their resilience to water shortages to assess changes in vulnerability of private water supplies due to reduced quantity of water as a result of climate change.

The study indicates that the private water supplies in the National Park are mostly at low to moderate risk. However, there are localised areas where the risk is high including within Badenoch and Strathspey and Deeside. This means developments, especially in these areas could conflict with Policy 22 if the private water connection is not resilient to periods of water scarcity. The data is presented in Figure 15, on page 36, of the Centre of Expertise for Waters report:



 https://www.crew.ac.uk/sites/www.crew.ac.uk/files/publication/CRW2018\_05\_report \_FINAL.pdf

National Planning Policy 4 Policy 22 d presumes against the use of private water supplies unless these are sourced from a sustainable water source that is resilient to periods of water scarcity. Therefore, the ability of development to connect to a mains water supply does influence the spatial strategy of the proposed plan, but there is uncertainty as to whether this would sufficiently mitigate the risk of water scarcity. The Cairngorms National Park gets much of its water from its major rivers (known as abstraction), which are also affected by climate change (e.g. fluctuating seasonal rains), and this could affect how drinking water is consumed and stored in the future. As a result, reducing the need for drinking water in the home by capturing and using of rainwater for gardening etc. is very important.

# Septic tanks

As a rural area, many properties within the Cairngorms National Park are served by septic tanks. The purpose of a septic tank is to treat wastewater from properties that are generally not connected to the public wastewater system.

Under section 79 of the Environmental Protection Act 1990 and Under part 6, section 37 of the Water Resources (Scotland) Act 2013 Scottish Environment Protection Agency, Scottish Water and local Authorities all have a responsibility for the registration, management and compliance of septic tanks within Scotland. The Scottish Assessors also currently identifies 678 septic tanks. These are tanks that serve more than one dwelling. Those that serve just one dwelling may be treated as an appurtenance of the dwelling i.e. they are classified as domestic and treated as being reflected in the council tax band.

This dataset presented in Figure 58 is an amalgamation of licenced Scottish Environment Protection Agency, Scottish Water, Scottish Assessors and some local authorities Septic Tanks in Scotland.

Scottish Environment Protection Agency have approximately a quarter of the septic tanks mapped as it has only been a requirement since 2012 that when buying or selling a house that these get licenced. Scottish Water have partial information and the Scottish Assessors collect some as well. Scottish Environment Protection Agency, local authorities, Scottish Water and Scottish Assessors are keen to combine data to create a complete and comprehensive view of all Septic Tanks in Scotland, although this work is not yet competed.



The location of existing septic tanks does not have an impact on the spatial strategy of the proposed plan. However, the ability of development to connect to a public wastewater system does influence the spatial strategy and therefore the data is indicative of areas where connection is not possible or investment is required.

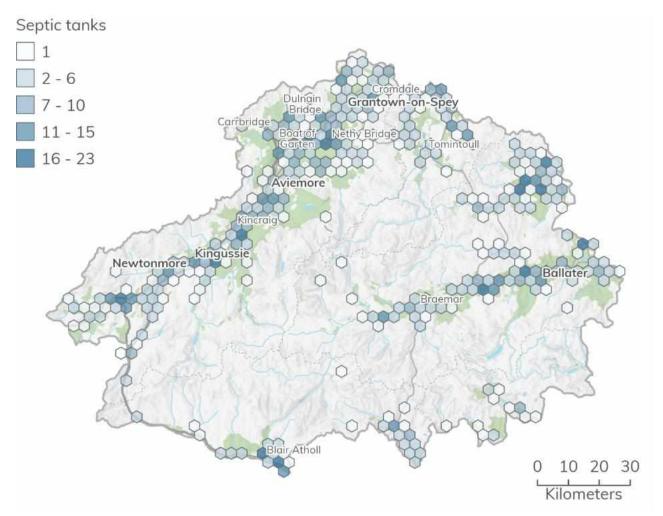


Figure 58A map of addresses served septic tanks within the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Improvement Service, 2025.

#### Water refill locations

In line with the Town and Country Planning (Scotland) Act 1997, as amended, the Proposed Plan will need to include a statement of the planning authorities' policies and proposals regarding the provision of water refill locations. Figure 59 shows the location of Scottish Water Top up Taps in the National Park. Further water refill locations may exist, however it is not possible to identify these without significant investigation. The Park Authority will seek to identify any additional locations through the preparation of



the proposed pan, in particular, through engagement on placemaking within settlements identified in the spatial strategy.

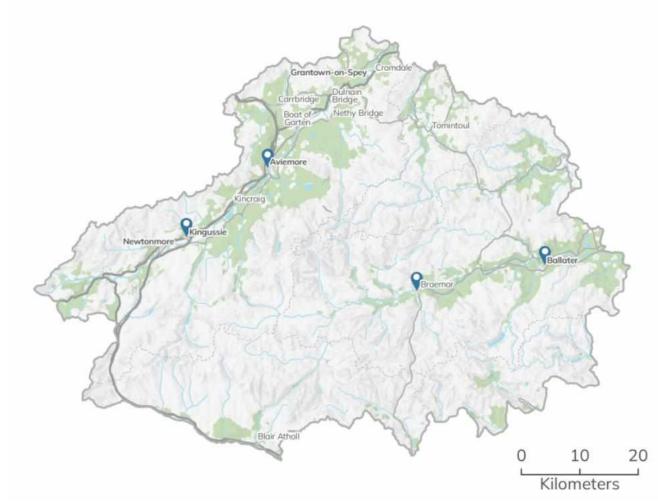


Figure 59 Location of Scottish Water Top up Taps in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2025 Ordnance Survey AC0000821810. Contains data © Scottish Water 2025.

Detailed information on the location of the Top up Taps can be found on Scottish Water's website:

https://www.yourwateryourlife.co.uk/find-my-nearest-tap/

# Summary of implications for Proposed Plan

The Nature Conservation (Scotland) Act 2004 places a statutory duty on all public bodies in Scotland, including the Cairngorms National Park Authority, to further the conservation of biodiversity. The Local Development Plan may play a key role in meeting this duty.



The Proposed Plan needs to be prepared in accordance with:

- The four aims of the National Park as set out in The National Parks (Scotland) Act 2000), in particular the first aim 'to conserve and enhance the natural and cultural heritage of the area' and the second aim 'to promote sustainable use of the natural resources of the area'.
- The spatial strategy and principles of National Planning Framework 4 such as flood risk and \_or water management plan when identifying opportunities to enhance and expand blue and green infrastructure.

# The Proposed Plan should seek to:

- Safeguard the habitats and species protected by international designations, including Ramsar sites, from the potentially adverse effects of development through the site assessment, Habitats Regulations Appraisal and Strategic Environment Assessment process.
- Safeguard national, regional and local designations from the potentially adverse effects of development through the site assessment and Strategic Environment Assessment process.
- Safeguard the ecological status of surface waterbodies in the Cairngorms National Park. This may be achieved through the site assessment, Habitats Regulations Appraisal and Strategic Environment Assessment process.
- Support Scottish Government's 30 by 30 ambitions.
- Support the National Park Partnership Plan 2022 ambitions for 50% of the National Park to me managed for ecosystem restoration by 2045.
- Support projects and developments that support sustainable access and recreational use of international, national and non-statutory sites.
- Protect land that provides multiple benefits, including nature networks and blue and green infrastructure that supports natural flood management measures.
- Encourage and support the use of natural flood management measures, which can
  include nature networks and blue and green infrastructure, on land that does not
  currently provide multiple benefits, recognising that multiple benefits for both people
  and nature can be realised through applying natural flood risk management
  measures.
- Support the delivery of community action plan and local place plan priorities regarding the delivery of new blue and green infrastructure.
- To take account of and to identify opportunities to enhance cross-boundary blue and green network features.



- Consider the need for a policy or suite of site-specific requirements that seek to reduce the risk of flooding potentially arising from beaver activity. For example, by requiring particular standards of construction for infrastructure within areas that have the potential to support a beaver population.
- Protect water quality, including drinking water, and support development that improves water quality, for example by removing barriers to fish migration.
- Support proposals that deliver sustainable drainage systems as a part of the development.
- Take an infrastructure first approach to planned development.
- Identify opportunities for the sustainable reuse of brownfield land including vacant and derelict land and empty buildings.
- Safeguard Annex I habitats and Scottish Biodiversity List habitats in the development of its spatial strategy and assessment of sites for allocation, following National Planning Framework 4's mitigation hierarchy.
- Safeguard Annex II, Schedule 2, Schedule 3 and Schedule 4 and Scottish Biodiversity List species in the development of its spatial strategy and assessment of sites for allocation, following the National Planning Framework 4's mitigation hierarchy.
- Safeguard badgers and badger setts in the assessment of land suable for development allocations, following National Planning Framework 4's mitigation hierarchy.
- Support the delivery of the next Cairngorms Nature Action Plan.
- Support the delivery of the Capercaillie Emergency Plan.
- Support the delivery of community action plan and local place plan priorities and actions through the placemaking process.
- Adopt the Cairngorms Nature Index as a tool to measure ecosystem health in the National Park.
- Contribute to establishing nature networks according to the approach set out in the supporting document 'Identifying a Cairngorms Nature Network'78, to help protect and restore the biodiversity, ecosystems and natural processes of the National Park. This may be achieved through measures such as:
  - Protecting priority habitats.
  - Ensuring allocated sites and windfall developments do not break the connectivity of priority habitats.
  - Ensuring biodiversity mitigation and enhancement measures contribute towards the connectivity of habitats



- Directing biodiversity mitigation and enhancement measures towards delivering the aims and outcomes of the Cairngorms Nature Action Plan.
- Informed by the National Park Partnership Plan and Cairngorms National Park Forest Strategy 2018 and approach to establishing nature networks, identify and protect existing woodland and trees in the National Park and identify potential to enhance / expand to avoid habitat fragmentation and improve ecological connectivity.
- Set out proposals for forestry, woodlands and trees in its spatial strategy, as supported by the National Park Partnership Plan and Cairngorms National Park Forest Strategy 2018.
- Require all forestry-related activity to meet the UK Forest Standard.
- Integrate forestry policy delivery mechanisms such as the Forestry Grant Scheme and Woodland Carbon Code.
- Promote 'designing with nature' and providing nature-based solutions to the provision of open space and infrastructure within new developments.
- Support development proposals where biodiversity loss is reversed and enhanced, along with the restoration of degraded habitats where relevant.
- Support development proposals that demonstrate the intention to provide long-term positive effects for biodiversity over and above those found on the undeveloped site.
- Take account of any open space strategies published by the constituent local authorities as well as the Cairngorms National Park Authority's Play Sufficiency Assessment.