

North Lanarkshire Local Development Plan 2

Survey Paper - Evidence Report

Topic 5 Soils

1. Introduction

- 1.1 The Planning (Scotland) Act 2019 requires Planning authorities to prepare an Evidence Report that contains sufficient information to enable the planning authority to prepare a Local Development Plan.
- 1.2 The Evidence Report has two main functions. The first is that it should set out the evidence that will be used to inform and prepare a new Local Development Plan. The second is for local authorities to identify the issues they think based on the evidence presented that need to be addressed by the new Local Development Plan, and for other interested parties and stakeholders to express what they think are the issues.
- 1.3 There are specific matters that the Evidence Report must cover; these are set out in the Planning (Scotland) Act 2019:
 - *the principal physical, cultural, economic, social, built heritage and environmental characteristics of the district;*
 - *the principal purposes for which the land is used;*
 - *the size, composition, health, and distribution of the population of the district;*
 - *the housing needs of the population of the area, including, in particular, the needs of persons undertaking further and higher education, older people and disabled people;*
 - *the availability of land in the district for housing, including for older people and disabled people;*
 - *the desirability of allocating land for the purposes of resettlement;*
 - *the health needs of the population of the district and the likely effects of development and use of land on those health needs;*
 - *the education needs of the population of the district and the likely effects of development and use of land on those education needs;*
 - *the extent to which there are rural areas within the district in relation to which there has been a substantial decline in population;*
 - *the capacity of education services in the district;*
 - *the desirability of maintaining an appropriate number and range of cultural venues and facilities (including in particular, but not limited to, live music venues) in the district;*
 - *the infrastructure of the district (including communications, transport and drainage systems, systems for the supply of water and energy, and health care and education facilities);*
 - *how that infrastructure is used; and*
 - *any change which the planning authority thinks may occur in relation to any of the matters mentioned above.*
- 1.4 This topic paper examines the Soils evidence surrounding the Soils topic for the forthcoming North Lanarkshire Local Development Plan 2 (NLLDP2). The paper

identifies what evidence and information has been sourced and subjected to an initial assessment as to the relevance of that evidence and information to NLLDP2.

- 1.5 Key points from and the potential future relevance of the evidence and information is highlighted, with a view to this informing the approach in progressing the Evidence Report, and NLLDP2 more generally.
- 1.6 The final Evidence Report will detail the stakeholder engagement and public survey that has taken place in developing its conclusions and will highlight the agreements and disputes that have arisen through this process.

2. Identification of Relevant Evidence

- 2.1 The relevant evidence has been identified through an evaluation of the Soils topic and assessment of available information linked to the topic. Where available evidence shared by external stakeholders has been included. Should additional evidence become available we will consider its implications for the Evidence Report.

3. Consideration of Relevant Evidence

- 3.1 The following is an explanation of evidence sources which have been used in this Survey Paper and are considered potentially relevant for NLLDP2.

Main Evidence considered:

Source: The Plan for North Lanarkshire (2019)

Reason for using the Evidence:

The plan sets out the vision for North Lanarkshire to be a place to Live, Learn, Work, Invest and Visit. NLLDP2 will be a tool to assist in the realisation of this vision. The vision consists of five priorities that are comprised of 25 high level Ambition Statements. These statements amongst other issues cover refocussing town centres, maximising the use of marketable land, and maintaining a clean, safe and attractive environment and specific to this topic look to transform our natural environment to support wellbeing and inward investment and enhance it for current and future generations and ensure we keep our environment clean, safe and attractive.

Links to Evidence: [The Plan for North Lanarkshire](#) and [North Lanarkshire Council Climate Plan](#)

Source: The State of Scotland's Soil Report (2011)

Reason for using the Evidence:

Provides a detailed overview of loss of organic matter in soils, Soil sealing, contamination, soil biodiversity, erosion and landslides and compaction after climate change, development and transport have been identified as providing the greatest threats to soils, scoring high in an index of biodiversity, loss of organic matter erosion and landslides, and soil sealing pressures.

Links to Evidence: [The State of Scotland's Soil. March 2011](#)

Source: Soil Monitoring Action Plan (2012)

Reason for using the Evidence:

To promote the sustainable management and protection of soils consistent with the economic, social and environmental needs of Scotland.

Links to Evidence: [Soil Monitoring Action Plan. November 2012](#)

Source: Scottish Soil Framework (SSF) Progress Report (2013)

Reason for using the Evidence:

An update to The Scottish Soil Framework (May 2009) which identified soils as one of the nation's greatest assets, valuable but vulnerable. It listed several threats to soil functions, with climate change and loss of organic matter being the most significant. The Framework was designed to promote the sustainable management and protection of soils. It identified some 13 soil outcomes (eg "soil organic matter stock protected and enhanced where appropriate") to which a wide range of activities would contribute.

Links to Evidence: [Scottish Soil Framework \(SSF\) Progress Report. December 2013](#)

Source: The James Hutton Institute Scottish Soil Classification

Reason for using the Evidence:

The Scottish soil classification recognises 5 five divisions (immature, non-leached, leached, gleys and organic soils), 13 major Soil Groups (MSG) and 49 Major Soil Sub-Groups (MSSG) along with a number of anthropogenic soil types.

Links to Evidence: [The James Hutton Institute Soil Classification](#)

Source: Scotland's Soils – Landscape Capability for Agriculture

Reason for the use of the Evidence

(relevance, interlinkages, currency, etc): Capability maps classify land based on the potential for what it could grow and how well it could grow it. These take into account soils, climate and landscape.

Links to Evidence: [Capability maps | Scotland's soils](#)

Source: Scotland's Soils – Carbon and Peatland Map

Reason for using the Evidence:

The map shows the distribution of carbon and peatland classes across the whole of Scotland. 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.

Links to Evidence: [Carbon and peatland 2016 map](#)

Source: Peatland Action Project - NatureScot

Reason for using the Evidence:

Primarily supports on-the-ground peatland restoration activities and is open for applications from eligible land managers who have peatlands that would benefit from restoration. There are no geographical restrictions or target areas for Peatland action funding.

Links to Evidence: [NatureScot Peatland Action Project](#)

Source: Scotland's National Peatland Plan 2015 NatureScot

Reason for the use of the Evidence

(relevance, interlinkages, currency, etc): It identifies the wide range of benefits provided by healthy peatlands, including a rich biodiversity, good water quality and carbon storage.

Links to Evidence: [Scotland's National Peatland Plan 2015 NatureScot](#)

Source: North Lanarkshire Biodiversity Action Plan 2023-2027

Reason for using the Evidence:

The document seeks to ensure that NLC continue to conserve and enhance the habitats and species that contribute to the unique character and heritage of North Lanarkshire whilst also contributing to the target to halt the current Nature

Emergency. Specific to this topic the document references protection of peatland, farmland and general impacts of soil on biodiversity.

Links to Evidence: [North Lanarkshire Biodiversity Action Plan 2023-2027](#)

Source: Measuring the vulnerability of Scottish soils to a changing climate. August 2020

Reason for using the Evidence:

The aim of this study is to summarise previous work on Scottish soils, explore existing evidence, and identify those metrics which could support the monitoring of Scotland's soil health and measure the vulnerability of Scottish soils to climate change in future.

Links to Evidence: [Measuring the vulnerability of Scottish soils to a changing climate. August 2020](#)

Source: Scottish Environment, Food and Agriculture Research Institutions (SEFARI)

Reason for using the Evidence:

This project delivers new insights and knowledge on the role of Scottish soils, and the benefits they confer, as well as identifying and developing strategies to mitigate degradation, reduce loss and enhance soil health.

Links to Evidence: [Healthy soils for a green recovery | SEFARI](#)

Source: Central Scotland Green Network Study: Costing the CSGN

Reason for using the Evidence:

Section 12.4 Appendix 4 contains information on the extent of Peatland in the CSGN area with useful links to data.

Links to Evidence: [CSGN Study: Costing the CSGN - November 2014](#)

Source: Tackling the nature emergency – consultation on Scotland's Strategic Framework for Biodiversity.

Reason for using the Evidence:

The Scottish Government published its draft Scottish Biodiversity Strategy. It set out a vision, outcomes and 33 priority actions designed to halt and reverse biodiversity loss and includes a commitment to protecting 30% of land and seas for nature by 2030 and ensuring that every local authority area has a nature network to improve ecological connectivity across Scotland.

Links to Evidence: [Tackling the Nature Emergency - Consultation](#)

4. **Assessment of Evidence**

Peatland and carbon rich Soils

- 4.1 Peatlands are a special living landscape and are rich in carbon peat soil. The UK is of international importance for peatland habitat with most of this found in Scotland. More than 20% of Scotland's land area is covered in peatland habitat. Most peatland in Scotland is in the form of blanket bog and raised bog which contain the most extensive and deepest peat soils. These bogs are formed over many thousands of years. Our peatlands are significant stores of carbon and play an important role in tackling climate change. The carbon stored in Scotland's peatland is equivalent to over 180 years of greenhouse gas emission from Scotland. Both blanket bogs and lowland raised bogs are found within North Lanarkshire, with the latter being more common.

- 4.2 Peat bogs are home to a unique array of wildlife, some of which is only associated with this habitat type. As rainwater fed ecosystems, they are acidic and poor in nutrients and therefore support a restricted range of specialist species.
- 4.3 Peatlands are not only important for biodiversity, but also provide many benefits to people. The multi-use benefits in terms of ecosystem services include the provision of clean drinking water as much of our drinking water comes from peatland areas. Intact peat bogs play a vital role in flood management by helping to maintain steady flow rates as well as reducing the risk of flooding events downstream.
- 4.4 In Scotland, much of the blanket and raised bog has been damaged by activities such as afforestation, drainage and agriculture. This has resulted in the extent and benefits of this important habitat being much reduced. Degraded bogs do not sequester carbon and fail to act as a carbon sink. In Scotland, it is estimated that up to 70% of blanket bog and 90% of active raised bog has been damaged. The 2020 Challenge for Scotland's Biodiversity includes a key imperative to restore Scotland's peatlands. Extensive areas of peatland will be managed to conserve their wildlife, and to improve their capacity for storing carbon. The Scottish Government has funded a programme of peatland restoration since 2012 (Peatland Action) to mitigate against climate change. In 2020 the Scottish Government announced a multi-annual investment in peatland restoration of more than £250 million until 2030. Delivered by NatureScot, Peatland Action aims to;
- restore and manage peatlands to maintain carbon stores and encourage carbon sequestration (since 2012 the project has helped restore over 35,000 ha);
 - restore peatland ecosystem functions;
 - enhance ecosystem resilience to climate change; and
 - build peatland restoration capacity and understanding amongst land managers, contractors, advisors and the public.
- 4.5 A notable coverage of lowland raised bogs is present within North Lanarkshire given the size of the region. Unfortunately, the extent and quality of this habitat mirrors national trends and is much reduced and degraded.
- 4.6 The Peatlands Habitat Action Plan aims to protect and safeguard existing peatland sites as well as guide restoration works on degraded sites. The restoration and enhancement of bog sites in North Lanarkshire will help to contribute to Scotland's targets to reduce carbon emissions and help tackle climate change, as well as improving conditions for a large number of bog associated species.
- 4.7 In North Lanarkshire, bogs are most commonly found around Shotts, Eastern Monklands and in the Kelvin Valley. Most of the bogs within North Lanarkshire are lowland raised/intermediate bogs. Blanket bogs are not as common; however, several are located within the district. These types of bog are mostly found in upland areas of Scotland.
- 4.8 In North Lanarkshire seven bogs are designated as Sites of Special Scientific Interest (SSSI's) and some have the additional cSACs designation (candidate Special Areas of Conservation – a European designation). All have been surveyed for their habitat quality. The sites, site condition and survey dates are shown below:
- West Fannyside Moss (SAC) – 34ha. Favourable maintained condition (2017).
 - Black Loch Moss (SAC) – 95ha. Favourable recovered condition (2012).

- Hassockriggs – 45ha. Unfavourable condition (2008).
- North Shotts Mosses (SAC) – 35ha. Favourable maintained condition (2013).
- Lady Bell's Moss – 54ha. Unfavourable no change (2013).
- North Bellstane Plantation – 3ha. Unfavourable condition due to competing designated features on one site (2009).
- Longriggend Moss – (around 37ha). Favourable maintained condition (2005).

In addition there are also 72 bogs, which are, at least in part, designated as Sites of Importance for Nature Conservation (SINC's) by North Lanarkshire Council, including all of the SSSIs. Kingshill, Greenhead Moss and Brownsburn have been designated as Local Nature Reserves. However, despite these designations, many sites are vulnerable to destruction, damage or neglect.

4.9 The current factors affecting this habitat:

- **Peat extraction** – the extraction of peat and/or underlying mineral deposits for horticultural and fuel uses.
- **Forestry** – in addition to the direct impacts of existing plantations on deep peat, successive rotations dry out neighbouring areas and act as an invasive seed source. Current procedures ensure that new woodland schemes avoid peatland of value in North Lanarkshire.
- **Built development** – Opencast and built development can result in the total destruction of bogs or in serious damage to their hydrology. Another 4 areas are potentially threatened through extensions to quarrying operations and opencast.
- **Agricultural Intensification** – Livestock management/ rough grazing on bogs is common in North Lanarkshire. This is frequently accompanied by drainage, trampling, burning and surface contamination with feed and droppings.
- **Dereliction/Neglect** – Many North Lanarkshire sites suffer from neglect and are being currently drained (either directly or indirectly) and will degenerate without conservation management. Many bogs are burnt as a result of vandalism or accidents.
- **Pollution** – contamination from adjacent landfill, opencast or agricultural drainage. Deposition of atmospheric pollutants, fertiliser drift during its application, or the legacy of past deposition, may be significant at certain sites.
- **Windfarms** – Development on sensitive bog areas.

4.10 In terms of current action:

- The Forestry Commission (FC) has produced a guidance note on "Forests and Peatland Habitats". This signals a presumption against new planting on active raised bog and degraded raised bog capable of restoration. It also describes the criteria, which the FC will use to consider supporting the restoration of lowland raised bog from existing woodlands.

- The UK Peatland Strategy 2018 – 2040 aims to drive and co-ordinate action across the UK, supported by country level plans that will establish a course for peatland conservation and management at a more detailed level.
- NatureScot published Scotland’s National Peatland Plan in 2015, This sets out the many benefits of healthy peatlands and how we can improve peatland that is in poor condition.
- NatureScot – Peatland Restoration Fund has been made available since 2012
- North Lanarkshire Council are encouraging composting initiatives as part of a waste minimisation strategy. This is a valuable component for education in reducing horticultural peat use.
- Joint SNH/FC/Central Scotland Forest Trust (CSFT) Guidance: The Assessment of Peatland for Woodland Establishment in the Central Scotland Forest Area has been produced in order to assist in the planning of afforestation schemes.
- Large scale Peatland restoration projects occurred at Fannyside Muir within the Slamannan Plateau by Buglife, NLC, FCS and CSGNT. At least 230 hectares of lowland raised bog was restored through this project with funding from WREN Biodiversity Action Fund, NatureScot and the contribution of the LIFE financial instrument of the European Community delivered as part of the EcoCo LIFE project: LIFE13 BIO/UK/000428.
- Since 2015, Greenspace Development have applied and been granted £89,000 funding from NatureScot’s Peatland Action Fund for the restoration of four sites across North Lanarkshire:
 - Greenhead Moss,
 - Broadwood Moss,
 - Cathburn Moss and
 - North Shotts Moss.
- All of our restored bogs have an interpretation panel associated with them reflecting the interest of the sites. Small scale volunteer work at Brownsburn bog by the Butterfly Conservation’s Bog Squad – installation of dams and scrub removal.
- Feasibility studies were undertaken on 3 urban bogs within Cumbernauld in 2019 and 2020. Works were due to start on these bogs in 2021. Owing to restrictions during the pandemic this has been delayed until to 2022 - 2023. This project is in partnership with CLL.
- Buglife are currently working with landowners at Easter Greenrigg and within a new area of Fannyside Muir to complete a feasibility study for a Peatland Action application.

4.11 The NatureScot Carbon and Peatland 2016 map was prepared as a high-level planning tool to promote consistency and clarity in the preparation of spatial frameworks by planning authorities. It provides an indication of the likely presence of peat on each individually mapped area, at a scale of 1:250,000 for most upland areas of Scotland and 1:25,000 elsewhere including the North Lanarkshire boundary area.

4.12 The map below is an extract from a high-level planning tool to promote consistency and clarity in the preparation of spatial frameworks by planning authorities. The map is a predictive tool which provides an indication of the likely presence of peat on each individually mapped area, at a coarse scale. The types of peat shown on the map are:

- carbon-rich soils

- deep peat
- priority peatland habitat

The map shows the areas of peat - carbon-rich soil, deep peat and priority peatland habitat. On the map, the top two classes (1 and 2) taken together identify the nationally important resource:

Class 1

- Nationally important carbon-rich soils, deep peat and priority peatland habitat*
- Areas likely to be of high conservation value.

* Priority peatland habitat is land covered by peat-forming vegetation or vegetation associated with peat formation.

Class 2

- Nationally important carbon-rich soils, deep peat and priority peatland habitat
- Areas of potentially high conservation value and restoration potential.

Class 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.

Class 4

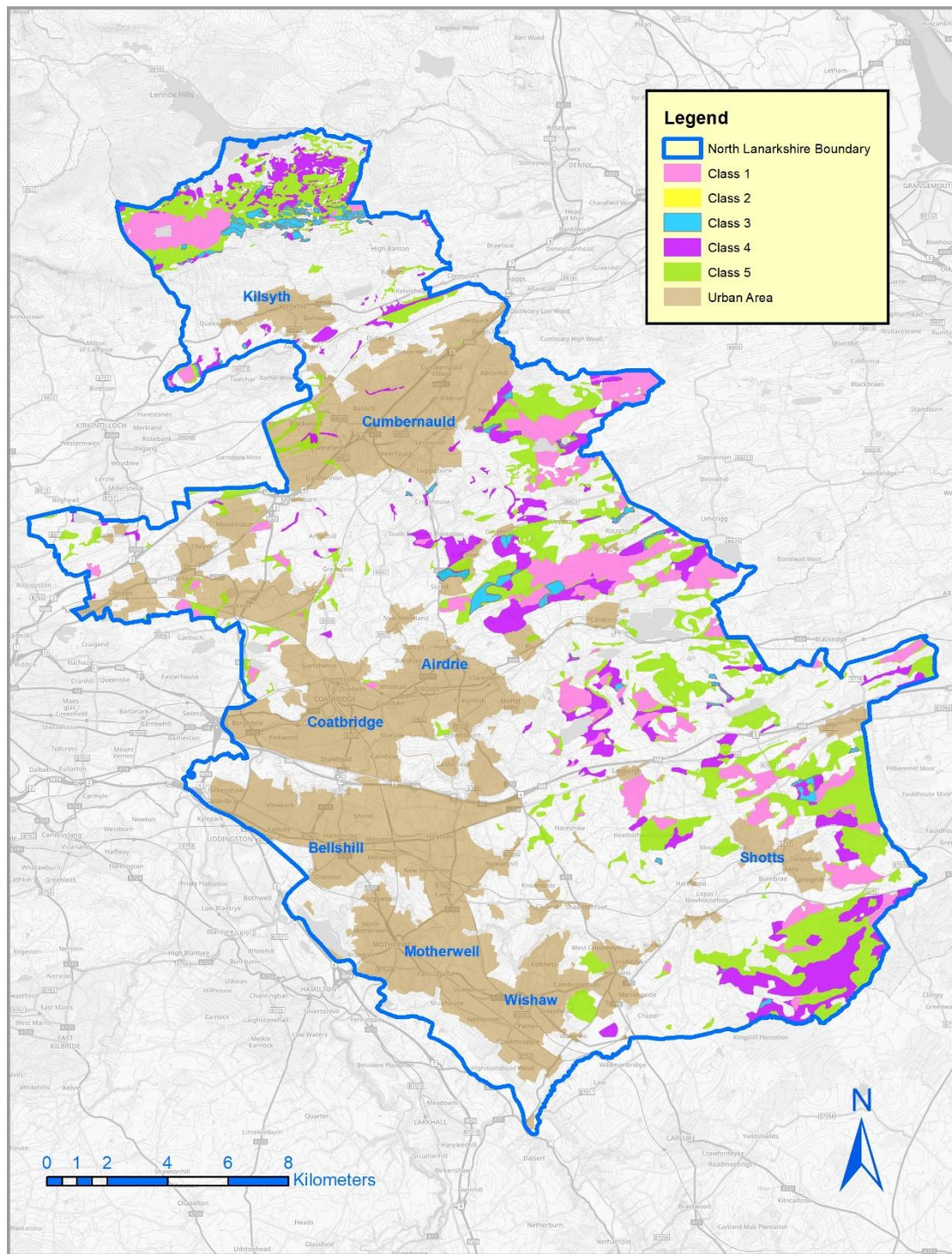
- Area unlikely to be associated with peatland habitats or wet and acidic type.
- Area unlikely to include carbon-rich soils.

Class 5

- Soil information takes precedence over vegetation data. No peatland habitat recorded.
- Soil information takes precedence over vegetation data. No peatland habitat recorded.

Figure 1. Map data extract NLC Area – Carbon and Peatland Map 2016 NatureScot

Map Showing Carbon Peatland by Importance



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Source: [Scotland's Soils - Carbon and Peatland Map NatureScot 2016](#)

4.13 Figure 1, data extracted from the Carbon and Peatland 2016 map, shows the distribution of carbon and peatland classes in North Lanarkshire with large areas highlighted Class 1 (pink), little to no areas class 2 (yellow), class 3 (blue), class 4 (purple) and class 5 (green). Analysis of the soil data shows that whilst large swathes of protected soils are primarily located in more rural settings there are instances where protected areas may abut some settlements which could cause some conflict with development aspirations in some circumstances.

4.14 It is anticipated that National Planning Framework (NPF) Policy 5(c) coupled with the site-specific protective designations of such sites within North Lanarkshire should afford adequate control of development proposals to ensure that development proposals on peatland, carbon- rich soils and priority peatland habitat will only be supported for:

- Essential infrastructure and there is a specific locational need and no other suitable site;
- The generation of energy from renewable sources that optimises the contribution of the area to greenhouse gas emissions reductions targets;
- Small-scale development directly linked to a rural business, farm or croft;
- Supporting a fragile community in a rural or island area; or
- Restoration of peatland habitats.

Furthermore NPF Policy 5(d) ensures that where development on peatland, carbon-rich soils or priority peatland habitat is proposed, a detailed site-specific assessment will be required to identify:

- the baseline depth, habitat condition, quality and stability of carbon rich soils;
- the likely effects of the development on peatland, including on soil disturbance; and
- the likely net effects of the development on climate emissions and loss of carbon.

4.15 North Lanarkshire Council as part of its Bog Action Plan will seek to maintain areas of active peatlands, improve the condition of degraded peatlands and increase awareness of peatlands and their importance. The key actions currently and going forward will include:

- Seek to reduce consumptive use of peat by all NLBAP Steering Group organisations, including contracted work
- SSSI sites to be in a local bogs management scheme.
- Refuse new applications for extraction consents on all European, national and locally designated peatlands.
- Create and maintain favourable conditions for the conservation and enhancement of Council owned bogs
- Key Forestry Commission sites to be identified for restoration.
- Create and maintain favourable conditions for the conservation and enhancement of key Forestry Commission sites.
- All primary sites and their owners to be identified.
- All primary, undisturbed sites (P1) to be in a positive management agreement.
- Promote awareness of the biological and cultural importance of Mosses to five local communities adjacent to lowland raised/ intermediate bogs.
- Encourage survey of plants and invertebrates on key sites.

- 4.16 It is anticipated that such measures above and the policies already proposed by NPF Policy 5 offer sufficient protection and thus require significant consideration when looking at the suitability of potential development sites in the site selection process.

Prime Agricultural Land

- 4.17 Farming has been taking place in the UK for thousands of years, changing the natural landscape and creating a predominately man-made environment. Farmland dominates our landscape, with agricultural land accounting for approximately 75% of UK land use cover and there are over 300 farms within North Lanarkshire.
- 4.18 NPF4 defines “Prime agricultural land & land of lesser quality that is culturally or locally important for primary use” as land identified as being Class 1, 2 or 3.1 in the Land Capability classification for Agriculture developed by Macaulay Land Use Research Institute (now the James Hutton Institute).
- 4.19 With reference to Figure 2 below it shows that North Lanarkshire has very limited prime agricultural land with no Class 1 (Land capable of producing a very wide range of crops) a tiny sliver of Class 2 (Land capable of producing a wide range of crops) and only some small very limited areas of Class 3.1 (Land capable of producing consistently high yields of a narrow range of crops and/ or moderate yields of a wider range. Short grass leys are common).
- 4.20 North Lanarkshire contains some larger areas designated as Class 3.2 (Land capable of average production though high yields of barley, oats and grass can be obtained. Grass leys are common) but is largely typified by large areas of:
- Class 4.1 (Land capable of producing a narrow range of crops, primarily grassland with short arable breaks of forage crops and cereal).
 - Class 4.2 (Land capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops).
 - Class 5.2 (Land capable of use as improved grassland. Few problems with pasture establishment but may be difficult to maintain).
 - Class 5.3 (Land capable of use as improved grassland. Pasture deteriorates quickly).

And some concentrated areas of:

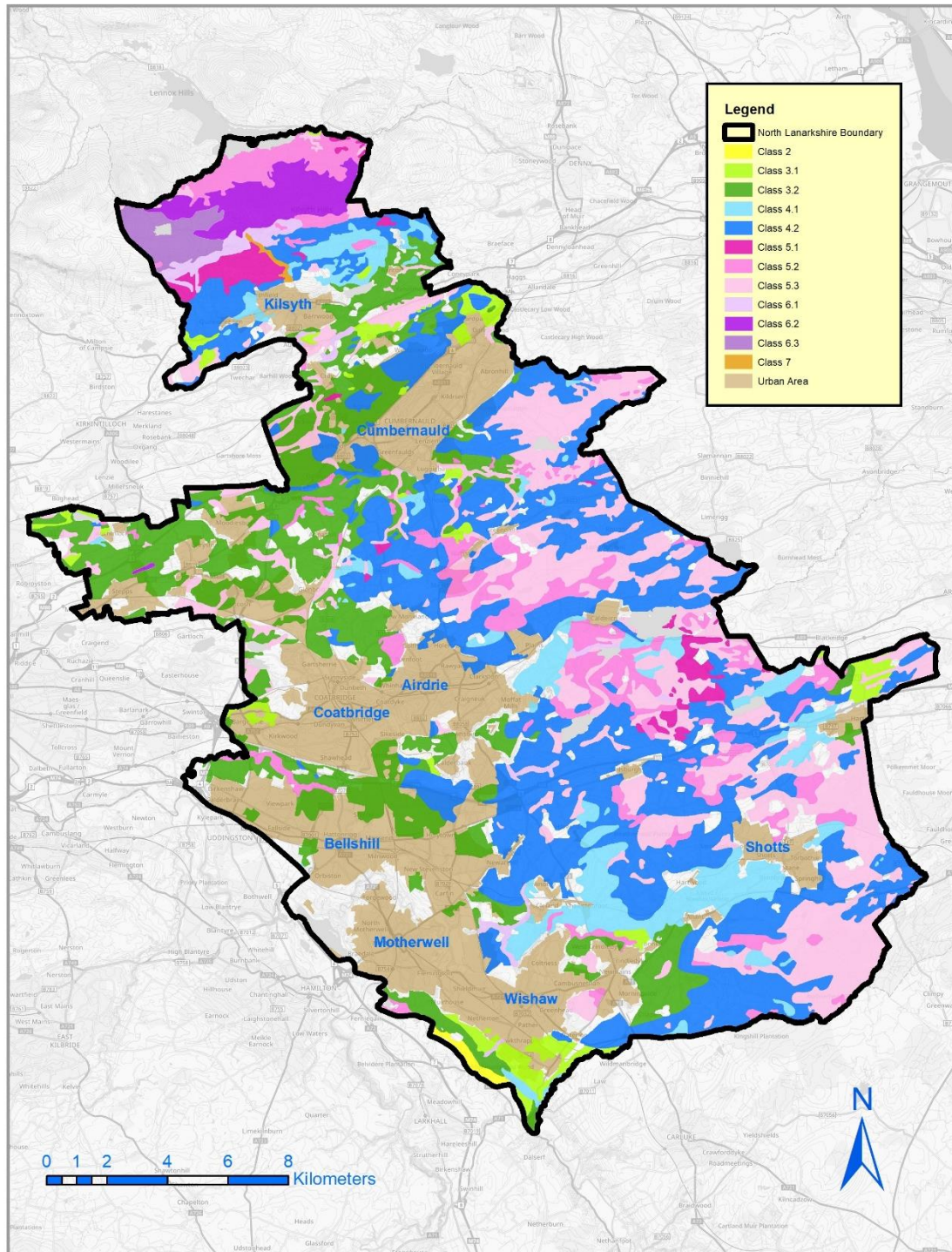
- Class 5.1 (Land capable of use as improved grassland. Few problems with pasture establishment and maintenance and potential high yields).
- Class 6.1 (Land capable of use as rough grazings with a high proportion of palatable plants).
- Class 6.2 (Land capable of use as rough grazings with moderate quality plants).
- Class 6.3 (Land capable of use as rough grazings with low quality plants).

And a tiny area of:

- Class 7 (Land of very limited agricultural value).

Figure 2. Map Data extract NLC Area - National Soil Map of Scotland extract Land Capability for Agriculture

Map Showing Land Capability for Agriculture



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Source: [Scotlands Soils - National Scale Land Capability for Agriculture](#)

4.21 NPF4 Policy 5(b) outlines that proposals on prime agricultural land, or land of lesser quality that is culturally or locally important for primary use, as identified by the LDP, will only be supported where it is for:

- Essential infrastructure and there is a specific locational need and no other suitable site;
- Small-scale development directly linked to a rural business, farm or croft or for essential workers for the rural business to be able to live onsite;
- The development of production and processing facilities associated with the land produce where no other local site is suitable;
- The generation of energy from renewable sources or the extraction of minerals and there is secure provision for restoration; and

In all of the above exceptions, the layout and design of the proposal minimises the amount of protected land that is required.

4.22 Given the limited nature of Prime Agricultural Land within North Lanarkshire it is envisaged that the potential for conflict with development aspirations in most circumstances will also be limited. North Lanarkshire Council would still seek to protect the limited areas of Prime Agricultural land where possible and any land of a of lesser quality that has been identified as culturally or locally important for primary use, as identified by NLLDP2.

Cultural and locally important soils

4.23 It is important to note that 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 scheduled monuments and records on North Lanarkshire Archaeological Sites and Monuments are best assessed as part of the topic paper on Historic Assets and Places 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.

Soil sealing and Soil Compaction

4.24 It is noted that such matters are generally associated with the specific location and design of proposed developments and as such are unlikely to have a significant influence on the special strategy for NLLDP2. This aligns with NPF4 Policy 5 which identifies these as specific risks for any development proposals.

Potential Connections in Evidence

5.1 The Plan for North Lanarkshire is the council's main strategy for the area to improve services and outcomes for the communities who live here. It provides a shared ambition for inclusive growth and prosperity for all. It sets a path for the council and partners to follow. The Plan covers a wide range of activities that can impact on carbon emissions and help to make North Lanarkshire a more sustainable place to 'live-learn-work-invest-visit'.

5.2 In the UK the past four decades have been warmer than the one before. In North Lanarkshire it is expected that the average summer temperatures will increase, and the number of rainy days will reduce. The volume of rain on summer's wettest day will increase. Our winters are expected to be milder. Whilst the impact of climate

change may seem to be less severe locally, in recent years we have seen an increase in severe weather events. These can affect us through:

- *Travel Disruption*
- *Emergency Response Situations*
- *Loss of power supply*
- *Landslides*
- *Flooding*
- *Disruption to service Delivery*

- 5.3 The council recognised that it must take action and declared a climate emergency in June 2019. It has committed itself and the area of North Lanarkshire to achieving net-zero by 2030. Concerned about the impact of climate change on biodiversity, the council became a signatory of the Edinburgh declaration on Post-2020 Global Biodiversity Framework.

Soils Topic - implications for topic 1 tackling the climate and nature crises

- 5.4 It is noted that when considering all development proposals significant weight is to be given to the global nature crises. Scotland has ambitious climate targets, including a commitment to achieve net-zero greenhouse gas emissions by 2045. Development proposals would need to align with these targets by promoting land-use practices that enhance carbon storage in peatlands and contribute to overall emissions reductions.
- 5.5 NatureScot published Scotland's National Peatland Plan in 2015, This sets out the many benefits of healthy peatlands and how we can improve peatland that is in poor condition.

Soils Topic – implications for topic 2 climate mitigation and adaptation

- 5.6 Scottish soils are at the heart of all life and underpin much of our social and economic activity. Nutrient rich soils help produce fresh crops and healthy trees and our peatlands and carbon-rich soils sequester and store carbon and are used in our whisky industry. Soils also help control the flow and quality of water in our rivers, contain and support important biodiversity and habitats, preserve our cultural and archaeological heritage and provide a platform for buildings and roads. However, exacerbated by climate change, soils are at high risk of damage through compaction, erosion, flooding and drought and loss of organic matter. This creates impacts locally, regionally and nationally which can be difficult to reverse.
- 5.7 There are a number of actions ongoing to protect our soils including through peatland restoration, sustainable forest management and through the promotion of regenerative agriculture practices. This means reducing the disturbance of soils so as they do not release carbon or are in poor condition which can lead to flooding and landslides.
- 5.8 As noted NPF4 includes national planning policy on soils that sets out the intention of protecting carbon-rich soils, restoring peatlands and minimising disturbance to soils from development. This would have the policy outcomes that: Valued soils are protected and restored; Soils, including carbon rich soils, are sequestering and storing carbon; Soils are healthy and provide essential ecosystem services for nature, people and our economy.
- 5.9 Protecting 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 but

also for multiple benefits such as flood resilience and improved biodiversity. Scotland's natural carbon stores can be broadly categorised into peatland, forestry and woodland.

- 5.10 In good condition, peatlands provide multiple benefits: capturing and storing carbon, supporting nature, reducing flood impacts, improving water quality, and providing places that can support physical and mental wellbeing. However, around three quarters of our peatlands is degraded through drainage, extraction, overgrazing, burning, afforestation and development. Degraded peat offers fewer benefits and emits greenhouse gases, now accounting for around 15% of Scotland's total net emissions. Caring for our peatlands through protection, management and restoration is critical to mitigating and adapting to the linked climate and nature emergencies and achieving a Just Transition to net zero.

Conclusion in terms of implications for topic 1 and 2

- 5.11 It is considered that the proposed issues addressed by the soils topic in seeking to protect and avoid allocations or extensions to settlements that would impact peat and high organic matter rich soils as identified in the Carbon and Peatland 2016 Map as classes 1, 3 and 5 aligns with the intention of topics 1 and 2 in helping to tackle the climate crises and align with the principles of climate mitigation and adaptation. Scotland has been actively involved in peatland restoration efforts to enhance carbon sequestration and biodiversity conservation and as noted above similar efforts at restoration and protection of peatland areas have been and will continue to be a focus of North Lanarkshire going forward.

Other topic/policy overlaps stated in NPF4

- 5.12 It is possible that connections may exist with the following topics and in the following ways.
- 5.13 There is potential for some positive effects for the following topic areas:
- Policy 3 Biodiversity
 - Policy 4 Natural Places
 - Policy 6 Forestry, woodland and trees
 - Policy 7 Historic assets and places
 - Policy 22 Flood risk and water management

Given that the proposals seek to promote the conservation of fragile habitat areas by limiting development and where possible redirecting development to locations that do not erode finite land or forestry resources.

- 5.14 There is potential for some negative effects for the following topic areas:
- Policy 11 Energy
 - Policy 16 Quality Homes
 - Policy 17 Rural Homes
 - Policy 29 Rural Development
 - Policy 33 Minerals

Given that the proposals seek to promote the conservation of fragile habitat areas by limiting development it is possible that some proposals falling within these categories would have further restrictions and/or additional justification required if they sought to encroach or would impact on the proposed protected areas. It is envisaged however

that such conflicts would be minimised due to the existing policy requirements outlined by the policies contained within NPF4.

6. Site Selection Implications

6.1 The issues that have been identified to inform the site selection process are:

Issue 1 Allocations on peat and high organic matter rich soils as identified in the Carbon and Peatland 2016 Map as classes 1, 3 and 5 should be avoided and allocations should be carefully considered for any proposals or extensions to settlements that would impact such designations.

Issue 2 The limited areas of Prime Agricultural Land identified in the MLURI Land Capability Classification for Agriculture (Bibby, Douglas, Thomasson and Robertson, 1982 revised 1991) (1:25,000 scale) should be used, unaltered, to inform the Local Development Spatial Strategy and development allocations should seek to avoid such areas.

Issue 3 Reference should be given to topic area 7 Historic assets and places in relation to protection of cultural and locally important soils. As noted above 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 means that protection of such soils are better addressed through topic 7.

7. Implications for North Lanarkshire Local Development Plan 2

7.1 New and updated development allocations in the proposed LDP2 will need to take account of existing areas of protection for high carbon soils and Prime Agricultural Land and promote the conservation of fragile habitat areas and the best agricultural land by limiting development and allocations on such areas and where possible redirecting development to locations that do not erode what are a finite land resource.

7.2 Based on the evidence, analysis and views presented in this survey paper, North Lanarkshire Council currently considers that the topic policy in NPF4 for Soils should be applied as per NPF4 in North Lanarkshire as there is no need to consider locally specific policy to support decision making in this regard.