Topic: Land use, soil and resources

Engagement version August 2024

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

- Town and Country Planning (Scotland) Act 1997
  https://www.legislation.gov.uk/ukpga/1997/8/contents

- National Park (Scotland) Act 2000
  https://www.legislation.gov.uk/asp/2000/10/contents

- Planning (Scotland) Act 2019
  https://www.legislation.gov.uk/asp/2019/13/contents/enacted

- National Planning Framework 4
  https://www.dpea.scotland.gov.uk/LibraryDocument.aspx?id=2094

- Scotland's Third Land Use Strategy 2021 - 2026
  https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2021/03/scotlands-third-land-use-strategy-2021-2026-getting-best-land/documents/scotlands-third-land-use-strategy-2021-2026-getting-best-land/scotlands-third-land-use-strategy-2021-2026-getting-best-land/govscot%3Adocument/scotlands-third-land-use-strategy-2021-2026-getting-best-land.pdf

- Local development planning guidance
  https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2023/05/local-development-planning-guidance/documents/local-

development-planning-guidance/local-development-planning-guidance/govscot%3Adocument/local-development-planning-guidance.pdf

- Cairngorms National Park Partnership Plan 2022
https://www.dpea.scotland.gov.uk/LibraryDocument.aspx?id=2147

- Cairngorms National Park Local Development Plan 2021
https://www.dpea.scotland.gov.uk/LibraryDocument.aspx?id=1096

- 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

- Grantown Action Plan 2016
https://cairngorms.co.uk/wp-content/uploads/2020/12/160803-GrantownIconicPlan.pdf

- Our Community ... A Way Forward Action Plan – Kingussie 2018
https://cairngorms.co.uk/wp-content/uploads/2021/01/2018-Kingussie-Action-Plan.pdf

- CORINE Land Cover data
https://land.copernicus.eu/en/products/corine-land-cover

- Scottish Agricultural Census
https://www.gov.scot/collections/june-scottish-agricultural-census/

- Scottish Vacant and Derelict Land Survey 2023
https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2024/06/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

- Buildings at Risk
https://www.buildingsatrisk.org.uk/

- Cairngorms National Park Town Centre Health Check Report 2023
https://cairngorms.co.uk/wp-content/uploads/2024/06/Cairngorms-National-Park-Town-Centre-Health-Check-Report-2023.pdf

- Aberdeenshire Housing Land Audit 2023
https://www.aberdeencity.gov.uk/sites/default/files/2023-09/Aberdeen%20City%20and%20Aberdeenshire%20HLA%202023_0.pdf

- Highland Housing Land Audit 2023
https://www.highland.gov.uk/download/downloads/id/28475/housing_land_audit_2023_document.pdf

- Contaminated land
https://data.spatialhub.scot/dataset/contaminated_land-is

- The Scottish Soil Framework 2009
www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2009/05/scottish-soil-framework/documents/0081576-pdf/0081576-pdf/govscot%3Adocument/0081576.pdf

- The State of Scotland's Soils 2011
https://www.sepa.org.uk/media/138741/state-of-soil-report-final.pdf

- Scottish Biodiversity Strategy to 2045
https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2022/12/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland/documents/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland/govscot%253Adocument/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland.pdf

- Carbon rich soils
https://opendata.nature.scot/datasets/snh::carbon-and-peatland-2016-map/about

- Peatland condition
https://storymaps.arcgis.com/stories/24bba98fd4294dbc9828abc0928186f0

- Land capability for agriculture
https://www.spatialdata.gov.scot/geonetwork/srv/api/records/24c6df5a-6b04-43f8-839f-0d45cc2802e3

- Land capability for forestry

https://www.spatialdata.gov.scot/geonetwork/srv/eng/catalog.search#/metadata/ad1d9b2e-dc1e-4a61-beb8-d61cb6b3704f

- Soil sealing, compaction and erosion data
  https://www.hutton.ac.uk/soil-maps/

- National Landslide Database
  https://www.bgs.ac.uk/datasets/national-landslide-database/

- Climate change, land management and erosion int the organic and organo-mineral soils in Scotland and Northern Ireland
  https://soils.environment.gov.scot/media/1470/2009_climate-change-land-management-and-erosion-in-the-organo-mineral-soils-in-scotland-and-northern-ireland_research-report-no-325.pdf

- Geomorphological changes and trends in Scotland: debris-flows
  https://www.nature.scot/sites/default/files/2017-07/Publication%202004%20-%20SNH%20Commissioned%20Report%2052%20-%20Geomorphological%20changes%20and%20trends%20in%20Scotland%20-%20debris%20flows.pdf

- Cairngorms National Park Local Development Plan 3Strategic Flood Risk Assessment 2024
  https://cairngorms.co.uk/wp-content/uploads/2024/03/Cairngorms-Strategic-Flood-Risk-Assessment-2024.pdf

- BritPits Database
  https://www.bgs.ac.uk/datasets/britpits/

- 2019 Aggregate Minerals Survey for Scotland
  https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2023/09/2019-aggregate-minerals-survey-scotland/documents/collation-results-2019-aggregate-minerals-survey-scotland/collation-results-2019-aggregate-minerals-survey-scotland/govscot%3Adocument/collation-results-2019-aggregate-minerals-survey-scotland.pdf

- Scotland's Geodiversity Charter

https://scottishgeodiversityforum.files.wordpress.com/2019/06/scotlands-geodiversity-charter2018-2023.pdf

- Geodiversity of the Cairngorms National Park
https://nora.nerc.ac.uk/id/eprint/18475/1/OR10019.pdf

- Simplified bedrock geology
https://www.bgs.ac.uk/datasets/bgs-geology-625k-digmapgb/

- Sites of Special Scientific Interest
https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas/national-designations/sites-special-scientific-interest-sssis

- Geological Conservation Review sites
https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas/local-designations/geological-conservation-review-sites

- Geomorphology of the Cairngorm Mountains
https://opendata.nature.scot/maps/snh::geomorphology-of-the-cairngorm-mountains/about

Summary of evidence

Policy Context

National Parks (Scotland) Act 2000)

The National Park has four distinct aims as set out in The National Parks (Scotland) Act 2000). The first and second aims are of relevance to the matters discussed in this paper:

- To conserve and enhance the natural and cultural heritage of the area.
- To promote sustainable use of the natural resources of the area.

The aims are all to be pursued collectively. However, if there is conflict between the first aim and any of the others, greater weight is given to the first aim (as set out in Section 9(6) of the 2000 Act).

National Planning Framework 4

This paper covers a range of matters relating to National Planning Framework 4's Sustainable Places and Productive Places spatial priorities.

Policy 5 Soils seeks to protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development. It states that local development plans should protect locally, regionally, nationally and internationally valued soils, including land of lesser quality that is culturally or locally important for primary use.

Policy 9 Brownfield, vacant and derelict land and empty buildings seeks to encourage, promote and facilitate the reuse of brownfield, vacant and derelict land and empty buildings, and to help reduce the need for greenfield development. It states that local development plans should set out opportunities for the sustainable reuse of brownfield land including vacant and derelict land and empty buildings.

Policy 33 Minerals seeks to support the sustainable management of resources and minimise the impacts of the extraction of minerals on communities and the environment. It states that local development plans should support a landbank of construction aggregates of at least 10-years at all times in the relevant market areas, whilst promoting sustainable resource management, safeguarding important workable mineral resources, which are of economic or conservation value, and take steps to ensure these are not sterilised by other types of development.

Scotland's Third Land Use Strategy 2021 - 2026

The Land Use Strategy sets out our long-term vision for sustainable land use in Scotland, its objectives and key policies for delivery. The Strategy contains a vision for 2050, which is:

'A Scotland where we fully recognise, understand and value the importance of our land resources, and where our plans and decisions about land use will deliver improved and enduring benefits, enhancing the wellbeing of our nation.'

The vision is supported by three overarching land use objectives:

- Land based businesses working with nature to contribute more to Scotland's prosperity.
- Responsible stewardship of Scotland's natural resources delivering more benefits to Scotland's people.
- Urban and rural communities better connected to the land, with more people enjoying the land and positively influencing land use.

The Strategy does not set out new policies, instead it seeks to make land use more understandable and accessible to everyone, in support of a shift in the way we think about land, towards more inclusive conversations around how we use land and who should be involved in those decisions. From a development plan perspective, therefore, National Planning Framework 4 is the policy expression of its vision and objectives.

The Scottish Soil Framework 2009

The Scottish Soil Framework sets out the vision for soil protection in Scotland, and formally acknowledges the important services soils provide to society. Its vision is

'That soils are recognised as a vital part of our economy, environment and heritage, to be safeguarded for existing and future generations.'

The main aim of the Framework is to promote the sustainable management and protection of soils consistent with the economic, social and environmental needs of Scotland.

The framework is supported by the State of Scotland's Soil Report (2011) which provides further evidential insight on the functions of soils, as well as on the nature and relative importance of the threats to soil quality.

From a development plan perspective, National Planning Framework 4 is the policy expression of the Soil Framework's vision and objectives.

Scottish Biodiversity Strategy to 2045

The Scottish Biodiversity Strategy sets out the Scottish Government's ambition for Scotland to be Nature Positive by 2030, and to have restored and regenerated biodiversity across the country by 2045. The Strategy states that soil health will be 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. Soils and species indicators also point to ecosystem health improvements and reveal which drivers are working positively or negatively across habitats and areas.

Scotland's Geodiversity Charter 2018 - 2023

The Cairngorms National Park Authority is signatory of Scotland's Geodiversity Charter. The Charter encourages the promotion and management of Scotland's geodiversity and better integration of geodiversity into policy and guidance, consistent with the economic, social, cultural and environmental needs of Scotland.

Signatories commit to maintain, promote and enhance geodiversity as an integral part of nature, recognising its contribution to:

- Scotland's remarkable geoheritage.
- Historical and cultural development, intellectual growth and creative expression.
- Sustainable economic development and essential benefits for society.
- Supporting biodiversity and addressing biodiversity loss.
- Helping us understand Earth's history and providing knowledge that will help society to mitigate and adapt to climate change and sea level rise.
- Public health, quality of life, national well-being and reconnecting people with nature.

The Charter was designed to be time-limited. This approach accommodates periodic refocussing of the Charter to address additional needs and fresh challenges. The Charter is due for review and renewal. According to NatureScot, the Charter for 2024 - 2030, which is yet to be published, has a role in helping to address the nature and climate emergencies.

National Park Partnership Plan 2022

The National Park Partnership Plan is the Regional Land Use Framework for the National Park. Five regions across Scotland, including the Cairngorms National Park,

were involved in the Regional Land Use Partnership and Regional Land Use Framework pilot programme from 2021 – 2023.

It is still uncertain what, if any, powers Regional Land Use Partnerships will have in future to direct public funding and this is pivotal in terms of how this approach will function. Within the Cairngorms National Park, the Park Authority has been tasked with creating the structures necessary to operate a partnership and framework and to trial how they might work in practice. However, during this pilot, the partnership and framework will not have powers to direct public funding.

The strategic approach to the partnership and framework pilot as relevant to this National Park Partnership Plan period is set out below. The Park Authority will take further direction from Scottish Government on how the partnership and framework should operate and, as such, the approach to partnerships and frameworks may change in the future.

The Partnership Plan provides the strategic context for the development of a pilot Regional Land Use Framework for the National Park using a natural capital approach. Natural capital is defined within the Partnership Plan as the world's stock of natural resources, which includes geology, soils, air, water and all living organisms. Natural capital 'assets' such as habitats and ecosystems provide a wide range of benefits to human wellbeing, known as 'ecosystem services'.

Natural capital within the context of this paper includes matters relating to soil and geology. Other matters, such are habitats and ecosystems are covered in papers specifically relating to those matters.

The Partnership Plan contains a number of specific actions relating to the use of land use.

Objective A1. Net Zero, which seeks to ensure the Cairngorms National Park reaches net zero as soon as possible, is likely to have a significant impact on land use across the National Park, although it does not contain any specific measures in itself, instead being delivered through a number of the Partnership Plan's other objectives, including:

- A2. Woodland expansion, which seeks to create a minimum of 35,000 hectares of new woodland cover by 2045.
- A3. Peatland restoration, which seeks to have a minimum of 38,000 hectares of peatland under restoration management by 2045.

- A8. Farming, which aims to reduce the carbon footprint of farms and conserve carbon rich soils.
- A10. Ecological network, which aims to connect habitats and ecosystem across all different types of land use.
- A11 ecological restoration, which seeks to have at least 50% of the National Park to be managed principally for ecosystem restoration by 2045.
- A14. Green investment, which seeks to see an increase in the amount of green finance per annum for projects that deliver multiple benefits, including, carbon reduction.

A number of these objectives, notably, Objective A3 and A8, specifically support the protection and restoration of carbon rich soils.

The Partnership Plan does not contain any specific objectives or policies on minerals or geodiversity. However, as geology is an important aspect of natural capital and that the Partnership Plan, as the Regional Land Use Framework, promotes a natural capital approach, then these matters are broadly included within its remit.

Community action plans

The following action plans identified issues and / or priorities relating to empty properties and vacant and derelict land.

Blair Atholl Community Action Plan: Looking to 2030

The action plan contains the following priorities:

- To bring vacant residential properties back into use as affordable housing.
- Too preserve the currently vacant buildings at Blair Atholl railway station.
- To invest in old buildings and sites for community benefit.

Grantown Action Plan 2016

The action plan highlights the following issues:

- Empty commercial on the High Street and Square.
- The former Strathspey Hotel and vacant land to its rear.

Since the action plan was published the Strathspey Hotel has been converted into residential accommodation and the land to its rear has been partially developed with housing. However, there remains a small area of vacant land to the rear of these properties for which the ownership is unknown.

Our Community: A Way Forward Action Plan – Kingussie 2018

The action plan identifies the following issues and priorities:

- The issue of the number of vacant shops on the High Street.
- A priority to regenerate the High Street.
- A priority to regenerate the old Highland Folk Museum site.

Baseline of land use, soil and resource matters

This paper summarises a number of matters relating to the use of land, soil and resources, including:

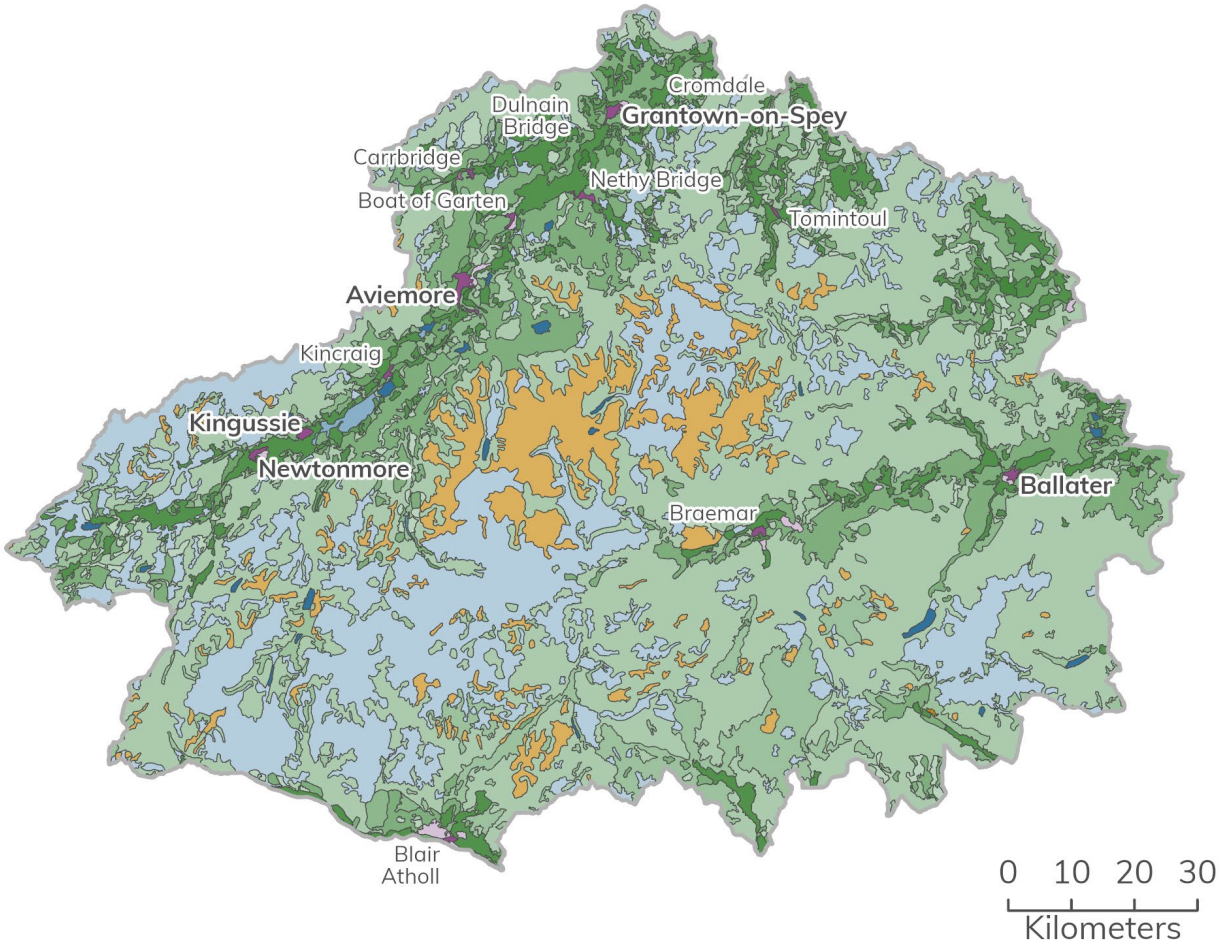
- Land use
- Vacant and derelict land
- Brownfield land
- Empty buildings
- Soil
- Minerals and aggregates.

The principal purposes for which the land is used

Section 15 of the Town and Country Planning (Scotland) Act 1997, as amended states that local development plans should take into account the principal purposes for which the land is used.

The matter of land use is covered in several of the sections of the evidence report, including those covering, natural heritage, housing and economic matters. These deal with specific aspects of land use and how they are to be addressed in the preparation of the Proposed Plan. This section provides an overview of land use within the National Park and the broad changes that have taken place over a 28-year period.

There are numerous datasets that cover land use within Scotland. This report draws on data from the European Environment Agency's CORINE Land Cover dataset. In its current form, the CORINE Land Cover product offers a pan-European land cover and land use inventory with 44 thematic classes, ranging from broad forested areas to individual vineyards. The product is updated every six years, with the earliest dataset compiled in 1990 and the most recent update made in 2018. This allows for change to be monitored over time, although there are limitations in comparing non-consecutive inventories due to several factors, including methodological changes. This is particularly pronounced when comparing inventories that are more distant in time (for example, comparing 2000 and 2018 datasets).



Corine level 3 land cover type

- Discontinuous urban fabric
- Industrial or commercial units
- Mineral extraction sites
- Sport and leisure facilities
- Non-irrigated arable land
- Pastures
- Land principally occupied by agriculture, with significant areas of natural vegetation
- Broad-leaved forest
- Coniferous forest
- Mixed forest
- Natural grasslands
- Moors and heathland
- Transitional woodland-shrub
- Bare rocks
- Sparsely vegetated areas
- Water bodies
- Water courses
- Inland marshes
- Peat bogs

Figure 1 Landcover within the Cairngorms National Park according to CORINE Land Cover data, 2018. Contains Ordnance Survey data © Crown copyright and database right 2024. Contains data © European Union, Copernicus Land Monitoring Service 2024, European Environment Agency (EEA).

According to the 2018 dataset (Figure 1) the two dominant types of land cover within the National Park are moorland and heathland, which covers around 2,000km^2 (44%) and peat bog, which covers around 950km^2 (21%). The use of these land cover types can vary but may include agriculture and sport (e.g. grouse shooting). Other land that may principally be used for agriculture covers around 590km^2 (13%), although around 315km^2 of this is classified as natural grassland and is therefore likely to be low intensity. Woodland accounts for around 650km^2 (14%). Developed land accounts for approximately 10km^2 (0.2%).

Table 2 provides details of broad changes in land-cover between each of update of the CORINE dataset. The changes do not represent every change within these periods and the later periods are not directly comparable with the earlier ones. Figure 2 shows where these changes occurred. The primary changes relate to land management with a relatively small amount attributed to some form of development.

Table 2 Changes in landcover in parcels of land that 5 hectares (ha) or larger according to CORINE data 1990 – 2018. Some figures may not sum due to rounding.

Landcover change 1990 - 2000			
Landcover in 1990 (ha)		**Landcover in 2000 (ha)**	
Coniferous forest	700.4	Moors and heathland	49.1
		Natural grasslands	29.3
		Pastures	14.2
		Transitional woodland-shrub	608.0
Moors and heathland	474.6	Coniferous forest	474.6
Pastures	87.7	Coniferous forest	87.7
Transitional woodland-shrub	718.0	Coniferous forest	707.6
		Natural grasslands	10.4
Landcover change 2000 - 2006			
Landcover in 2000 (ha)		**Landcover in 2006 (ha)**	
Coniferous forest	1288.4	Transitional woodland-shrub	1288.4
Transitional woodland-shrub	90.2	Coniferous forest	90.2
Landcover change 2006 - 2012			
Landcover in 2006 (ha)		**Landcover in 2012 (ha)**	
Burnt areas	132.4	Moors and heathland	132.4
Coniferous forest	310.5	Transitional woodland-shrub	310.5
Discontinuous urban fabric	27.2	Coniferous forest	17.6
		Construction sites	9.6
Moors and heathland	247.6	Burnt areas	247.6
Transitional woodland-shrub	2158.7	Coniferous forest	2099.1
		Moors and heathland	59.6

Landcover change 2012 - 2018			
Landcover in 2012 (ha)		Landcover in 2018 (ha)	
Broad-leaved forest	32.5	Road and rail networks and associated land	6.6
		Transitional woodland-shrub	25.9
Burnt areas	191.7	Natural grasslands	191.7
Coniferous forest	1543.1	Transitional woodland-shrub	1543.1
Mixed forest	28.1	Transitional woodland-shrub	28.1
Moors and heathland	26.9	Natural grasslands	26.9
Pastures	7.6	Construction sites	7.6
Transitional woodland-shrub	434.4	Coniferous forest	259.3
		Mixed forest	175.1

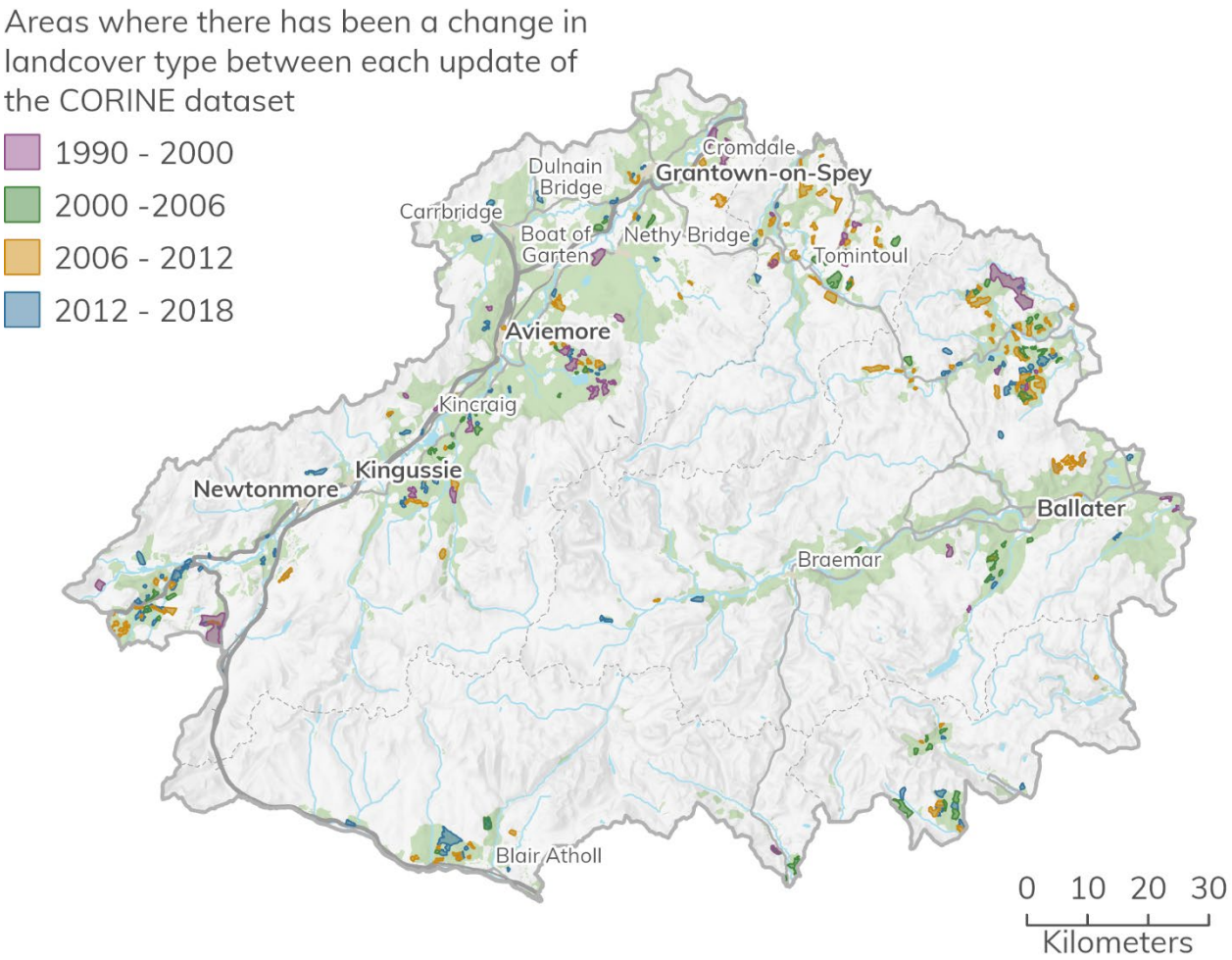


Figure 2 Changes in landcover in parcels of land that 5 hectares (ha) or larger according to CORINE data 1990 – 2018. Contains Ordnance Survey data © Crown copyright and database right 2024. Contains data © European Union, Copernicus Land Monitoring Service 2024, European Environment Agency (EEA).

Land used for agriculture

It is difficult to estimate the precise area of land used for agriculture within the National Park. This is due to the agricultural parishes used to gather statistics for the Scottish Agricultural Census not nesting within the boundary of the Cairngorms National Park. A sample of parishes mush therefore be selected to form an aggregate. Based on a sample of parishes that best fit the National Park's geography[1], in 2023 there was approximately 570 agricultural holdings within or mostly within the National Park boundary.

According to the 2023 census, the total area of agricultural land, excluding common grazing, within these holdings was approximately 381,455 hectares, down from around 423,500 hectares in 2003. The majority of agricultural land is classified as rough grazing and this is where the greatest change in land use has occurred. All other types of agricultural land use have increased slightly over the time period (Figure 3).

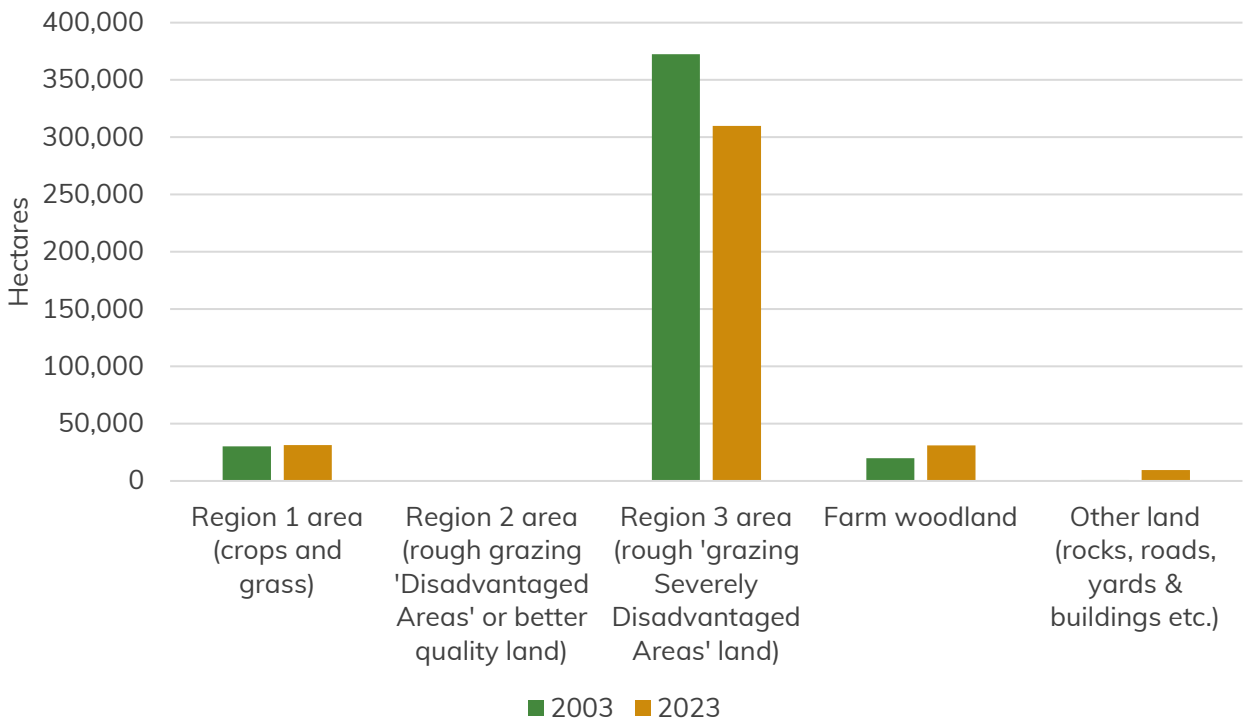


Figure 3 Area of agricultural land within or mostly within the Cairngorms National Park boundary according to 2003 and 2023 Agricultural Census.

[1] Reference numbers 16, 21, 38, 42, 43, 45, 234, 235, 438, 439, 440, 441, 442, 586 and 676.

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.

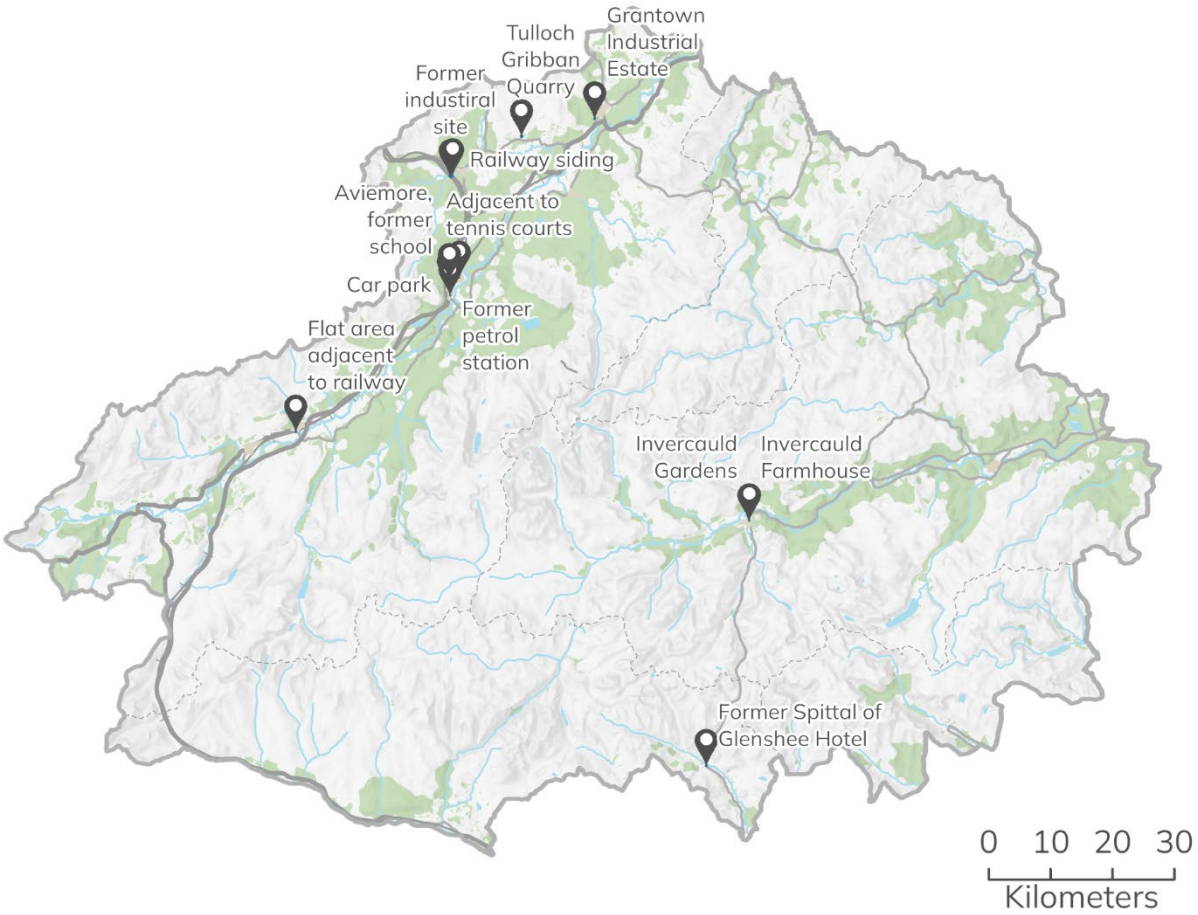


Figure 4 Sites identified by the Scottish Vacant and Derelict Land Survey within the Cairngorms National Park 2023. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority.

Vacant land is land unused for the purposes for which it is held and which is viewed as an appropriate site for development. This land 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 (ha), identified by the Scottish Vacant and Derelict Land Survey within the Cairngorms National Park (Figure 4 and Table 3). Of these sites 7.6ha are classified derelict, 3.4ha as vacant land and 0.2ha as vacant land and buildings (Figure 5). One site, the former primary school in Aviemore, was granted planning permission for 12 affordable houses in August 2023 (2023/0056/DET).

Table 3 Sites identified by the Scottish Vacant and Derelict Land Survey within the Cairngorms National Park 2023 (Source: Scottish Government, 2024).

Name	Local authority	Site type	Development potential	Ownership	Previous use	Area (ha)
Invercauld Farmhouse	Aberdeenshire	Derelict	Developable - medium term	Unknown private	Residential - housing	0.28
Invercauld Gardens	Aberdeenshire	Vacant land and buildings	Developable - undetermined	Unknown private	Residential - housing	0.22
Flat area adjacent to railway	Highland	Derelict	Developable - undetermined	Network Rail / Rail franchise holder	Transport	0.49
Car park adjacent to Scandinavian Village	Highland	Vacant land	Developable - undetermined	Ownership unknown	Transport	1.64
Adjacent to tennis courts	Highland	Vacant land	Developable - undetermined	Ownership unknown	Unknown	0.11
Former petrol station	Highland	Vacant land	Developable - short term	Unknown private	Storage	0.18
Former industrial site	Highland	Derelict	Developable - undetermined	Unknown private	Other general industry	2.7
Railway siding	Highland	Derelict	Developable - undetermined	Network Rail / Rail franchise holder	Transport	0.42
Grantown Industrial Estate	Highland	Derelict	Developable - short term	Unknown private	Storage	0.68
Tulloch Gribban Quarry	Highland	Derelict	Developable - undetermined	Other private	Mineral activity	2.02

Name	Local authority	Site type	Development potential	Ownership	Previous use	Area (ha)
Aviemore, former school	Highland	Vacant land	Unknown	Local authority	Education	1.43
Former Spittal of Glenshee Hotel	Perth and Kinross	Derelict	Unknown	Unknown private	Residential - hotels, hostels etc.	1.04

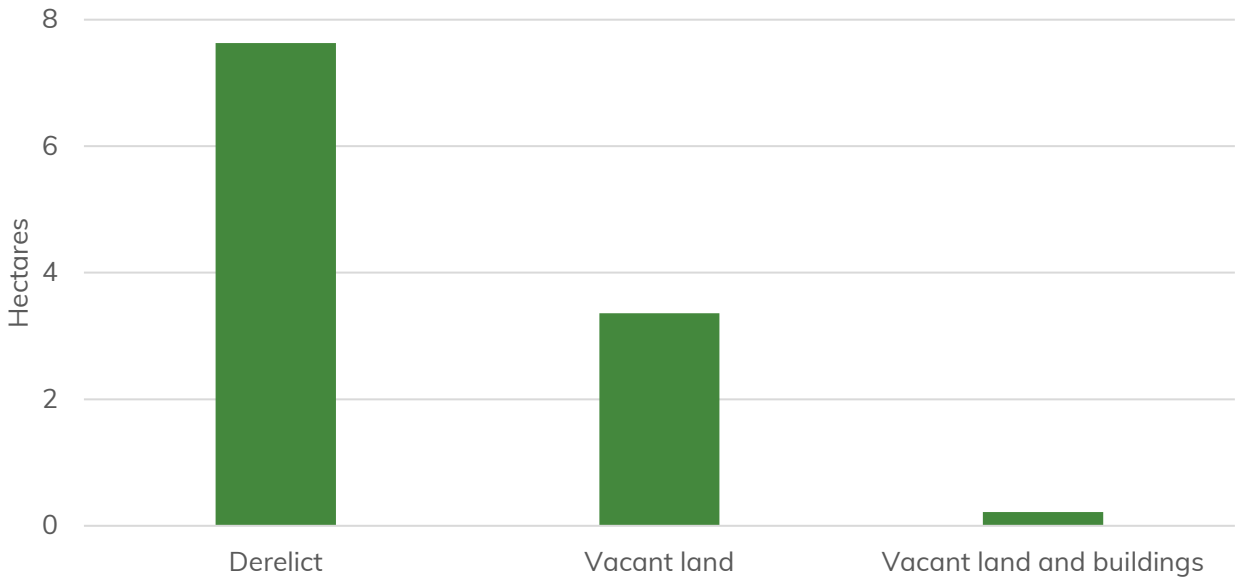


Figure 5 Types of vacant and derelict land in the Cairngorms National Park (Source: Scottish Government, 2024).

Overall, less 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%[2] are living less than 500m from derelict land
- 3% have been living less than 500m from land which has been derelict long-term[3].

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.

All of the sites identified on the vacant and derelict land survey within the National Park (Table 3) meet this definition. However, not all brownfield land is included within the survey.

[2] Figures do not sum due to rounding.
[3] Land that has been identified as being vacant and / or derelict prior to 2006.

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 (Table 4). A significant majority of the land allocated within the adopted Local Development Plan is brownfield or was already developed and allocated to protect existing uses (approximately 70%).

Table 4 Brownfield land allocated in the Cairngorms National Park Local Development Plan 2021[4].

Allocation type	Total allocated land (ha)	Allocated land that is predominantly brownfield / already developed (ha)	Proportion of land that is predominantly brownfield / already developed	Allocated land that is identified by the vacant and derelict land survey 2023 (ha)
Community	10.7	9.1	85%	0.6
Economic development	55.8	55.8	100%	3.7
Housing	85.1	0.8	1%	0
Mixed use	33.8	33.8	100%	0
Tourism	114.1	110.8	97%	0
Total	299.5	210.3	70%	4.3

Land allocated in the current Local Development Plan will need to be reviewed for its effectiveness for it to be considered for allocation in the next Local Development Plan.

Housing land audits, which record information on housing sites that are over 5 units, contain further information on brownfield land. Table 5 provides information from the most recent housing land audits covering the National Park. It shows that alongside the Local Development Plan's allocated sites that there are a further two brownfield sites with planning permission within the National Park.

[4] An Camas Mòr (142 hectares) is not included in table as this is identified as strategic consent and not an allocation. The consent has now lapsed and the site is no longer considered and effective part of the housing land supply.

Table 5 Housing sites classified as brownfield by the housing land audits covering the Cairngorms National Park[5].

Housing land audit	Housing land audit reference	Allocated in Local Development Plan 2021	Site capacity (units)	Completions (units)	Remaining capacity (units)	Site area (ha)
Aberdeen City and Shire 2023	M/BR/H/011	Yes	15	0	15	0.4
Highland Council 2023	19/04385/FUL	No	27	0	27	0.6
	20/00322/FUL	No	8	1	7	0.06
	Aviemore_M1	Yes	128	49	79	33.1

Data on brownfield land that are not allocated in the Local Development Plan and / or does not fulfil the requirements for identification within the derelict and vacant land survey or housing land audits is not available. The Park Authority will need to consider the identification of brownfield land through the site selection process for the Proposed Plan.

Empty buildings

Information on empty buildings can be derived from a number of sources, including:

- Vacant and derelict land survey
- Buildings at risk register
- Household estimates
- Town centre health checks.

Invercauld Gardens is the only site on the 2024 vacant and derelict land survey identified as having empty buildings. Its previous use is recorded as residential and its ownership is recorded as unknown.

There are 27 buildings at risk in the Cairngorms National Park, 23 of which are vacant and a further two that are only partly occupied. They are relatively evenly split between Highland and Aberdeenshire areas of the National Park, with 12 located in the former and 15 in the latter. Only 6 of the buildings on the register are located within settlements (Figure 6).

[5] Angus, Moray and Perth and Kinross Council housing land audits do not identify any brownfield sites within the Cairngorms National Park.

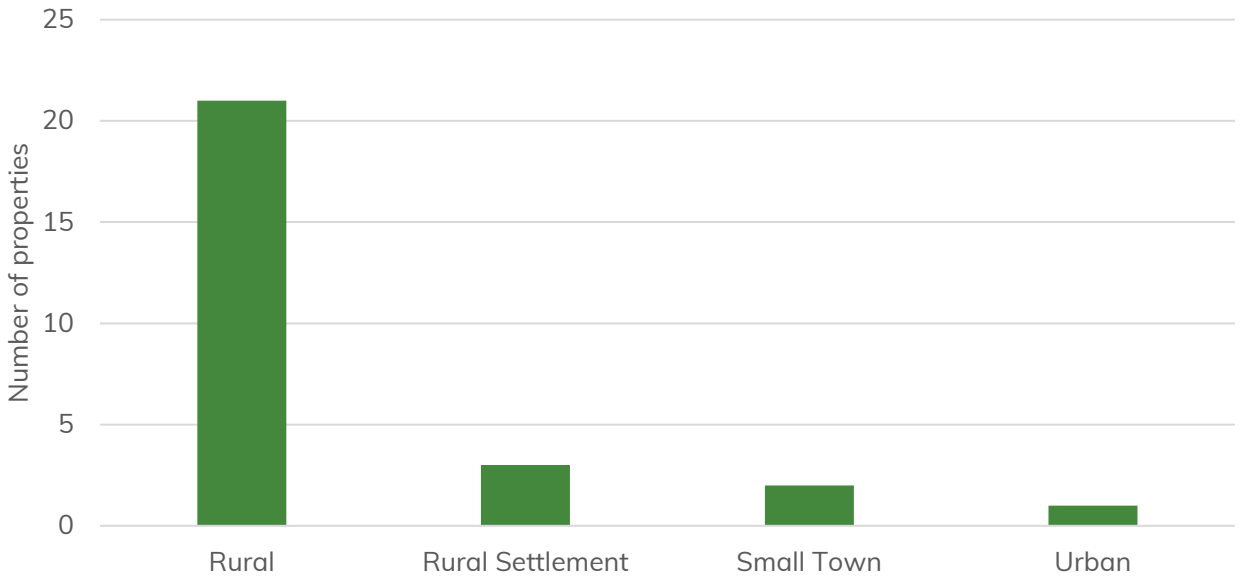


Figure 6 Location types of buildings at risk within the Cairngorms National Park (Royal Commission on the Ancient and Historical Monuments of Scotland, 2023).

Matters relating to buildings at risk, including their condition and risk status are covered in more detail in the Historic and Cultural Heritage section of the Evidence Report[6].

According to Scottish Government's household estimates, in 2023 there were 632 vacant residential dwellings in the National Park, equating to approximately 4% of the housing stock (Figure 7). Of these 459 are classified as being long term empty dwellings[7].

Further consideration will be given to ineffective stock, of which vacant residential dwellings are a component, in the housing section of the Evidence Report.

[6] https://cairngorms.co.uk/wp-content/uploads/2024/07/Topic-paper-Historic-and-cultural-heritage-Engagement-version.pdf
[7] These are generally properties which have been empty for more than 6 months and are liable for council tax.

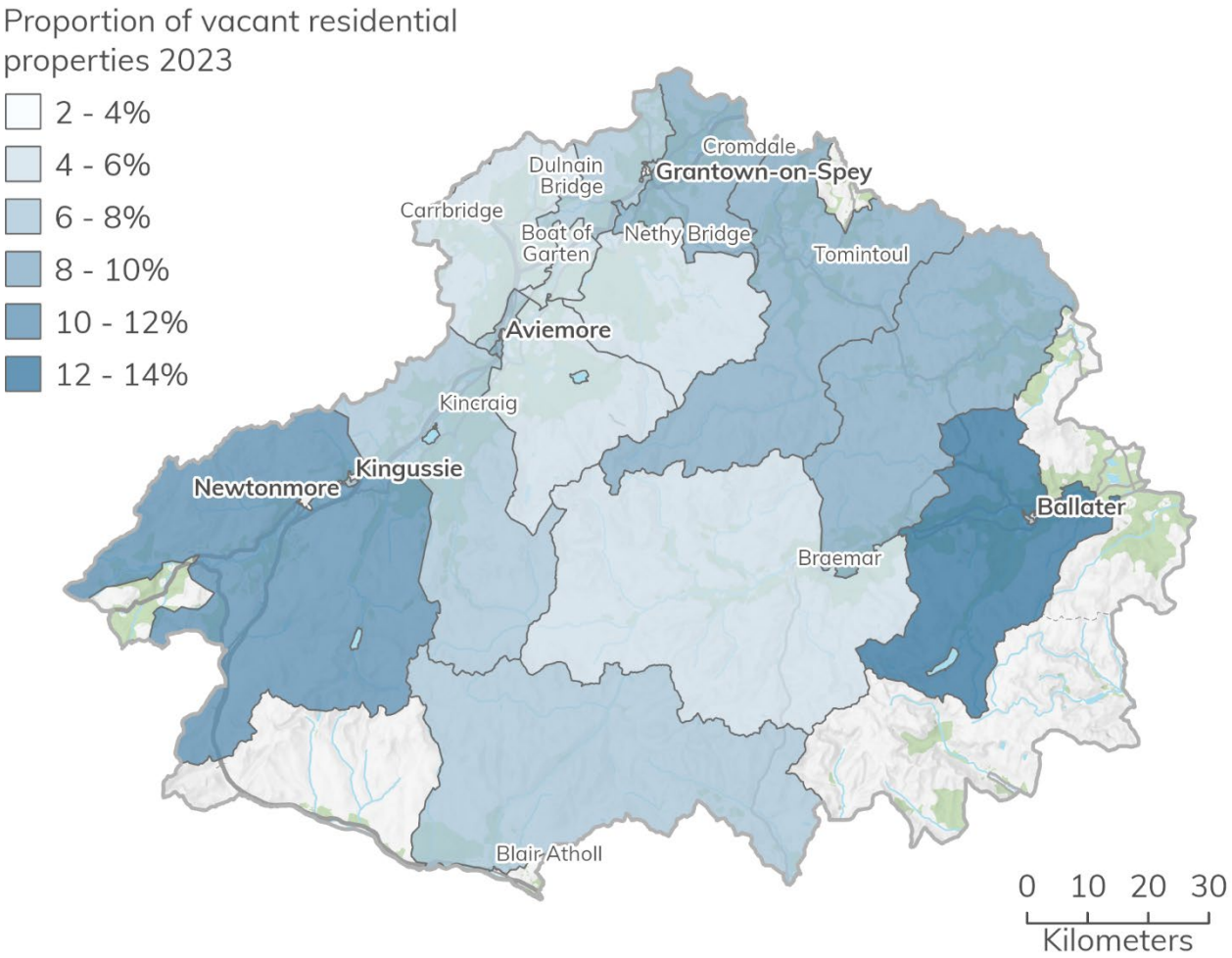


Figure 7 Proportion of residential properties in the Cairngorms National Park that are vacant. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority.

Town centre health checks in Aviemore, Ballater, Grantown on Spey, Kingussie and Newtonmore were carried out in 2016, 2018 and 2023. Key to the consideration of this topic is the breakdown of commercial uses in the centres, including the change in vacancy rates (Table 6).

Table 6 Vacancy rates for commercial properties with town centre boundaries as identified in the Cairngorms National Park Local Development Plan 2021.

Centre	Number of vacant properties 2016	Proportion of vacant properties 2016	Number of vacant properties 2023	Proportion of vacant properties 2023	Change between 2016 and 2023
Aviemore	3	5%	6	8%	+3
Ballater	12	22%	2	3%	-19
Grantown on Spey	7	9%	7	9%	0
Kingussie	6	13%	10	17%	+4
Newtonmore	3	20%	1	7%	-2

The small size of the town centres means that small changes in the number of vacant properties can lead to large proportional changes between surveys. Generally, vacancy rates are relatively low compared to the Scottish average, which in quarter 2 of 2023 were 15.1% for high streets and 20.7 for shopping centres[8].

Contaminated land

Land is legally defined as 'contaminated' where substances are causing or could cause significant harm to people, property or protected species as well as causing significant pollution to surface waters (for example lakes and rivers) or groundwater. Land can become contaminated by a variety of substances, from heavy metals to agricultural waste. The environmental, financial and legal implications of this can be substantial.

Local authorities are the primary regulator for the contaminated land regime (Scottish Environment Protection Agency also has certain responsibilities) to regulate activities and assist in the management and remediation of contaminated land.

There is no confirmed (and remediated) contaminated land within the National Park and while localised contamination may exist at certain locations within National Park boundary, for example at sites formally used as sawmills, it is not of an order that is likely to cause significant harm to the wider environment. Therefore, while the potential for contaminated land can play a role in the assessment of proposed development sites, there are no broader implications of the Proposed Plan's spatial strategy.

[8] https://www.scottishfinancialnews.com/articles/scottish-retail-vacancy-rates-surge-to-18-month-high

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.

This section of the evidence report deals with matters relating to soils within the Cairngorms National Park.

Carbon rich soils

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.

Figure 8 shows a measure of estimated peat depth while Figure 9 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 7 provides details on the carbon and peatland classes shown on Figure 9.

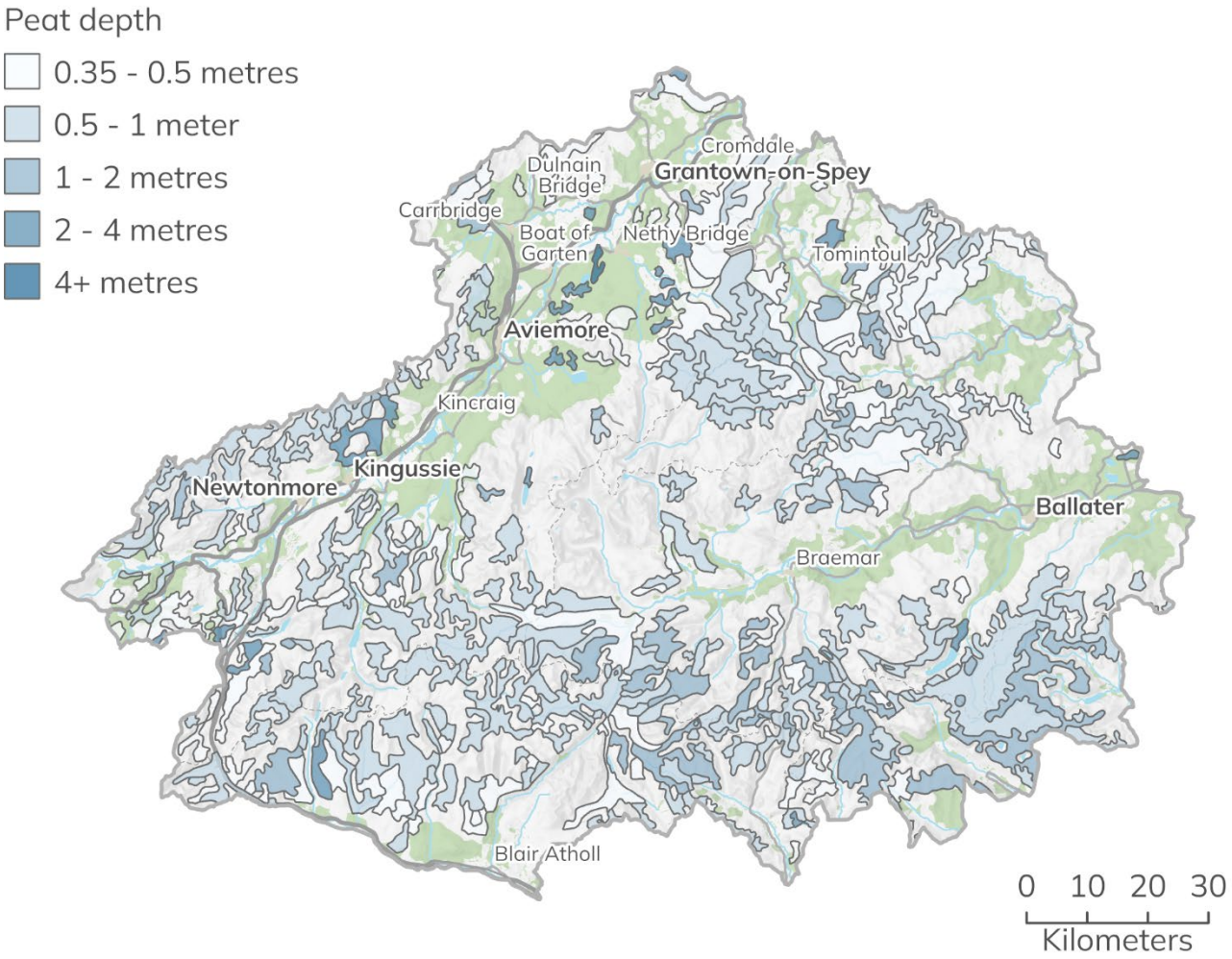


Figure 8 Depth of peat in the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © James Hutton Institute 2024.

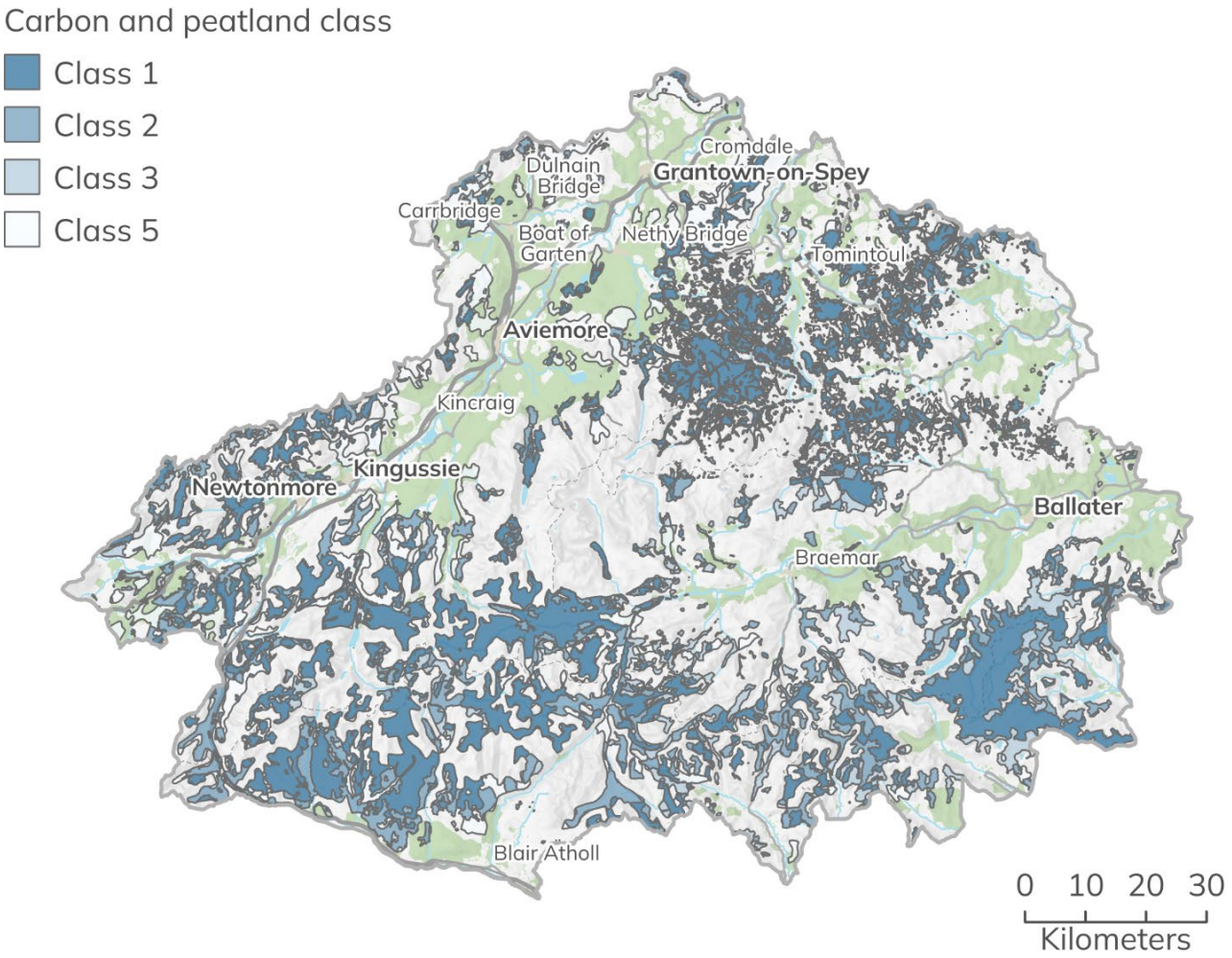


Figure 9 Carbon and peatland classes across the Cairngorms National Park (NatureScot, 2016). Table 7 provides information on the classes shown on this map.[9] Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © NatureScot 2024.

Table 7 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	Nationally important carbon-rich soils, deep peat and priority peatland habitat. Areas of	Peat soil with occasional peaty soil	Peatland or areas with high potential

[9] Class 4 soils are not included on the map as they are areas that are unlikely to include carbon-rich soils.

Class	Class description	Indicative soil	Indicative vegetation
	potentially high conservation value and restoration potential.		to be restored to peatland
3	Dominant vegetation cover is not priority peatland habitat but is associated with wet and acidic type. Occasional peatland habitats can be found. Most soils are carbon-rich soils, with some areas of deep peat.	Predominantly peaty soil with some peat soil	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.	Peat soil	No peatland vegetation

Blanket bog is the second most extensive habitat within the National Park and is susceptible to erosion from human activity and impacted upon 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 10).

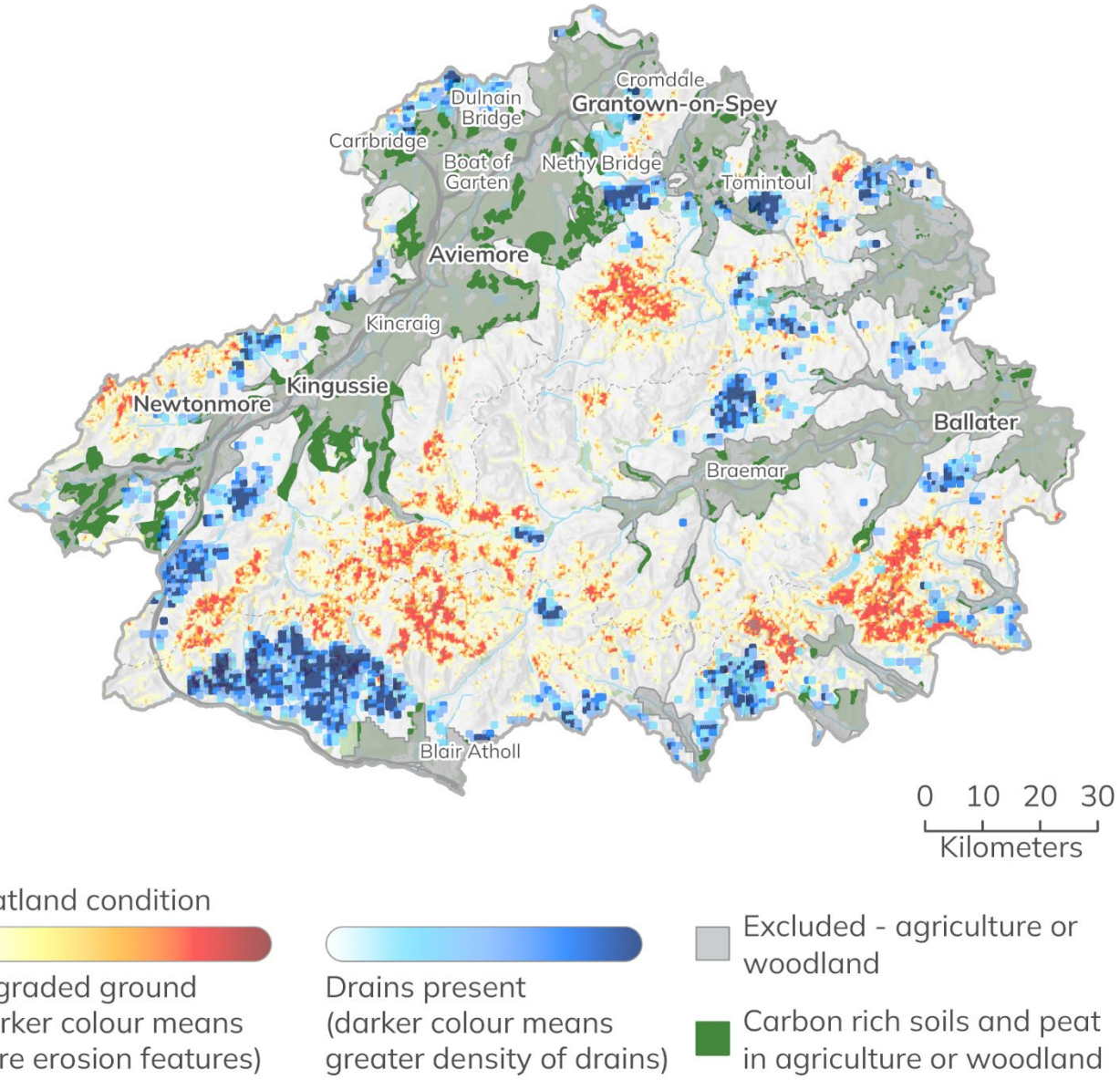


Figure 10 Condition of peatland within the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority.

Land capability for agriculture

Land Capability Classification for Agriculture mapping provides detailed information on soil, climate and relief for those involved in the management of land use and resources. The classification ranks land from 1 to 7 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.

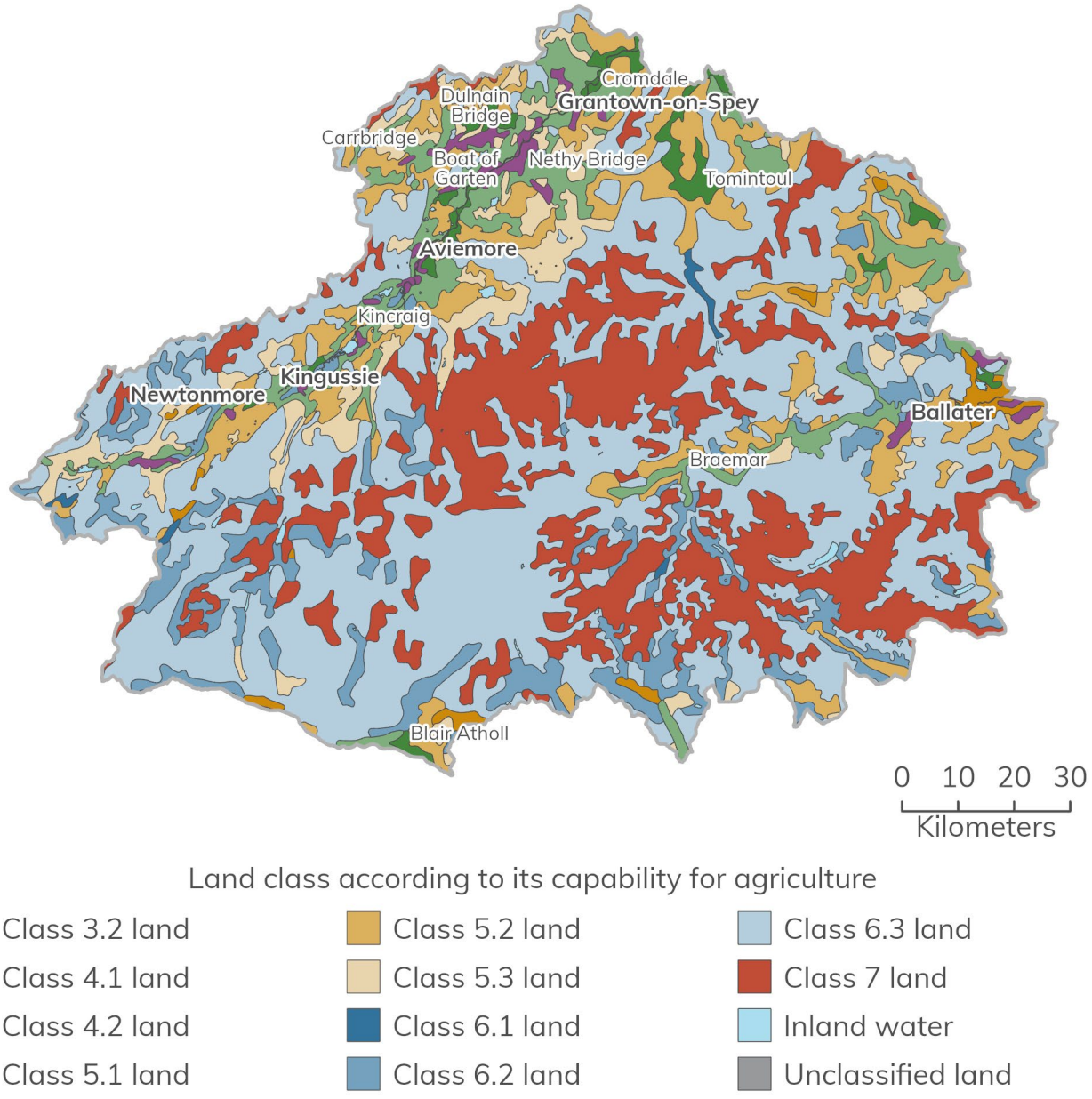


Figure 11 Land capability for agriculture within the Cairngorms National Park. Table 8 provides information on the classes shown on this map. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © James Hutton Institute 2024.

There are no areas of prime agricultural land within the Cairngorms National Park, although there are areas of land in Strath Spey 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 11).

Table 8 Definition of land classes.

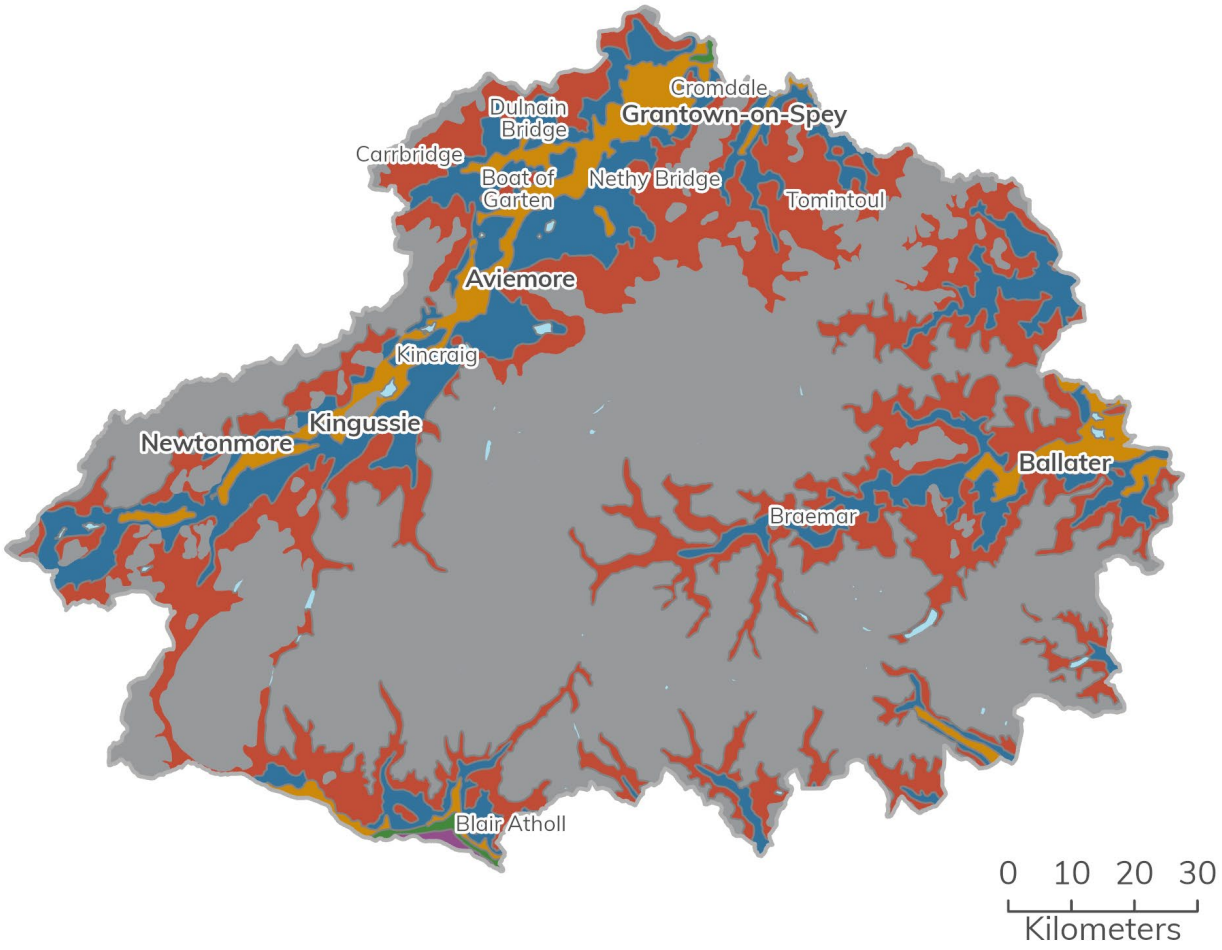
Class	Class description
1	Land capable of producing a very wide range of crops. Cropping is highly flexible and includes the more exacting crops such as winter harvested vegetables (cauliflowers, brussels sprouts, leeks), The level of yield is consistently high.
2	Land capable of producing a wide range of crops. Cropping is very flexible and a wide range of crops can be grown though some root and winter harvested crops may not be ideal choices because of difficulties in harvesting.
3.1	Land in this division is capable of producing consistently high yields of a narrow range of crops (principally cereals and grass) and/or moderate yields of a wider range (including potatoes, field beans and other common root crops). Short grass leys are common.
3.2	Land in this division is capable of average production but high yields of barley, oats and grass are often obtained. Other crops are limited to potatoes and forage crops.
4.1	Land capable of producing a narrow range of crops. Land in this division is suited to rotations which, although primarily based on ley grassland, include forage crops and cereals for stock feed. Yields of grass are high but difficulties of utilization and conservation may be encountered. Other crop yields are very variable and usually below the national average.
4.2	Land capable of producing a narrow range of crops. The land is primarily grassland with some limited potential for other crops. Grass yields can be high but the difficulties of conservation or utilisation may be severe, especially in areas of poor climate or on very wet soils. Some forage cropping is possible and, when the extra risks involved can be accepted, an occasional cereal crop.
5.1	Restricted to grass production. Establishment of a grass sward and its maintenance present few problems and potential yields are high with ample growth throughout the season. Patterns of soil, slope or wetness may be slightly restricting but the land has few poaching problems. High stocking rates are possible.

Class	Class description
5.2	Restricted to grass production. Sward establishment presents no difficulties but moderate or low trafficability, patterned land and/or strong slopes cause maintenance problems. Growth rates are high and despite some problems of poaching satisfactory stocking rates are achievable.
5.3	Restricted to grass production. Land in this division has properties which lead to serious trafficability and poaching difficulties and although sward establishment may be easy, deterioration in quality is often rapid. Patterns of soil, slope, and wetness may seriously interfere with establishment and/or maintenance. The land cannot support high stock densities without damage and this may be serious after heavy rain even in summer.
6.1	Land capable only of use as rough grazing. Land in this division has high proportions of palatable herbage in the sward, principally the better grasses, e.g. meadow grass-bent grassland and bent-fescue grassland.
6.2	Land capable only of use as rough grazing. Moderate quality herbage such as white and flying bent grasslands, rush pastures and herb-rich moorlands or mosaics of high and low grazing values characterise land in this division.
6.3	Land capable only of use as rough grazing. This vegetation is dominated by plant communities with low grazing values. Particularly heather moor, bog heather moor and blanket bog.
7	Land of very limited agricultural value. Land with extremely severe limitations that cannot be rectified.

Land capability for forestry

The National scale land capability for forestry map provides information on the potential for land to grow trees based on a number of factors including soil, climate and topography (Figure 12). The use of this land for forestry may yield a number of benefits, including carbon sequestration.

Further matters relating to woodlands and woodland expansion will be covered in the Natural Heritage section of the Evidence Report.



Classes of land capability for forestry

- Class F1 - Land with excellent flexibility for the growth and management of tree crops
- Class F2 - Land with very good flexibility for the growth and management of tree crops
- Class F3 - Land with good flexibility for the growth and management of tree crops
- Class F4 - Land with moderate flexibility for the growth and management of tree crops
- Class F5 - Land with limited flexibility for the growth and management of tree crops
- Class F6 - Land with very limited flexibility for the growth and management of tree crops
- Class F7 - Land unsuitable for producing tree crops

Figure 12 Land capability for forestry within the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © James Hutton Institute 2024.

Soil sealing and soil compaction

Policy 5 of National Planning Framework 4 seeks to avoid the compaction and erosion of soils. Data on risks associated with these factors is limited, with only part of the National Park benefitting from risk-based mapping from compaction (Figure 13 and Figure 14). The impact of development in this regard is limited and specific to the location and design of development sites. These issues are therefore unlikely to impact on the spatial strategy or policy content of the Local Development Plan. However, they may play a role in the choice of development sites and / or the identification of site-based requirements for allocations.

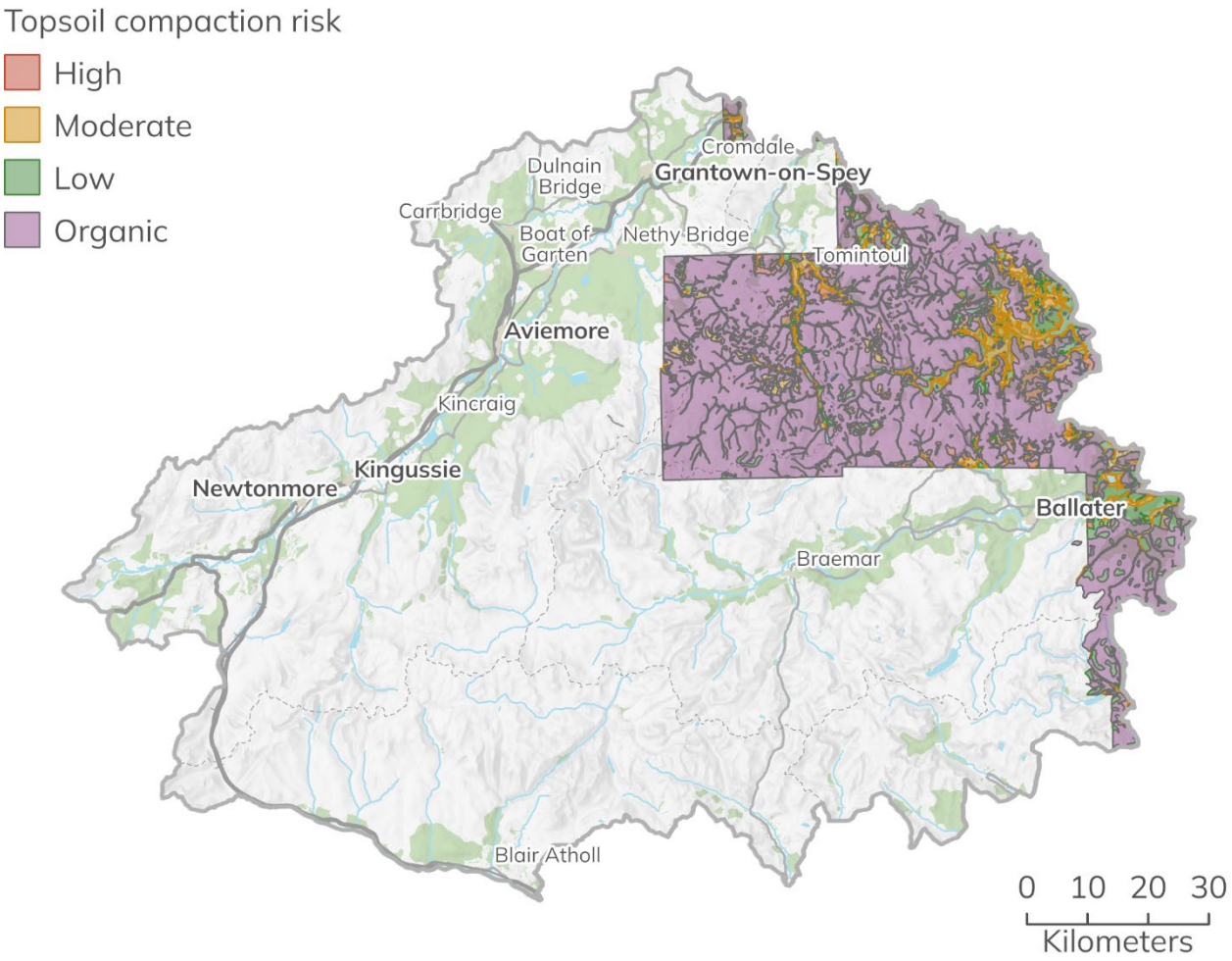


Figure 13 Risk of the topsoil becoming compacted due to the passage of machinery. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © James Hutton Institute 2024.

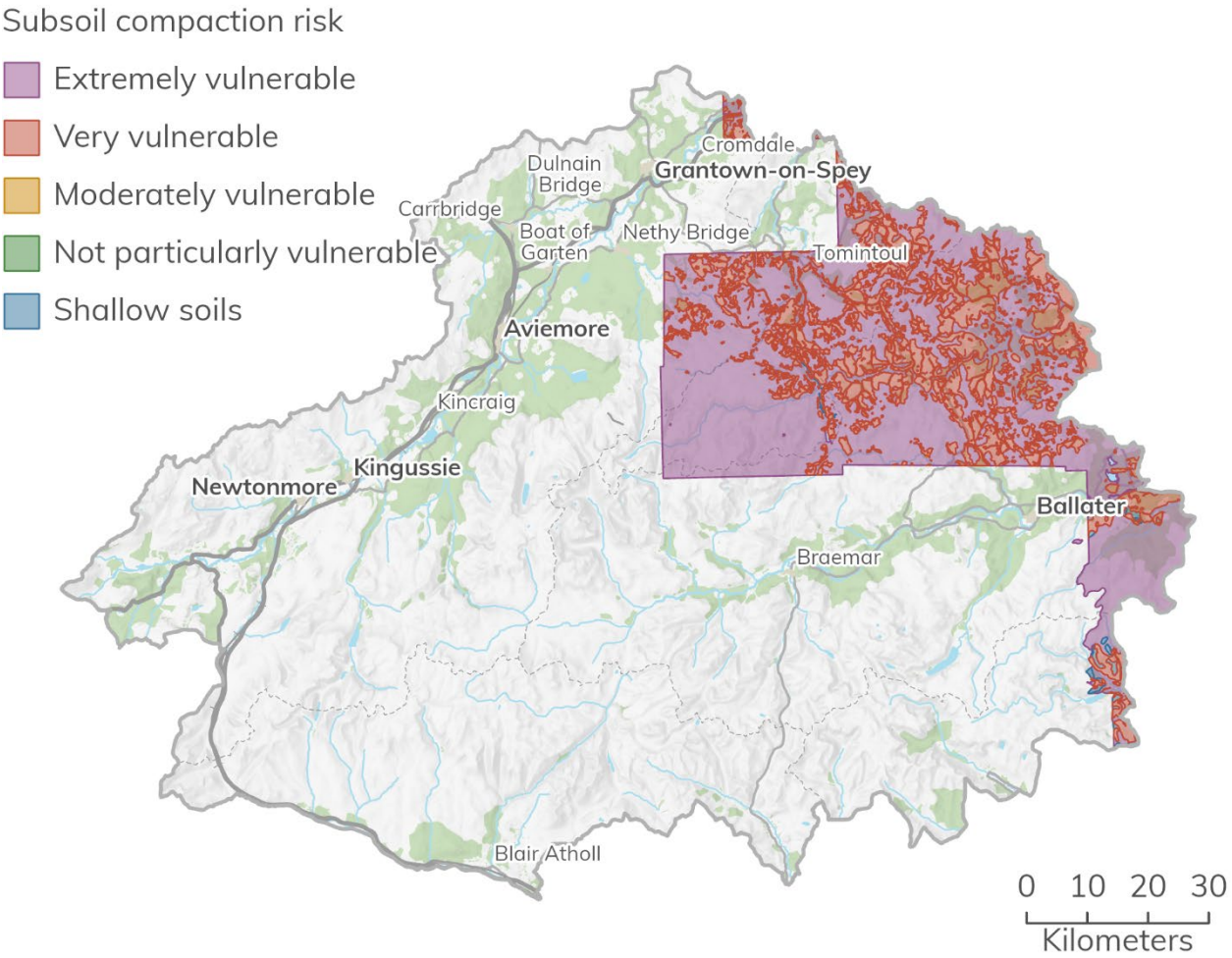


Figure 14 Risk of the subpsoil becoming compacted due to the passage of machinery. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © James Hutton Institute 2024.

Soil erosion and landslides

Soil erosion by water or wind is a natural process where soil particles become detached and are transported within the landscape. Features of soil erosion may be found throughout the Cairngorms National Park, with the area partially covered by risk mapping (Figure 15). For example, landslides and debris flows are a relatively common occurrence on many of the National Park's hill slopes, which have been over-steepened by glaciation. The rate of soil loss via erosion and the incidence of landslides can be increased by removing the vegetation cover that protects the soil (e.g. ploughing to grow crops, deforestation) or by engineering works. Tillage erosion also leads to the redistribution of soil downslope.

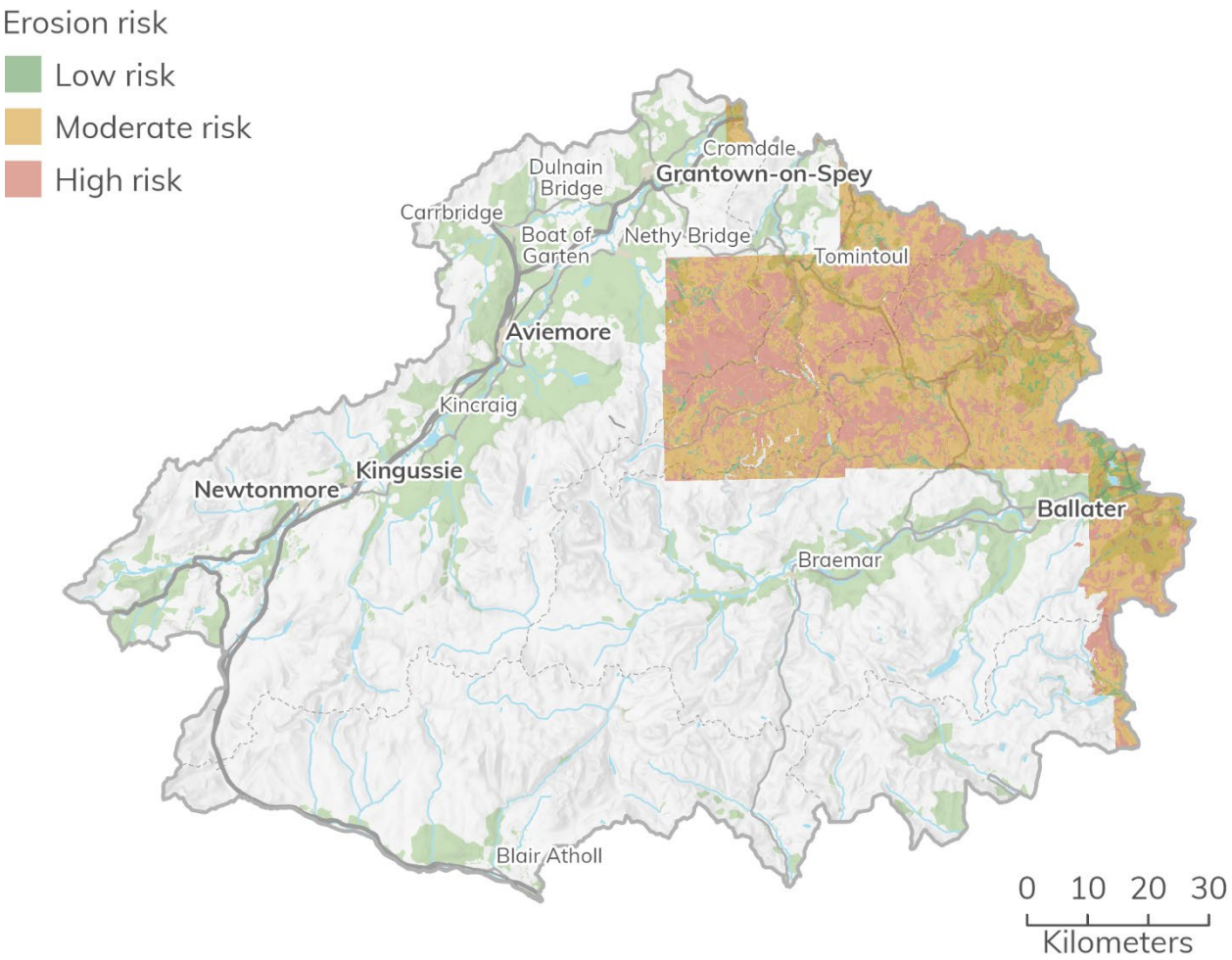


Figure 15 Simplified map of soil erosion risk within the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © James Hutton Institute 2024.

The erosion of upland organic soils is also prevalent in some parts of the National Park, and in particular the Monadhliath Mountains, the southern part of which fall within its boundary. The mechanisms that lead to erosion in these soils are not fully understood although historic overgrazing by sheep and deer may be a contributory factor. There is also evidence that changes in climate over many years may be partly responsible for the development of gully systems in these areas.

Landslides and debris flows have occurred in clusters over the last 7,000 years which may be related to climatic factors such as the frequency of extreme rainfall events, although deforestation is also likely to be an important factor.

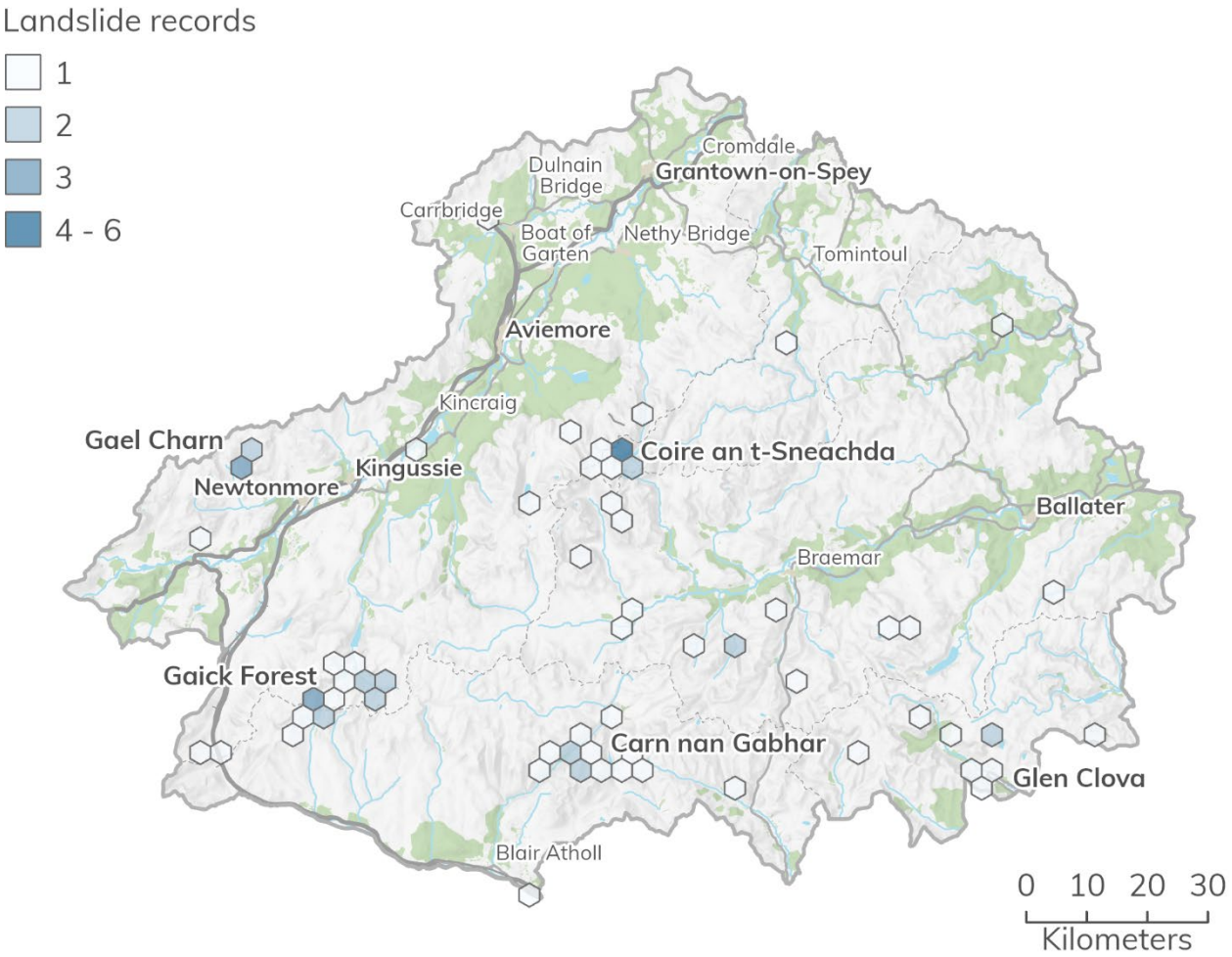


Figure 16 Density of landslide records on the National Landslide Database within the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © British Geological Survey 2024.

Information on the extent and prevalence of historic landslides is provided by the British Geological Survey's National Landslide Database. The database identifies five clusters of recorded landslides within the National Park:

- Coire an t-Sneachda
- Gael Charn
- Gaick Forest
- Carn nan Gabhar
- Glen Clova.

Other locations are also recorded.

Landslide and debris flow activity is reported to have increased over the last 200 – 500 years and it is thought that localised extreme rainfall was the major contributing factor

to the Scottish landslides in 2004. Triggering of peat slides is also commonly attributed to intense rainfall events.

Climate change is therefore likely to lead to an increase in the frequency of landslides and in the intensity of soil erosion.

Cultural and locally important soils

According to Policy 5 of National Planning Framework 4, local development plans are expected to protect locally, regionally, nationally, and internationally valued soils, including 'land of lesser quality that is culturally or locally important for primary use'.

While there is no nationally consistent definition of what constitutes 'land of lesser quality that is culturally or locally important for primary use', examples are provided on page 154 of National Planning Framework 4. These are:

- Food production
- Flood management
- Water catchment management
- Carbon storage

Matters relating to food production (see pages 15 and 30) and carbon storage (see page 26 and 33) are covered elsewhere in this section of the Evidence Report. Details relating to flood management and water catchment management are covered in detail within the Strategic Flood Risk Assessment Report prepared to support the preparation of the local development plan. The report identifies areas of flood risk, flood management schemes and proposals, locations where natural flood management techniques may be used, and past and current projects being undertaken to restore floodplains and wetland systems. These matters will be summarised in the Climate Change and Flood Risk section of the Evidence Report. The full Strategic Flood Risk Assessment Report may be viewed here:

- https://cairngorms.co.uk/wp-content/uploads/2024/03/Cairngorms-Strategic-Flood-Risk-Assessment-2024.pdf

National Planning Framework 4 does not provide any examples of what might be classified as 'culturally' important. Examples of cultural and locally important soils may include crofting field patterns (Figure 17) and a broad range of soils that have been historically modified by historic practices. Very little holistic data exists regarding these cultural soils. Much of the impact of these soils is managed at a site level by information relating to the historic assets and places. The impacts of the spatial strategy on

designed landscapes and historic sites (such as Properties in Care, Gardens and Designed Landscapes, Scheduled Monuments and records on the National Monuments Record of Scotland) are best identified as part of the Historic and Cultural Heritage section of the Evidence Report[10] on the principle that the objective should be led by the significance of the site and not the soil that is a component of that site. It is therefore not considered any further in this paper.

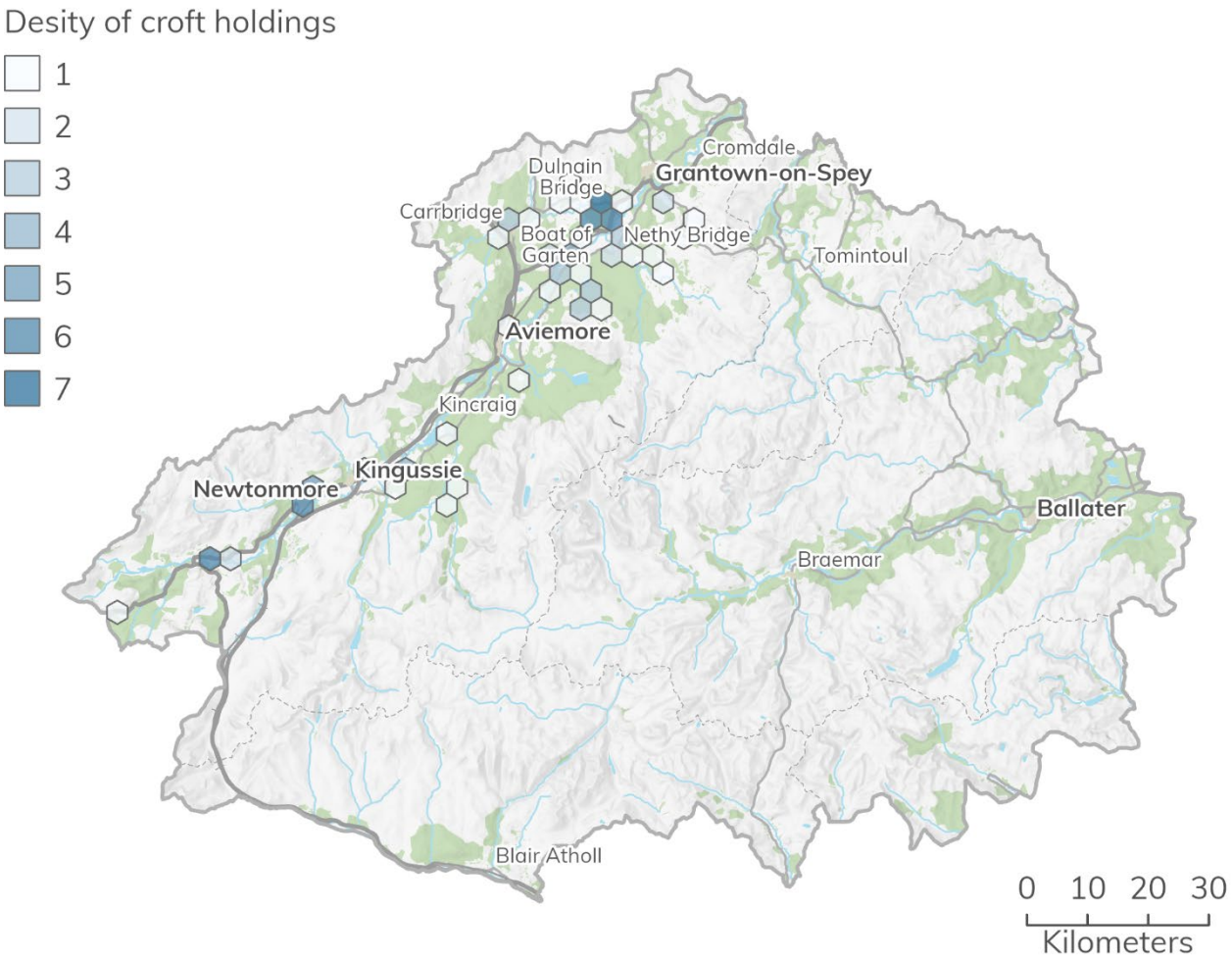


Figure 17 Density of croft holdings within the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority.

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

[10] https://cairngorms.co.uk/wp-content/uploads/2024/07/Topic-paper-Historic-and-cultural-heritage-Engagement-version.pdf

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 18 and Table 9 provides details of quarries within the National Park that have planning permission and / or have planning applications pending decision. The following quarries currently have applications pending decision[11]:

- 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 by the 2023 vacant and derelict land survey.

[11] The planning applications are being determined by the Highland Council. The planning references provided are therefore those of the Highland Council,

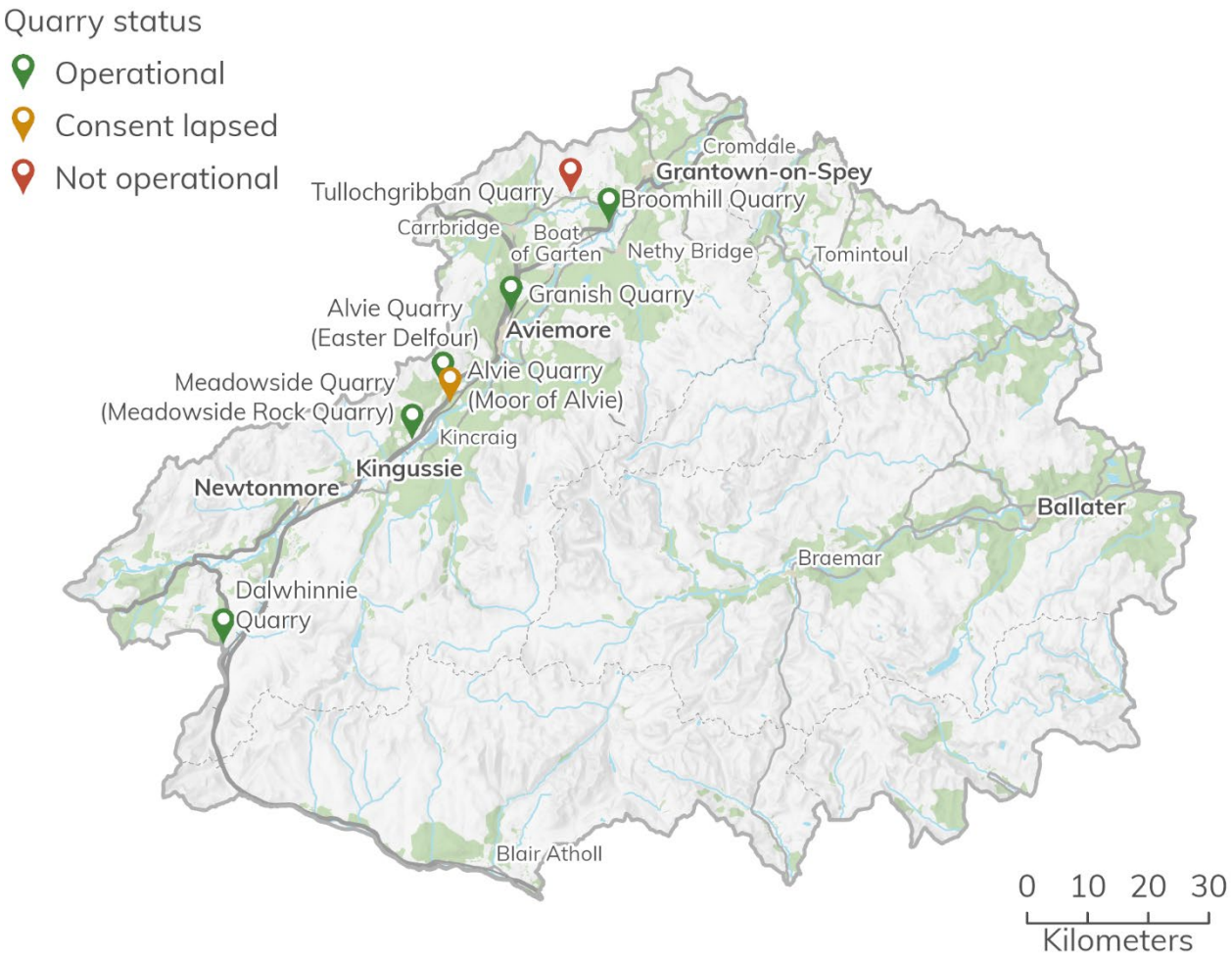


Figure 18 Quarries with consent or planning applications pending decision within the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. ©Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority.

While data on permitted reserves and planning permission timescales is available to the National Park Authority, information on extraction rates, as gathered and published in the 2019 aggregates survey, is not. This is because the data is commercially sensitive and cannot be published at the geography of the National Park without issues of disclosure arising. It is therefore not possible to calculate a landbank for construction aggregates within the market areas of the National Park as required by National Planning Framework 4. The National Park Authority is however satisfied that there is sufficient access to construction aggregates through the quarries active within the local authorities that cover the National Park, both within and outwith its boundary.

Table 9 Quarries with consent or planning applications pending decision within the Cairngorms National Park.[12]

Quarry name	Location	Planning application reference	Consent expires	Status	Annual permitted reserves (tonnes)	Total permitted reserves (tonnes)	Material
Alvie Quarry (Easter Delfour)	Kincraig	00/00279/FULBS	2025	Operational	12,000	No data available	Igneous and metamorphic rock
Meadowside Quarry (Meadowside Rock Quarry)	Kincraig	15/01723/S42	2031	Operational	50,000 – 150,000	No data available	Igneous and metamorphic rock
Alvie Quarry (Moor of Alvie)	Kincraig	11/04428/FUL	2019	Consent lapsed	No data available	No data available	Sand and gravel
Granish Quarry	Aviemore	12/04734/S42	2028	Operational	No data available	No data available	Sand and gravel
Broomhill Quarry	Dulnain Bridge	18/01332/S42	2029	Operational	30,000	120,000	Igneous and metamorphic rock
Dalwhinnie Quarry	Dalwhinnie	18/01434/FUL	2054	Operational	70,000	250,0000	Sand and gravel
Tullochgribban Quarry	Dulnain Bridge	07/00117/FULBS	2042	Not operational	No data available	No data available	Sand and gravel

[12] The planning applications references used in this table are those given by the Highland Council not the Cairngorms National Park Authority. This is due to some consents predating the designation of the National Park.

Geoconservation

Geo-conservation involves recognising, protecting, and managing sites and landscapes identified as important for their rocks, fossils, minerals, or other geological or geomorphological features of interest. Some of the concepts of geo-conservation are still being developed; however, in some areas a good deal has been achieved, particularly in the creation of Scotland's Geodiversity Charter. Policy 33 of National Planning Framework 4 states that proposals for the sustainable extraction of minerals will not be supported if they are likely to result in significant adverse impacts on geodiversity.

There are many definitions of 'geodiversity', but the majority are variations on similar wording. Broadly, it may be defined as: 'The variety of rocks, minerals, fossils, landforms, sediments and soils, together with the natural processes which form and alter them'[13].

As well as being of scientific and cultural importance, geodiversity makes an immense contribution to Scotland's economy, as a source of energy and materials, and as a visitor attraction through its contribution to our unique landscape. Crucially, geodiversity underpins biodiversity through providing mosaics of landforms, soils, water, nutrients and natural processes to support our nationally and internationally important habitats, species and ecosystems.

There are a range of designations that help to safeguard geodiversity within the Cairngorms National Park, including Sites of Special Scientific Interest and Geological Conservation Review sites. Indeed, geodiversity is part of the special qualities of the National Park.

[13] https://data.jncc.gov.uk/data/45dcb105-6043-476c-aa84-1b874d313c94/JNCC-Report-450-FINAL-WEB.pdf

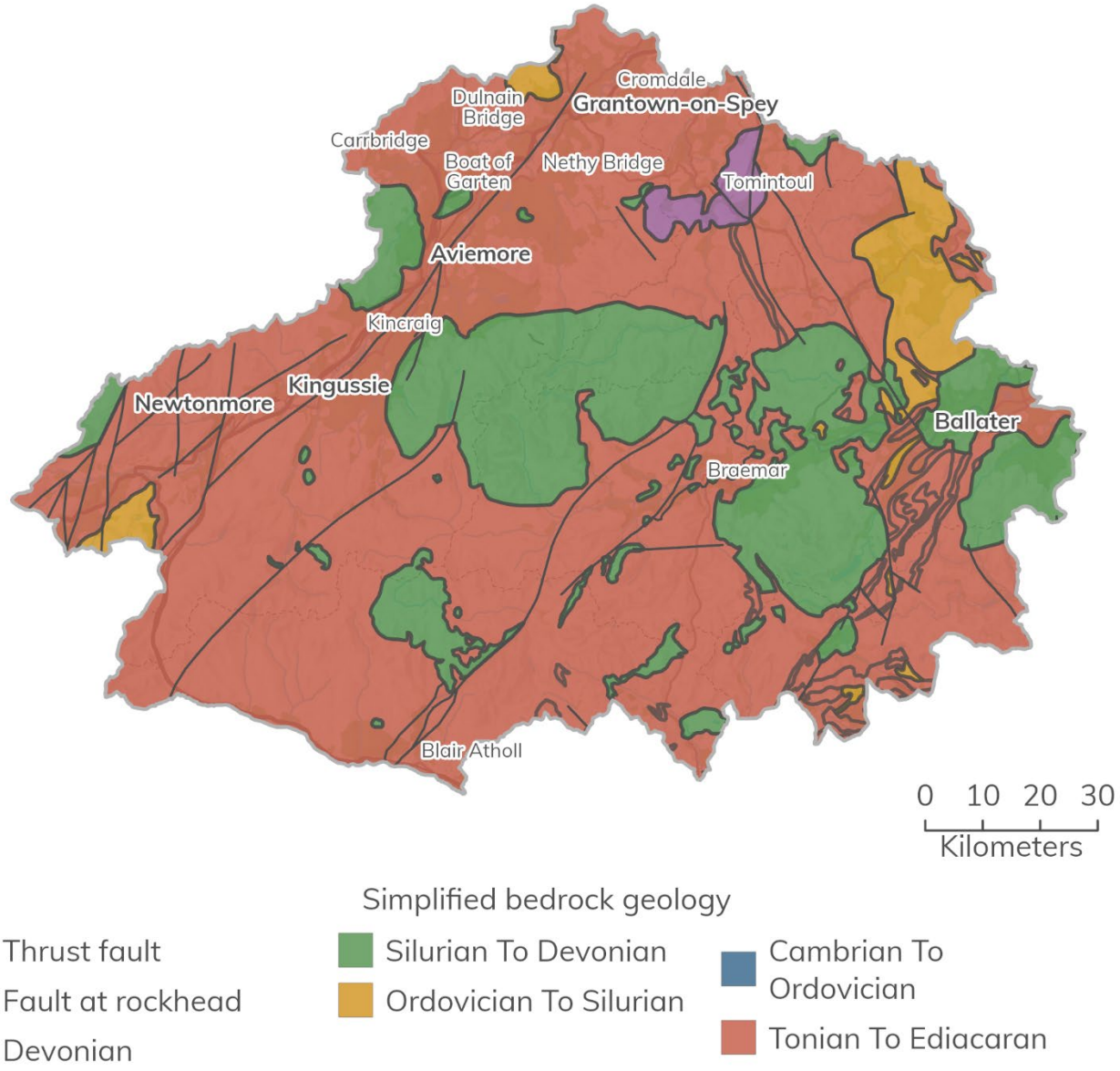


Figure 19 Simplified bedrock geology of the Cairngorms National Park by geological period. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © British Geological Survey 2024.

The landscapes of the Cairngorms National Park have a remarkable history stretching back to some 700 million years (Figure 19). The processes that have led to these old landscapes can be traced today in the rocks, landforms and soils beneath our feet and in the shapes of the straths and mountains around us. These landscapes incorporate a wealth of information about past environmental change and in particular, the Cairngorm Mountains are considered to be one of the finest examples in the world of glaciated granite mountains, notable for their distinctive plateau surfaces, tors and glacially

sculptured features. These mountains therefore represent a precious scientific, educational, environmental and earth heritage asset.

There are 16 Geological and Mixed Sites of Special Scientific Interest within the National Park, covering an area of some 680 km^2 (around 15% of the National Park's area) (Figure 20).

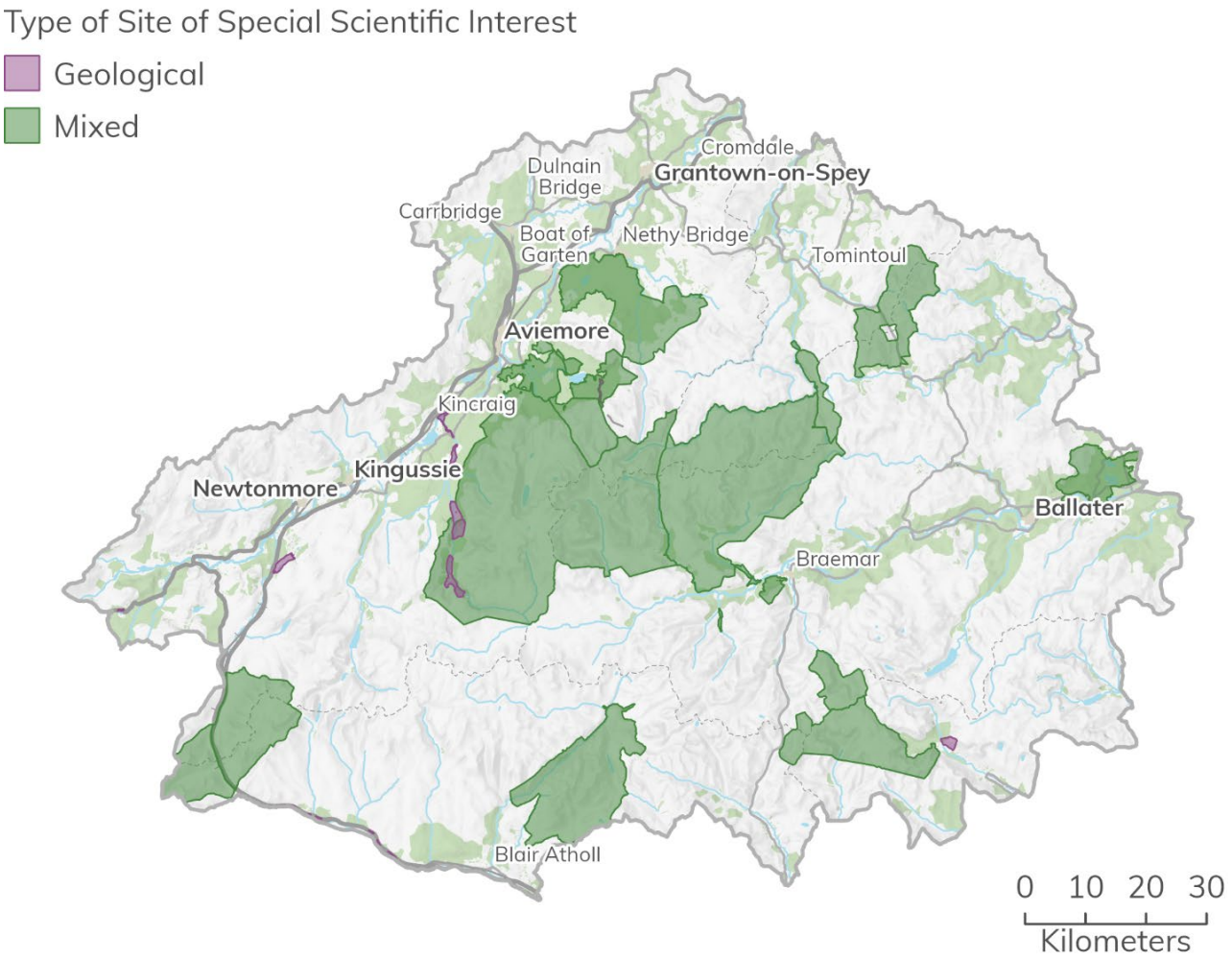


Figure 20 Geological and mixed Sites of Special Scientific Interest in the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © NatureScot 2024.

Further protection is given to certain areas, which includes areas both within and outwith Sites of Special Scientific Interest, by the 39 Geological Conservation Review sites within or overlapping the Cairngorms National Park boundary (Figure 21). Combined they cover an area of around 592 km^2, the vast majority of which lies wholly within the National Park itself. In fact, the majority of this area (around 526 km^2) is

attributed to a single Geological Conservation Review site, the Cairngorms Mountains (site 2284), which is listed for its exceptional assemblage of pre-glacial, glacial, glaciofluvial and periglacial features.

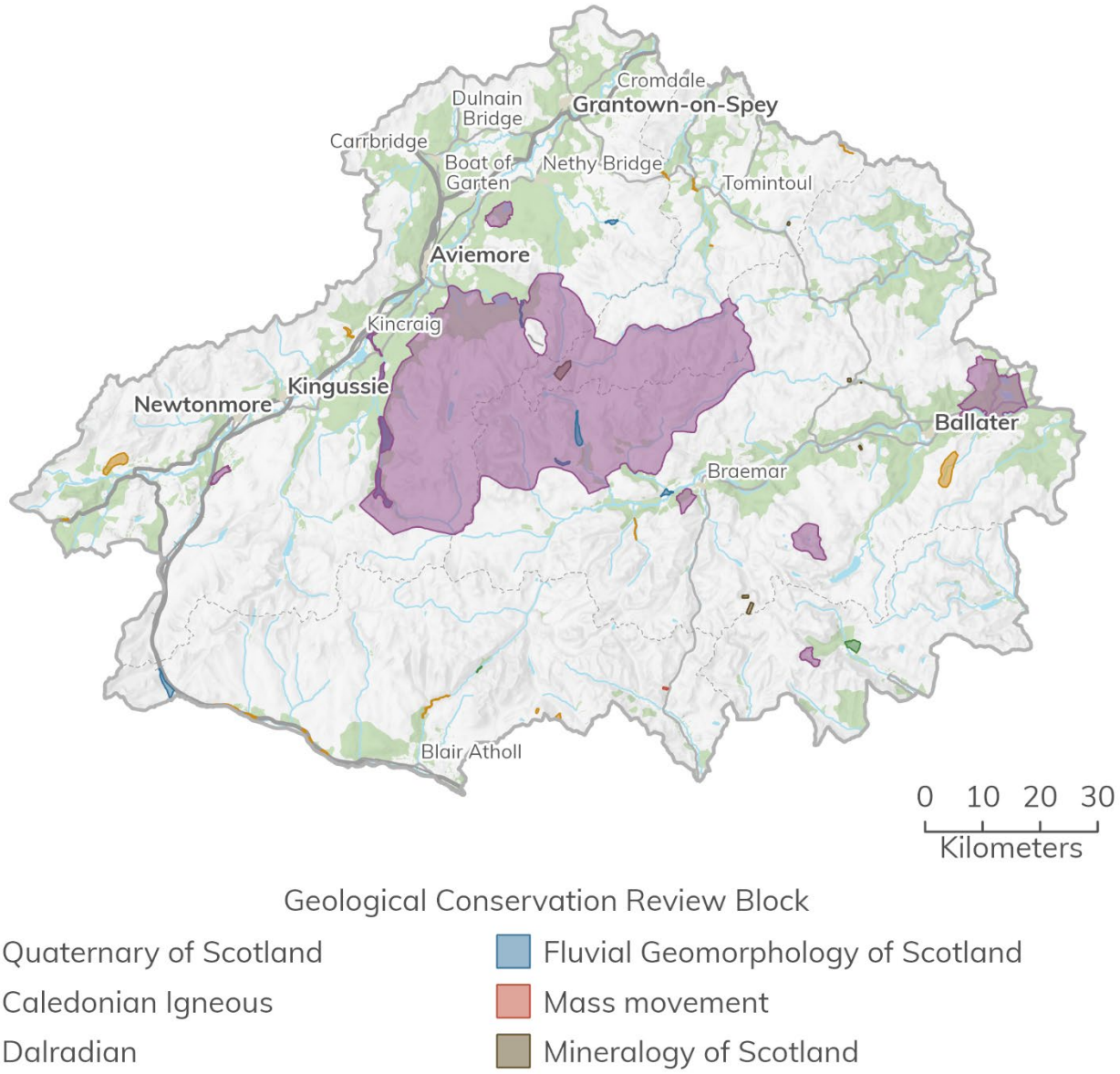


Figure 21 Geological Conservation Review sites within the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © British Geological Survey 2024.

A report on the geodiversity of the National Park by the British Geological Survey on behalf of the National Park Authority was published in 2011. This report represented a first pass at selecting the most important localities for Local Geodiversity Sites in the National Park, based on available information and local knowledge of British Geological

Survey geologists. Thirty-five bedrock geodiversity sites (including 23 Geological Conservation Review Sites) and fifty-four Quaternary sites (including 38 Geological Conservation Review Sites) were proposed as National Park geodiversity sites. These sites were not regarded as the final definitive list, but as a framework to which additional sites can be added as more information becomes available. They do not, unless covered by another form of protection, have any status in themselves. They do however offer further spatial information about the rich geodiversity of the National Park. Further information can be found in:

- https://nora.nerc.ac.uk/id/eprint/18475/1/OR10019.pdf

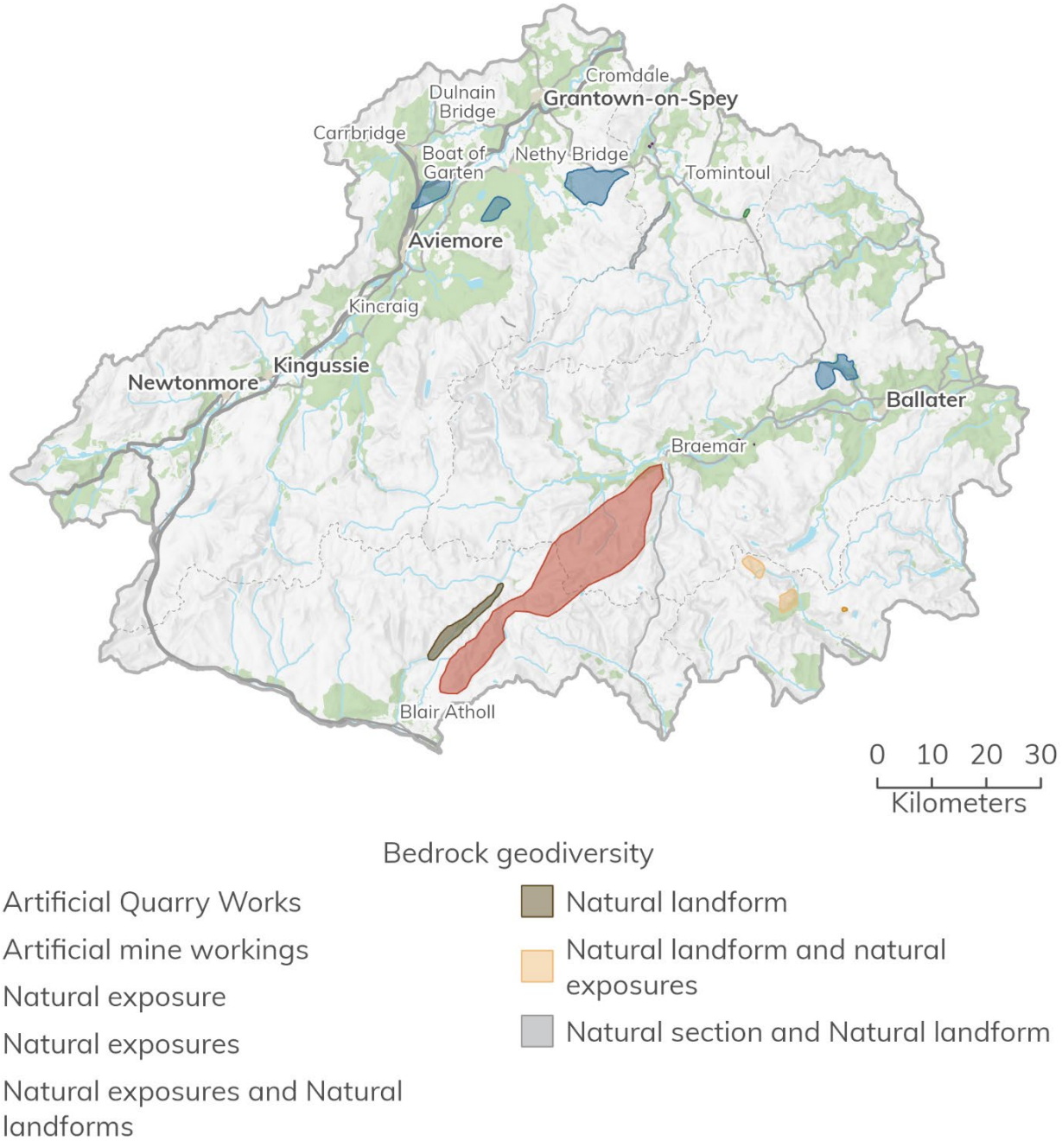
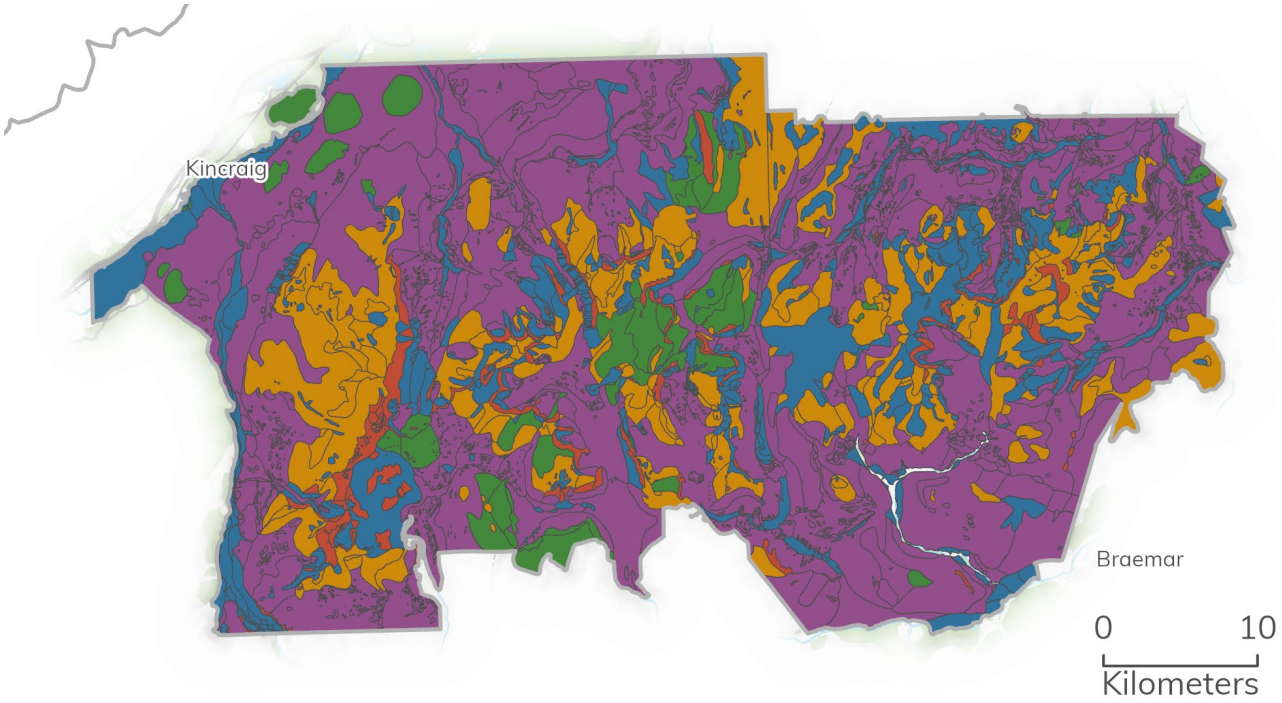


Figure 22 Bedrock geodiversity of the Cairngorms National Park. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © British Geological Survey 2024.

Although British Geological Survey mapping is available for the whole of the Cairngorms National Park, detailed geomorphological information is more limited. However, NatureScot, along with the British Geological Survey, have compiled a spatial inventory of the geomorphology of the Cairngorm Mountains core area (Figure 23).



General geomorphological landforms of the Cairngorm Mountains

- Landforms of glacial and glaciofluvial deposition (e.g. moraines, eskers, kames, kettle holes, drift, delta deposits)
- Landforms of glacial erosion (e.g. roche moutonnées, ice-scoured bedrock, thin regolith covered rock, corrie headwalls)
- Relict periglacial landforms (e.g. blockfields, boulder lobes, patterened ground, solifluction sheets)
- Postglacial and contemporary landforms and processes (e.g. acticve river corridors, peat, debris cones and slopes, large scale rockfall deposits, wetlands)
- Other landform types (e.g. rock outcrops, stable vegetated surfaces, torrs)

Figure 23 Geomorphological heritage of the Cairngorms Mountains. Reproduced by permission of Ordnance Survey on behalf of His Majesty's Stationery Office. © Crown copyright and database right 2024. All rights reserved. Ordnance Survey Licence number AC0000821810, Cairngorms National Park Authority. Contains data © British Geological Survey and NatureScot 2024.

The inventory identifies the location and extent of the main landform assemblages: landforms of glacial erosion; landforms of glacial and glaciofluvial deposition; relict periglacial landforms; and postglacial and contemporary landforms and processes. The spatial data is complemented by descriptions of the landforms and additional information on larger landscape features, the survival of relict non-glacial features and details of Late glacial and Holocene paleoenvironmental records. Together, they provide a basic source of information for the development of conservation management and interpretation of the Cairngorm Mountains.

The inventory highlights that understanding the links between geodiversity and biodiversity is particularly crucial for conservation management in dynamic environments such as the Cairngorm Mountains, where natural processes (for example, floods, sediment transport and flow regimes) maintain habitat diversity and ecological functions. It also highlights that consideration of geomorphological sensitivity is a vital part of working in sympathy with natural processes, in assessing natural hazards and implementing sustainable management of ecosystems, particularly under future climate change scenarios.

The inventory recommends that geomorphology is integrated in current monitoring programmes in the Cairngorm Mountains and that much more could be done to raise wider awareness of geodiversity interests within the overall framework for interpretation within the Cairngorms National Park. Issues include raising awareness of geodiversity per se, as well as the links between geodiversity and other elements of the landscape and land use.

Within the context of the Cairngorms National Park, the diversity of earth heritage interests also offers potential opportunities for local involvement in income-generating tourism.

Summary of implications for proposed plan

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.

The Proposed Plan should seek to:

- Identify opportunities for the sustainable reuse of brownfield land including vacant and derelict land and empty buildings.
- Protect carbon-rich soils.
- Protect soils that are of local or cultural value.
- Limit soil sealing and soil compaction from development.
- Avoid development in areas of high erosion or landslide risk.
- Identify and safeguard locations of important workable mineral resources which are of economic or conservation value.
- Safeguard the geological and geomorphological heritage of the area.