



Local Development Plan 2030

Technical Supplement 10 Appendix A - Landscape Character Assessment

September 2019



**Mid & East
Antrim**
Borough Council

www.midandeantrim.gov.uk/planning

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Executive Summary



Executive Summary

Mid and East Antrim (MEA) is one of the most varied and beautiful landscapes in Northern Ireland and covers an area of 1,046 km² stretching from the River Bann in the west to the Antrim Coast in the east and the southern part of the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB). It contains a rich and unique combination of spectacular coastline, expansive moorland, steep wooded valleys, attractive settlements and distinctive farmland. Its landscapes continue to inspire a rich and distinctive tradition of art and literature, and cultural development. This Landscape Character Assessment is both a celebration and an analysis of our rich and distinctive landscape.

The aim of this Landscape Character Assessment (LCA) is to provide a comprehensive Borough-wide assessment of landscape character within the Borough to help inform land use planning and land management decisions. The Landscape Character Assessment will be specifically used as a technical evidence base to inform the Local Development Plan for Mid and East Antrim.

This Landscape Character Assessment 2018 is primarily based on the Northern Ireland Landscape Character Assessment (NILCA) 2000 but contains additional information on the cultural, historic and perceptual qualities of the landscape to complement the existing descriptions of the landscape's physical characteristics. It also reflects the extensive research which has been undertaken by other statutory bodies in the past 18 years, since the publication of NILCA 2000.

As with all landscapes, that of MEA is subject to change. Forces for change may be natural or man-made, and relate (for example) to development, changing agricultural practices, recreation, energy generation, woodland and moorland management, climate change and coastal erosion. The main forces for change acting on the landscape character of MEA are set out in the individual landscape character chapters. The report identifies single dwelling in the countryside and wind energy development as the main changes to landscape character since the publication of the original NILCA study.

This Landscape Character Assessment includes eighteen Landscape Character Areas within the Borough as identified within the NILCA 2000 document, namely: **LCA 52 Lower Bann Valley; LCA 58 Long Mountain Ridge; LCA 59 Cullybackey and Cloughmills Drumlins; LCA 60 - River Maine Valley; LCA 98 - Carrickfergus Upland Pastures; LCA 115 Tardee and Six Mile Water Slopes;**

LCA 116 Ballymena Farmland; LCA 117 Central Ballymena and Glens; LCA 118 Motle Moorlands and Forests; LCA 122 Garron Plateau; LCA 123 Larne Glens; LCA 124 Larne Basalt Moorland; LCA 125 Tardee Upland Pastures; LCA 126 Larne Coast; LCA 127 Larne Ridgeline; LCA 128 Islandmagee; LCA 129 Carrickfergus Shoreline, and LCA 130 Carrickfergus Farmed Escarpment.

The MEA Character Assessment 2018 retains the original boundaries of the LCAs and describes in detail, using a combination of maps, text, and photographs. Each one has a summary description of the key landscape characteristics, Seascape Character Areas where relevant. This is followed by information on physical influences; biodiversity and land cover; historical and cultural influences; visual and sensory perception; natural heritage designations and nature conservation sites; landscape condition and sensitivity; forces for change, and assessment of development pressure.

The main output from this Landscape Character Assessment is the identification of a number of discreet areas of exceptional or high landscape value. These areas (detailed as Candidate Sensitive Landscape Areas) are listed in Chapter Six. These areas will be subject to further analysis in a separate study which will consider their merits for protection through appropriate strategic landscape designations in the emerging Local Development Plan (LDP)

Introduction



Mid and East Antrim Landscape Character Assessment

- 1.0 The landscape of Mid and East Antrim is one of considerable contrasts, reflecting its rich geology and topography as well as a long history of settlement and land use. These contrasts can give rise to landscapes of significantly differing character, the highest quality of which it is desirable to protect. The concept of **'landscape'** overlaps considerably with the **'built, natural and cultural environment'**, contributing to the special landscapes that are part of our culture and heritage.

What is landscape?

- 1.1 Landscape is often understood visually or how a place looks. However, it is more than just 'the view'. It refers to the dynamic relationship between people, place and nature and just as these things are constantly changing and evolving, so is the resulting landscape.
- 1.3 How the different components of our environment – natural, historical and cultural – interact together and are perceived by us creates the landscape. People value landscape for many different reasons. It is important to understand what the landscape is like today, how it came to be like that and how it may change in the future

“Landscape results from the interplay of the physical, natural and cultural components of our surroundings. Different combinations of these elements and their spatial distribution create the distinctive character of landscapes.”¹

- 1.4 Our local landscape is the backdrop to our daily lives. We often take it for granted, and it is only when something changes that we realise how much we value it. Asked to describe why landscape means so much to us, we often find it hard to explain.
- 1.5 It may be a particular view, or the sense of history we experience as we walk along a hedge-lined track with high banks, or a part of our town or village that has a pleasing combination of buildings and spaces. It is mostly about what makes our local area distinctive and unique, and about how our experience of the area makes us feel.

What is a Landscape Character Assessment?

- 1.6 Landscape Character Assessment (LCA) is a technique for classifying and describing the landscape. The process of doing it has evolved over the last 30 years, with the former Countryside Agency (now part of Natural England) leading the way in developing guidance for undertaking LCAs.
- 1.7 An LCA is about understanding what makes one place different from another. For that to happen there has to be a map showing the boundaries between one distinctive area of landscape and another, and a clear explanation of what lies within each separate area. This is done by first identifying the 'types' of landscape in the area.

“Landscape Character Assessment is a standard method used to identify, describe, classify and map what's distinctive about our landscapes.”²

- 1.8 LCA is the process of identifying and describing variation in character of the landscape. LCA documents identify and explain the unique combination of elements and features that make landscapes distinctive by mapping and describing character types and areas. They also show how the landscape is perceived, experienced and valued by people.



¹ Landscape Institute and IEMA, (2013), Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, Routledge, UK.

² Landscape Institute and IEMA, (2013), Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, Routledge, UK.

“Landscape is about the relationship between people and place.... People’s perceptions turn land into the concept of landscape. It is not just about visual perception.”³

- 1.9 This LCA forms part of the evidence base for Mid and East Antrim Borough Councils Local Plan. It is designed to be used both as a tool to guide development to be in sympathy with local variations in landscape character, and to help inform land management activities to conserve and enhance the special qualities of the landscapes of Mid and East Antrim. It is important to recognise that this LCA does not set out policy, but provides an evidence base to inform decision-making in the Local Plan or more widely, around policy change, development and landscape management. Undertaking this LCA provides an opportunity to update the original Landscape Character Assessment (NILCA) published in 2000, as it applies to the Borough.

The Importance of Landscape Character

- 1.10 Character is defined as a distinct, recognisable and consistent pattern of elements that make each place different. Landscape character is essentially that which makes a place unique and gives a locality its “sense of place”. Landscape Character is influenced by particular combinations of visual, natural and historic elements together with settlement patterns and built components. Intangible aspects such as tranquillity and sense of place also have a strong influence upon the way our landscape is perceived.

Our Landscapes have...

- economic value - providing the setting for economic activity and often becoming a central factor in attracting business and tourism;
 - social and community value - as an important part of people’s lives, contributing to our sense of identity and wellbeing, bringing enjoyment and inspiration; and
 - environmental value - as a home for wildlife and cultural record of society’s use of the land.
- 1.11 Ensuring that new development or changes in land management respects the unique combination of natural, historic and cultural elements that contribute to the distinctive ‘character’ of our landscapes, is key to achieving sustainable development.

The Study Area

- 1.12 The study area extends to the boundaries of Mid and East Antrim Borough Council, shown on Map 1. The Council area covers 403.86 miles² and includes rural areas up to and including the urban edge. No settlement appraisal was undertaken as part of this study, this is included within LDP Technical Supplement XXXX. The study area is bounded by the following adjacent local authority areas;

- Antrim and Newtownabbey
- Causeway Coast and Glens, and
- Mid Ulster.

- 1.13 The diversity of landscape within Mid and East Antrim combines to provide a unique resource of significant environmental quality. The Borough has an impressive natural setting including the world-famous Coastal Route with the Carrickfergus Escarpment to the south forming a magnificent backdrop to the heritage town of Carrickfergus. The rural farmed landscape surrounding Ballymena contains very attractive and contrasting countryside and includes the Maine and Braid River valleys, the Lough Beg shoreline and the Lower Bann River to the west, the high ground of the Antrim Plateau in the north east and the prominent landscape feature of Slemish, are generally regarded as iconic landscapes in Mid and East Antrim.

“Our coast and glens provide an unparalleled variety of geology in such a small area with rock formations created in a range of environments from arid desert, warm tropical seas, explosive volcanic eruptions, to cold glacial conditions and in the rocks beneath our feet.”⁴

- 1.14 The Northern Ireland Landscape Character Assessment (NILCA 2000) subdivided the countryside into 130 Landscape Character Areas (LCAs), each based upon local patterns of geology, landform, land use, cultural and ecological features, 18 of these LCAs fall within the scope of the study area;

- 1) LCA 52 Lower Bann Valley Chapter.
- 2) LCA 58 Long Mountain Ridge Chapter.
- 3) LCA 59 Cullybackey and Cloughmills Drumlins Chapter.
- 4) LCA 60 River Maine Valley.
- 5) LCA 98 Carrickfergus Upland Pastures.

³ Landscape Character Assessment) Guidance for England and Scotland (Countryside Agency 2002)

⁴ <https://www.midandeantrim.gov.uk/tourism/things-to-do/history-heritage/geological-heritage>

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- 6) LCA 115 Tardee and Six Mile Water Slopes.
 - 7) LCA 116 Ballymena Farmland.
 - 8) LCA 117 Central Ballymena and Glens.
 - 9) LCA 118 Motle Moorlands and Forests.
 - 10) LCA 122 Garron Plateau.
 - 11) LCA 123 Larne Glens.
 - 12) LCA 124 Larne Basalt Moorland.
 - 13) LCA 125 Tardee Upland Pastures.
 - 14) LCA 126 Larne Coast.
 - 15) LCA 127 Larne Ridgeline.
 - 16) LCA 128 Islandmagee.
 - 17) LCA 129 Carrickfergus Shoreline, and
 - 18) LCA 130 Carrickfergus Farmed Escarpment.

Setting the Context



Setting the Context

- 1.15 Landscape character assessment is an objective assessment of landscape concerned with character, quality or value and following the process of characterisation judgements may be made about particular landscapes and values may be assigned to them to inform future policy decisions.

“Patterns of geology, landform, soils and vegetation, land use, field patterns and human settlement combine together to create character⁵.”

- 1.16 This Landscape Character Assessment is an overview of Mid and East Antrim’s landscapes presented within a single document. It brings together a very wide range of information, gathered from many different sources. It is important to note that it is **NOT** trying to replace any of these specialist documents and should not be used in place of them but be used in conjunction with the more detailed studies which may refer to a particular topic or location.

- 1.17 LCAs can inform a wide range of activities, such as:

- planning policies and decisions
- sensitivity and capacity studies
- land management plans
- landscape and visual impact assessments
- local council studies
- minerals planning
- place making
- green infrastructure
- forest and woodland strategies
- waterways strategies
- renewable energy, and
- AONB management plans.

LCAs are useful for monitoring change across the landscape and for capturing the characteristics of the landscape including:

- topographic features
- flora and fauna
- land use
- sights, sounds, touch and smells
- cultural associations, history and memories

Context

- 1.18 This study focuses entirely on our rural landscapes and does not include urban areas, industrial developments or larger rural settlements. It is proposed that this study is reviewed and updated on a five-year cycle in line with the LDP review process. This will ensure that it continues to reflect current best guidance, policies and research and that by regular updating it continues to provide a valuable tool within the planning process when considering issues related to landscape, land use and land management.

The European Landscape Convention

- 1.19 The **European Landscape Convention** of the Council of Europe signed in 2000 is the first international treaty dedicated to the protection, management and planning of all landscapes in Europe. It emphasises that landscape has an important public interest role in terms of culture, ecology, environment and social factors and is a resource favourable to economic activity whose protection, management and planning can contribute to job creation. It also recognises that landscape contributes to human well-being and the formation of culture. The ELC definition of ‘landscape’ recognises that all landscapes matter, be they ordinary, degraded or outstanding:

“Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors.”⁶

- 1.20 The European Landscape Convention (ELC) defines ‘**landscape**’ as ‘an area as perceived by people whose character is the result of the action and interaction of natural and / or human factors’ and ‘it concerns landscapes that might be considered outstanding as well as every day or degraded landscapes’. ‘It is a new way of thinking about landscape, responsive to different local, national and regional interpretations. It is not simply about landscape as biodiversity or ecology. It’s not only concerned with the countryside or matters of heritage. It addresses the experience we have of a place. A more democratic concept, it relates to remarkable and degraded landscapes, the special and the everyday, all from rural to urban; all areas, from the most treasured to the most nondescript and unloved, the places and spaces in desperate need of regeneration.’

⁵ <https://assets.publishing.service.gov.uk/government>

⁶ <https://www.landscapeinstitute.org/policy/13732-2/>

1.21 Landscape is a complex term because it covers all the factors that make up the environment. It includes the geology and the natural forces that shaped it into different landforms, the soils and habitats that cover it, the archaeological features, the hedge and field patterns that evidence past uses of the land, and the shape, layout and building materials of towns and villages. There are also ‘cultural’ aspects of the landscape, such as places that have been written about and painted, which lend significance to a particular place. And there are the people who live and work there and their individual perceptions of the landscape.

1.22 The ELC was ratified by the UK government in 2006 and came into force in 2007. The ELC requires signatory states to undertake a number of actions which seek to ensure compliance with the overarching aims of the ELC, including the following:

Article 5 – General Measures

- To recognise landscapes in law;
- To establish and implement landscape policies aimed at landscape protection, management and planning;
- To integrate landscape into its regional and town planning policies and other policies which can have direct or indirect impacts on landscape.

Article 6 – Specific Measures - Identification and Assessment

- To identify its own landscapes throughout its territory;
- To analyse landscape characteristics and the forces and pressures transforming them;
- To take note of changes.

Implementation

- To put landscape policies into effect, by introducing instruments aimed at protecting, managing, and/or planning the landscape.

1.23 The Convention puts emphasis on the whole landscape and all its values and is forward looking in its approach, recognising the dynamic and changing character of landscape. Specific measures promoted by the Convention, of direct relevance to this study include:

- the identification and assessment of landscape, and
- improved consideration of landscape in existing and future sectoral and spatial policy and regulation.

1.24 Policy Context – Natural Heritage Designations

A hierarchy of designations is available under European, National and local legislation and designation is primarily the responsibility of NIEA. Generally, sites are selected for their rarity value or for the diversity of species and habitats they contain, or as a representative

example of their habitat type on a local, national or international scale. Some designations are brought forward under the LDP process. The range of designations includes:

(a) International

- Special Protection Areas (SPAs) – sites selected under the Birds Directive (EC) as being important areas for breeding, of wintering and migrating birds.
- Special Areas of Conservation (SAC) – areas of certain natural habitats protected under the Habitats Directive. Collectively known as ‘Natura 2000’ sites.
- Ramsar Sites – wetlands listed under the Ramsar Convention to protect those of international importance.

(b) National

- Areas of Special Scientific Interest – sites which are of special interest by reason of their flora, fauna, geological and/or physiographical features are designated under the Environment (NI) Order 2002 (as amended).
- Nature Reserves and National Nature Reserves – managed by the DOE or by agreement with another Department, a District Council or a voluntary conservation body.
- Areas of Outstanding Natural Beauty – designated by the DOE primarily for their high landscape quality, wildlife importance and rich cultural and architectural heritage.

(c) Local

- Local Nature Reserves (LNRs) and Wildlife Refuges – LNRs can be provided by District Councils under powers conferred on them under the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985. Wildlife Refuges are provided for under the Wildlife Order.
- Sites of Local Nature Conservation Importance – identified through the LDP process with policies provided in the plan for their protection and /or enhancement.

Regional Development Strategy

1.25 The RDS 2035 aims to protect and enhance the environment for the benefit of current and future generations. It recognises that Northern Ireland’s environment, including its landscapes, is one of its greatest assets which has benefits in terms of the economy and quality of life. Regional Guidance relating to landscape is largely contained within RG 11, which seeks to conserve, protect, and where possible, enhance our built heritage and our natural environment.

Sustainable Development Strategy

1.26 The Sustainable Development Strategy aims to meet 2 overarching guiding principles, which are, living within environmental limits and ensuring a strong, healthy, just and equal society. It states that these principles will be met by; a sustainable economy; good

governance; sound science; and promoting opportunity and innovation. Ensuring that our Natural Heritage is used in a sustainable way is recognised in the SDS as a contributing factor in the support of a better quality of life and a better-quality environment.

Strategic Planning Policy Statement (SPPS)

1.27 Paragraph 6.76 of the SPPS states that, “The LDP process will play an important role for councils in identifying key features and assets of the countryside and balancing the needs of rural areas and communities with the protection of the environment. This should include an environmental assets appraisal and landscape assessment which will provide the evidence base for the purposes of bringing forward an appropriate policy approach to development in the countryside.” It emphasises that this evidence base should take into account Landscape Character Assessments.

1.28 With regard to the countryside, the general aim of the SPPS is to manage development in a manner which strikes a balance between protection of the environment from inappropriate development, while supporting and sustaining rural communities. Within this overall context, a specific objective is to conserve the landscape and natural resources of the rural area and to protect it from excessive, inappropriate or obtrusive development. The SPPS states that policies and proposals for the countryside should be informed by landscape assessment and environmental assets appraisal.

1.29 The SPPS expects LDPs to contain policies to:

- *require development in the countryside to integrate into its setting, respect rural character and be designed in a manner appropriate to the local area, and;*
- *protect areas identified in the Plan, wherein the quality of the landscape and unique amenity value is such that development should only be permitted in exceptional circumstances.*

1.30 As well as the core planning principle outlined above, the SPPS also includes the following regional strategic objectives:

- *protect, conserve, enhance and restore the abundance, quality, diversity and distinctiveness of the region's natural heritage;*
- *further sustainable development by ensuring that natural heritage and associated diversity is conserved and enhanced as an integral part of social, economic and environmental development; assist in meeting international (including European), national and local responsibilities and obligations in the protection and enhancement of the natural heritage;*

- *contributes to rural renewal and urban regeneration by ensuring developments take account of the role and value of natural heritage in supporting economic diversification and contributing to a high-quality environment; and*

- *take actions to reduce our carbon footprint and facilitate adaptation to climate change.*

1.31 The SPPS states that generally planning authorities should adopt a precautionary principle when considering the impact of a proposed development on national or international significant landscape or natural heritage resources. Appropriate weight must be given to the various natural heritage assets and LDPs should consider a number of specific measures in relation to Landscape:

- *Take full account of the implications of proposed land use zonings, locations for development and settlement limits on natural heritage features and landscape character within or adjoining the plan area;*

- *Natural heritage features and designated sites should be identified as part of the plan-making process. Where appropriate, policies should be brought forward for their protection and / or enhancement;*

- *LDPs should seek to protect and integrate certain features of the natural heritage when zoning sites for development through 'key site requirements';*

- *LDPs should seek to identify and promote green and blue infrastructure where this will add value to the provision, enhancement and connection of open space and habitats in and around settlements;*

- *LDPs should also consider the natural and cultural components of the landscape and promote opportunities for the enhancement or restoration of degraded landscapes, particularly those affecting communities.*

1.32 In terms of current operational planning policy, development proposals which affect landscape are primarily considered under **Planning Policy Statement 2: Natural Heritage**. This sets out planning policies for development within an Area of Outstanding Natural Beauty, where proposals have to be sensitive to the distinctive special character of the area, the quality of their landscape, heritage and wildlife.

1.33 Similarly, **Planning Policy Statement 6: Planning, Archaeology and the Built Heritage** includes the requirement for area plans to identify and contain policies for Local Landscape Policy Areas. These are features or areas within or adjoining settlements considered to be of greatest amenity value, landscape quality or local significance and therefore worthy of protection from undesirable or damaging development.

Planning Policy Statement (PPS) 21 – Sustainable Development in the Countryside

1.34 Countryside Assessments provide an evidence base for local policy development in the development plan process. PPS 21 states that, “Countryside Assessments are an integral part of the development plan-making process” and advises that countryside assessments normally include:

1. An Environmental Assets Appraisal,
2. A Landscape Assessment,
3. A Development Pressure Analysis, and
4. A Settlement Appraisal

Landscape Character Assessment (LCA)

1.35 Landscape Character Assessment is the process of identifying and describing variation in the character of the landscape. It seeks to identify and explain the unique combination of elements and features (characteristics) that make landscape distinctive. This process results in the production of a Landscape Character Assessment (LCA) (Natural England, 2014).

1.36 The Northern Ireland Regional Landscape Character Assessment (NIRLCA), published by NIEA in August 2015, defines 26 regional scale landscape character areas. This assessment provides a strategic overview of the landscape in Northern Ireland and sets the context for more detailed local landscape studies. It aims to draw together information on people and place, and the combinations of nature, culture and perception, which all contribute to the uniqueness of Northern Ireland.

1.37 The NIRLCA (2015) was preceded by the Northern Ireland Landscape Character Assessment 2000 (NILCA 2000). This study was published by the Department of Environment (DOE) in 1999 and defined 130 individual landscape character areas each with a distinctive character, based upon local patterns of geology, land form, land use, cultural and ecological features. NILCA 2000 identified the key characteristics of the landscape, provided a description of the landscape, assessed the landscape condition and sensitivity to change and outlined principles for landscape management and accommodating new development. Further, NILCA 2000 provides a brief description of the landscape setting of selected settlements and principles for the siting and design of new development. NILCA 2000 identified 18 LCAs that are wholly or partially in the area now falling within the Mid and East Antrim (MEA) Council area.

1.38 NIEA published a Northern Ireland Regional Seascape Character Assessment (NIRSCA) in 2014. This seascape character assessment identified and mapped 24 regional seascape character areas, detailed their key features and characteristics, and described the

relationship between each seascape character area and neighbouring terrestrial landscape character areas identified in NILCA 2000.

1.39 The aim of the NIRSCA document is to provide a strategic description of different areas of regional seascape character along the entire Northern Ireland coast, in line with similar assessments undertaken elsewhere in the UK. The NIRSCA contributes to the aims of the European Landscape Convention through promoting the protection, management and planning of the seascape, and to support European co-operation on landscape issues. The NIRSCA can help inform the planning, design and management of a range of changes and other projects taking place on and around the coastline. Four seascape character areas have been identified within MEA.

1.40 NIEA published “Wind Energy Development in Northern Ireland’s (NI) Landscapes” in 2010. This publication provided planning guidance on wind energy development in Northern Ireland’s landscapes and is based on the sensitivity of NI’s landscapes to wind energy development. The publication provides an assessment of the sensitivity to wind energy development of each of the 130 LCAs in NI with regard to the characteristics and values associated with each LCA.

Areas of Outstanding Natural Beauty

1.41 Areas of Outstanding Natural Beauty (AONB) are landscapes of national importance designated under the Nature Conservation and Amenity Lands (NI) Order 1985. A significant part of the Antrim Coast and Glens AONB lies within MEA Borough. The coastline of County Antrim from Ballycastle to Larne and the world-famous Glens of Antrim contain some of the most beautiful and varied scenery in Northern Ireland. Designated in 1988, the AONB covers 70600 ha. The area is dominated by a high undulating plateau cut by deep glens, which open north and eastwards to the sea. It is an area of contrasts: gentle bays are separated by blunt headlands; exposed moorland gives way to sheltered valleys; wide open expanses to enclosed farmland. Slemish Mountain rises abruptly, its wildness in sharp contrast to the neat fields of the Braid Valley below. The main aim of the AONB designation is to protect and enhance the landscape quality for the benefit of those who live there and for those visitors who come to enjoy it.

Areas of Scenic Quality

1.42 These are landscapes of regional or local importance valued for their scenic quality, they are important landscape resources in their own right, regardless of location or setting. They are characterised by visually pleasing patterns or combinations of landscape elements and by their generally unspoilt character and relatively free from major visual intrusion. In addition, they may include significant sites or features of nature conservation, historic or cultural importance. Often, they are visually prominent landscapes such as ridgetops, scarp slopes above settlements, and lough shores and are particularly sensitive to change. The

Areas of Scenic Quality identified within this report are considered to be of regional significance and represent a second tier (below AONBs) in the hierarchy of landscape classifications.

Supplementary Planning Guidance

- 1.42 The supplementary planning guidance '***Creating Places - Achieving Quality in Residential Development***' (DOE, 2000) has been the principal guide for use by prospective developers in the design of all new housing areas. It identifies that new development should respect and protect environmental interests.
- 1.43 Supplementary planning guidance '***Living Places: An Urban Stewardship and Design Guide for Northern Ireland***' (DOE, 2014) is a key reference point for formulating LDPs and states that 'working with nature' is a key component of responsible place making.
- 1.44 Similarly, the rural design guide, '***Building on Tradition - A Sustainable Design Guide for the Northern Ireland Countryside***' (DOE 2012) offers advice on considering landscape issues for developments in the rural area.
- 1.45 The Supplementary Planning Guidance, '***Wind Energy Development in Northern Ireland's Landscapes***', (NIEA, 2010) provides a broad, strategic guidance in relation to the visual and landscape impacts of wind energy development in the Northern Ireland countryside.

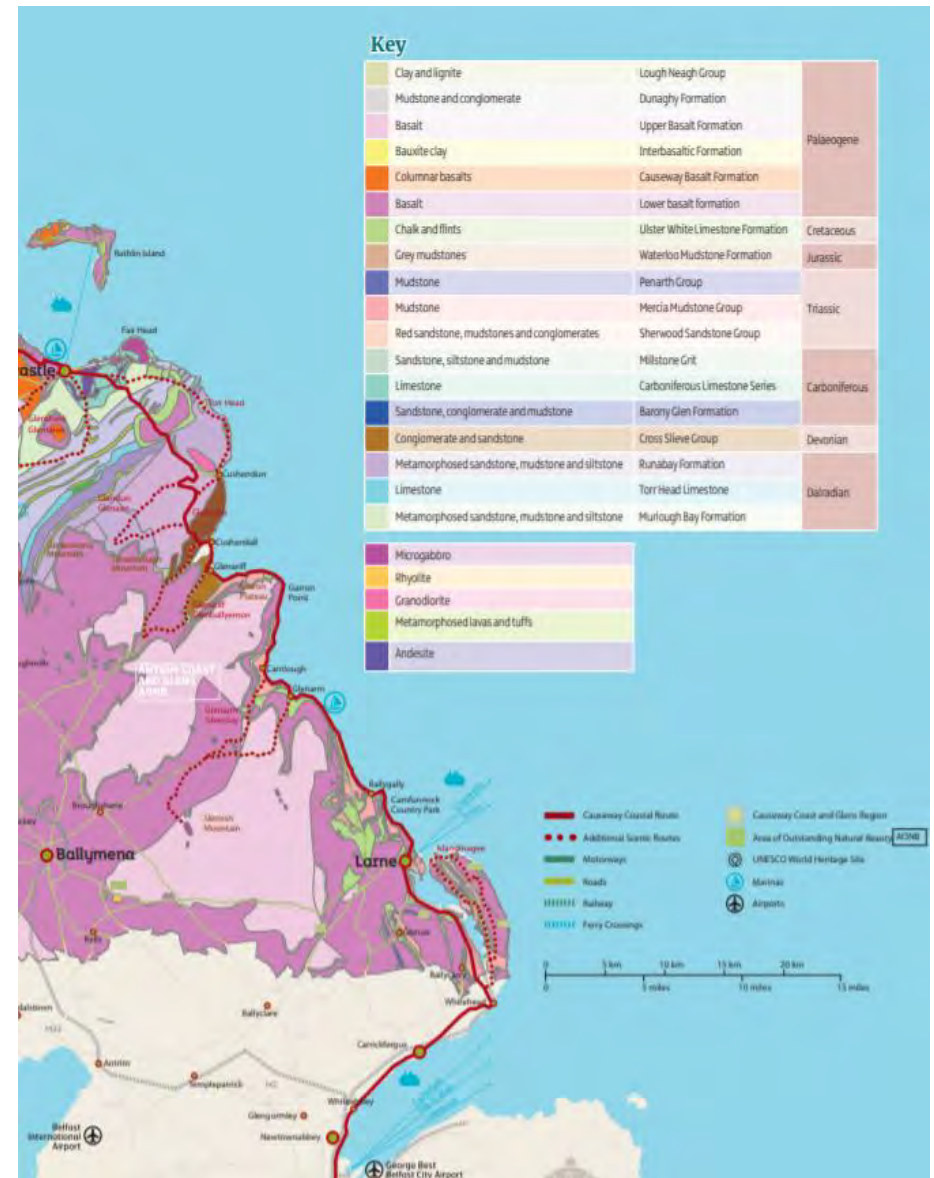
Understanding our landscapes



Geodiversity

2.0 Geodiversity has been defined as *“the link between people, landscape and their culture: it is the variety of geological environments, phenomena and processes that make those landscapes, rocks, minerals, fossils and soils which provide the framework for life on earth”* (Stanley, 2001), or as *“geological diversity or the variety of rocks, fossils and minerals and natural processes”* (Prosser, 2002). Highlighting a key element in Stanley’s definition, Burek (2001) commented that *“Geodiversity underpins biodiversity”* and offered a further definition of geodiversity as *“the abiotic factors, which together with biodiversity give a holistic view of the landscape”* (Burek, 2002). Geodiversity is a key component of an area’s natural heritage. A vital starting point is an appreciation of the most up to date available understanding of the area’s geological deposits and features, together with the processes and phenomena which have formed them and continue to influence them. An area’s geodiversity encompasses:

- Sites or features at which representative examples of the areas geological deposits and features may be seen.
- Sites or features which are deemed worthy of some form of designation or protection for the quality of earth science features displayed.
- The whereabouts and nature of past and present working of mineral products.
- Sites and features currently employed in interpreting earth science
- The influence of earth science in shaping the built and man-made environment.
- The inter-relationship and inter-dependence between earth science and other interests.



- 2.1 No part of the British Isles holds greater interest for the geologist than the coastline of County Antrim from Larne to Portrush. There are schists over 300 million years old, the largest lava field in the British Isles formed 50-70 million years ago with glens eroded by retreating glaciers and raised beaches resulting from the land rising when the enormous weight of the ice had melted. Some 500 million years ago, what we now know as Ireland existed as a number of discrete areas of land and sea floor within an ancient ocean called Iapetus. The effect of plate movements through time carried the continents across the Earth's surface, eventually closing this ocean. The continental collisions which occurred as the ocean contracted altered the mudstones and sandstones into other rock types known as schists.
- 2.2 The geology of the Borough is primarily dominated by tertiary basalts which were formed as part of a massive lava flow over 55-60 million years ago overlying other older sedimentary rocks including sandstone, shale and limestone. In the north-eastern part of the area the basalt has been eroded away to reveal silvery schists more than 300 million years old.
- 2.3 This has created a varied and interesting landscape of many contrasts - red sandstone, white limestone, black basalt and grey clays often reflected in place names such as, Red Bay, Black Cave and White Bay. This area is also characterised by a series of deep glacial glens running eastwards to the North Channel, known as the 'Nine Glens of Antrim'.
- 2.4 When travelling north through the Borough along the A2 which hugs the dramatic coastline the area is characterised by a series of striking headlands including Ballygally Head and Garron Point. Inland the Antrim Plateau, an exposed and desolate landscape, has its own wild beauty. Slemish Mountain is a distinctive landmark and Trostan, the highest point on the plateau, reaches a height of 550m.
- 2.5 The prevailing conditions at this time also led to the evolution of fish into amphibians, which was a major advancement for animal life on land. Flooding of this desert landscape heralded the beginning of the Carboniferous Period (355 – 290 million years ago), when Ireland was covered by shallow tropical seas and deltas. Sediments from this era comprise limestone and sandstone formed within major river deltas.
- 2.6 Northern Ireland continued to experience hot dry conditions during the Triassic Period (250 - 205 million years ago), due to its location close to the current Sahara Desert. Evaporation left behind large quantities of salt, including the deposits preserved and mined near

Carrickfergus. By the late Triassic Period, marine conditions returned, and reptiles emerged as the dominant life form on Earth.

- 2.7 The Jurassic Period (205 - 145 million years ago) is the best-known geological period and is associated with dinosaurs on Earth. Evidence from the Jurassic period can be seen at the Waterloo Beds, Larne where fossils such as ammonites and other remains of marine life can be found.
- 2.8 The Cretaceous period (145 - 65 million years ago), brought with it raised sea levels and the return of deeper marine conditions. During this period, shells and the remains of dead microscopic marine plants known as coccoliths were deposited on the sea bed, which over time led to the formation of chalk. This chalk, which is a pure form of limestone, can now be seen in the cliffs at Galboly.



- 2.9 The Palaeogene (65 - 25 million years ago), was associated with intense volcanic activity. Lava flows covered the limestone landscape and as this cooled it formed the black basalt which characterises much of the Northern Ireland landscape. The basalt forms the Antrim Plateau and has protected the underlying Cretaceous chalk from erosion. Other evidence of this period includes volcanic vents, these are places where the lava exploded out on the

surface of the earth. Remnants of such vents include Scawt Hill and Slemish Mountain. Many of the landscape features we see today were formed during the last Ice Age and much of the bedrock across the Causeway Coast & Glens is covered by deposits left by the receding ice sheets. Raised beaches, such as the one at Ballintoy Harbour and Magilligan Point, are evidence of this time in geological history, known as the Quaternary Period (2.5 million years ago - present).



2.10 The northeast quadrant is mostly underlain by the early Palaeogene (60–55Ma) Antrim Lava Group. However, the earliest eruptions were violent and formed localised rhyolitic volcanoes in central parts of Co. Antrim. Within the Tardree Rhyolite Complex, the largest area of silicic volcanic rocks, is a significant deposit of perlite. The main basalt lavas were then erupted in two main cycles separated by a period of relative quiescence when deep weathering of the earlier basalts occurred in a sub-tropical climate and produced a conspicuous and thick layer of reddish lateritised basalt known as the Interbasaltic Formation. This represents the primary source of iron ore and bauxite in Northern Ireland which were mined mainly in the late 19th and early 20th Century.

2.11 The Antrim Lava Group has concealed and protected from erosion a Permian to Cretaceous sequence of softer sedimentary rock. These crop out at the margins of the Antrim Plateau

but have been investigated more thoroughly in deep boreholes. In late Palaeogene (Oligocene) times (25Ma) localised non-marine basins which formed on top of the basalt plateau were filled mainly by deposits of lacustrine clay but also developed very thick beds of lignite at their margins. Exploration of the Oligocene lacustrine basins have revealed the presence of three large deposits containing about 1 billion tonnes of lignite.

2.12 In southeast Co. Antrim the Triassic (248–206Ma) rocks contain thick beds of halite (rock salt). This was historically mined at several locations but is now only worked by the room and pillar method at one mine producing about 500,000 tons per annum which is mainly used for gritting roads in the UK, Ireland and the USA. The suitability of deeper and thicker salt beds to host gas storage caverns is currently under investigation in the Larne area.

Natural Heritage & Biodiversity

2.13 Mid and East Antrim has an outstanding diversity of landscape and habitats, from the open moorlands and blanket bogs, the intimate mosaic of grasslands, woodlands and wetlands in the valleys, to the rugged coastline and the sea. This diversity of form and habitats supports a wildlife resource of international importance.

Woodlands

2.14 The Borough hosts some of the best sites in Northern Ireland to visit unspoiled, ancient woodlands, with one of the oldest and largest continuous areas of intact ancient woodland in Northern Ireland being located in the Glenarm Demesne. Historic maps which date back to the 1600s show the area of woodland at the Demesne, which show it in the same location and retaining its original shape.



2.15 This valuable habitat provides an important habitat for a number of bats, rare bird and insect species. Small private woodlands are common throughout the Borough and often comprise of conifers, mainly dominated by Sitka Spruce or Scots Pine. There are a number of larger conifer State Forest plantations, such as those found on the Moyle Moorlands and at Glenarm Forest Park – the planting out of many of these areas has resulted in the loss of and degradation of peatlands, greatly reducing their biodiversity value. Commonly, the red squirrel is the only priority species recorded within these woodlands.

2.16 There are also a number of mixed conifer and broadleaved plantations present in smaller numbers. Patches of semi-natural woodland can be found across the Borough but are mainly confined to the scarps and steep river valleys, sites that cannot easily be farmed, they generally comprise of hazel and ash with variable amounts of hawthorn, blackthorn, birch, rowan and willow dispersed throughout. This kind of woodland is also present further inland, for example at North Woodburn Glen near Carrickfergus and at Glen Burn, east of Buckna. An easily accessible route to explore one of these woodlands is the riverside path that leads to the waterfall at Cranny Falls, Carnlough. Here there is a canopy of hazel, ash and sycamore and the plants lining the route include sanicle, wood avens, woodruff, wild garlic, bluebell and wood anemone.

2.17 Forest Service has plantations of coniferous trees at Woodburn Reservoirs and Lough Mourne/Copeland Reservoirs near Carrickfergus and at Ballyboley, Capanagh and Cleggan in the Antrim Hills and have also developed mixed coniferous/broadleaved woodlands within part of the Glenarm Demesne, at places by the Bann where river banks used to dump dredged material were subsequently planted and also at Portglenone Forest.

2.18 Portglenone Forest is thought to be a long-established woodland site. Unfortunately, no veteran trees remain, though there are records for some uncommon woodland plants and the plated snail, an indicator of ancient woodland, has been noted. Beech dominates large areas at Portglenone and the dense shade cast by these trees in summer restricts the development of scrub species. However, in early spring, before the leaves appear, light reaches the ground, and this has encouraged the spread of spectacular expanses of bluebell.

2.19 Mature, planted woodlands with a diverse mix of trees, often including broadleaved and coniferous trees and both native and non-native species, are quite common in the lowlands, created by estate owners in the nineteenth century. A fine example of this type of woodland can be found at Carnfunnock Country Park which was formerly the grounds of a private house and is now open to the public with trails to explore and information boards to help visitors identify the trees.

Arable and Grassland Habitat

2.20 Farmland across the Borough is predominantly grassland, with improved pasture common in lowlands and rough grazing confined to higher altitudes. The biodiversity value associated with this type of farmland is relatively poor, and in many areas, high levels of over-grazing, repeated cutting for silage and the use of agricultural chemicals has led to depleted and reduced levels of biodiversity.

2.21 There are however examples of some small pockets of farmland which are managed for biodiversity, particularly in the Glenarm area, where careful grazing management and silage cutting regimes has helped maintain species rich meadows which add a splash of colour and texture to an often-monotone farmed landscape. Field abandonment is common in places especially in upland areas and valley slopes and has often led to an increase of heavy bracken and the associated loss in biodiversity. In some lowland areas where field drainage has not been maintained, fields have reverted back into rush dominated swards, however it is important to note that these areas now provide important breeding habitat for wading birds such as snipe, curlew and lapwing.

2.22 In species poor farmland areas, biodiversity is often concentrated and found in the hedgerows. Hedgerows provide important habitats for a variety of woodland and farmland species as well as corridors for movement around the landscape. In higher regions, hedgerow banks provide important refuge for spring flowering plants from encroaching bracken in abandoned fields. However, many hedges are poorly maintained, 'gappy' and often comprised of only hawthorn and gorse.



2.23 Hedgerows are mainly dominated by hawthorn, planted because it has sharp spines and the cut branches form an interlocking network of twigs that farm animals cannot easily push through. Hedges often also contain some ash and other tree species such as blackthorn, hazel, elder and elm together with dog rose, ivy and honeysuckle. In more upland areas such as Glenwherry, beech was often used for hedging, perhaps because cut beech trees retain their leaves in winter, when they may provide better shelter than hawthorn for farm animals.

2.24 Where farmers have not regularly cut these beech hedges, they grow to form a distinctive farm landscape of rows of tightly-spaced, tall trees. Hedges of privet are normally confined to urban areas but are also a feature of the land around the reservoirs in the hills near Carrickfergus, where they were probably planted by the Belfast Water Commissioners. Non-native fuchsia, which has beautiful lantern-like flowers, is sometimes used for hedging at farm houses and urban properties near the coast, where frosts that would affect this plant are rare.

Heathland and Blanket Bog

2.25 On the Antrim Hills and Garron Plateau you will pass upland fields that are dominated by common grasses and clumps of soft rush, with small pockets of wildflowers which enlivened and enrich these views – species include the ragged robin with bright pink, raggedy, star-shaped blooms; lesser spearwort which is a member of the buttercup family and has yellow, cup-shaped flowers and the wonderfully-named devil's-bit scabious that has rounded, violet-blue flower heads on long stalks. These species-rich grasslands are associated with purple moor-grass and a range of rushes and sedges.

2.26 Although coniferous forests have been planted over some areas of the uplands found within Mid and East Antrim, heath and blanket bog remain extensive in many areas. The Garron Plateau, an area of international importance is the most extensive remaining area of intact upland blanket bog in Northern Ireland. This biodiversity rich and varied landscape provides important habitats for a wide variety of animals, plants and mosses, such as the Irish Red Book bird species associated with the area include red grouse, golden plover, dunlin, merlin and hen harrier.

2.27 Historically, peat cutting has been common in many areas and peat erosion is widespread. Management for game birds (including burning, overgrazing and drainage) has also had a negative impact on the biodiversity of many areas. In other parts, gorse has spread over



many abandoned upland fields which can reduce the overall biodiversity but can provide habitats which are important for some bird species.

2.28 The vast majority of lowland raised bogs found within Mid and East Antrim have been affected to some degree by peat extraction - it has been estimated that approximately only 14% of lowland raised bogs in County Antrim still have an intact surface. Commercial mechanical peat extraction at Ballyscullion Moss to the east of Lough Beg has resulted in large swathes of degraded landscape which offers limited biodiversity.



2.29 Remnants of raised bogs are common and are often colonised by stands of birch and willow scrub with some rowan or planted with conifers. In Maine Valley to the south of Ballymena there are substantial areas of cutover raised bog including sites at Killybegs Lower near Slaght and at Sharvogues and despite continued drainage and cutting, Sharvogues retains

some of its conservation interest and is the only site in Antrim where bogrosemary can be found.

- 2.30 On the higher ground, it becomes apparent that trees are absent, large tracts of open unenclosed land with a windswept landscape includes extensive regions of upland heath which has developed on mineral soils or thin peats, and blanket bog. Blanket bog generally occurs at altitudes of over 200m, where rainfall is high, and temperatures are low. It can be several metres in thickness and cover large areas of flat or undulating landscape. The vegetation includes ling, bell heather, cross-leaved heath, deergrass, cottongrasses and several of the Sphagnum bog moss species. Like raised bogs, the more noticeable plants include cottongrasses which flower in early to mid-summer, bog asphodel and, in late summer and early autumn, the purple and pink flowers of heathers and cross-leaved heath.
- 2.31 Many areas of blanket bog found within Mid and East Antrim have historically suffered from an increased drainage and cutting for fuel, have been reclaimed for agriculture or planted out with conifers. The Star Bog to the northwest of Agnew's Hill is one such example, when driving along Star Bog Road, on one side are rows of conifers planted to create Capanagh Forest and on the other side old, abandoned peat cuttings can be seen. Some lines of turf set out to dry show where hand cutting is still undertaken.
- 2.32 In the hills located to the west of Carnlough, in addition to the Star Bog exploitation for fuel in the early 1900s peat was cut and conveyed two miles by aerial ropeway to supply a factory near the town where it was used in a process to manufacture fertilizer.
- 2.33 At Long Mountain, northwest of Ballymena, there are records for several notable plants in blanket bog and although some intact peatland and heathland survives, large areas have been affected by over drainage, peat cutting and agricultural intensification. In the uplands immediately to the north of Carrickfergus there are only remnants of bogs, such as Keeran Moss near Slimero which has areas of heather heath on old peat cuttings and Rigg Moss, northwest of Ballycarry.
- 2.34 Dry heath tends to be dominated by ling, bell heather, bilberry and crowberry and often occurs on the margins of the uplands including some areas around Slemish, and on the north-eastern fringe of the Garron Plateau at Galboly. Wet heath typically has a mixture of heather, crossleaved heath, deergrass and purple moor-grass with an understory of mosses, often including Sphagnum species. West of Sallagh Braes there are areas of dry heath and

also pockets of wet heath which can be found in hollows which are dotted throughout the landscape.

Coastal Areas

- 2.35 Much of the coastline of Mid and East Antrim comprises of rock platform and boulders, which generally supports a good diversity of flora and fauna. Cliffs, such as those found at Islandmagee, provide safe nesting sites for many rare and uncommon birds as well supporting several rare flowering plants. Littoral sites present relatively poor biodiversity due to their exposure – an exception to this is the Larne Glens area where most of the coast is in boulders, predominantly chalk boulders. Sub-littoral and littoral chalks are Northern Ireland Priority Habitat's and support a distinctive cohort of algae and animals.
- 2.36 The coastline on the eastern edge of Islandmagee hosts an impressive range and diversity of seabird colonies that occupy the cliff face, with resident populations of razorbill, kittiwake and common guillemot located at the Isle of Muck and the Gobbins. Other species of note include fulmar, black guillemot, shag and cormorant. It is worth noting that the Gobbins is also the only mainland nesting site in Northern Ireland for Atlantic puffin.



2.37 It is quite common to view harbour porpoise and dolphin at all times of the year from the Coast Road. Looking further out to the North Channel, the outline of the Maidens is visible on a clear day, a lighthouse on one small island and a tower and ruined light keepers' houses on another, both of which add interest and points of reference within this seascape. These rock outcrops are an important breeding site for shag and home to colonies of grey seal and common seal. The waters surrounding the islands also include reef and sandbank habitats that support rare marine life.

2.38 The plant perhaps most commonly associated with the coast is thrift, which forms cushions of deep green leaves with an abundance of pink or sometimes red, purple or white flowerheads on stalks. Other species with colourful flowers to look out for include red valerian (not native to Ireland but long-established and commonly seen growing on old stone walls near the coast), scentless mayweed, sea campion, common scurvygrass and rock-sea spurrey.

2.39 Along the western side of Larne Lough at Magheramorne and to the south and north of Glynn, there are brackish water lagoons created where inlets were cut off from the lough when the railway line was constructed in the nineteenth century. Another lagoon was formed next to Larne town railway station when the dual carriageway to Larne Harbour was constructed in the 1970s. Brackish water habitats are uncommon and can be associated with rare species. These include the lagoon cockle which has been found at the sites just north of Glynn and at Larne town, and spiral tasselweed noted at Glynn. Eelgrass, which forms underwater beds that are an important habitat for marine life, has been observed at Glynn and both eelgrass and dwarf eelgrass occur in Larne Lough.

2.40 Larne Lough regularly supports nationally important numbers of overwintering birds including goldeneye, great crested grebe, red-breasted merganser and shelduck. Greenshank and redshank and common gull are present in nationally important numbers. Internationally significant numbers of light-bellied brent geese have been recorded at the southern end of the lough, overwintering after migrating from northern Canada. Little egret, a distinctive medium-sized white heron with long black legs, yellow feet and black bill, has in recent years extended its range northwards in Europe and is now breeding in Ireland and is regularly spotted at Larne Lough, feeding on the mudflats.



2.41 South of Whitehead the coastal cliffs and rocky shoreline give way to a more urbanised landscape, with the settlements of Whitehead, Carrickfergus and Greenisland dominating views. The Carrickfergus Shoreline forms a fringe of flat land, 1km to 3km wide, between the high basalt ridge of the Carrickfergus Farmed Escarpment to the north and Belfast Lough to the south. The accommodating relief has been utilised by extensive development which runs more or less continuously along the length of the shore and extends westwards to the outskirts of Newtownabbey. Carrickfergus is the most concentrated area of settlement, with recent housing extending northwards from the shoreline core of the town. Prominent industrial structures, such as the stack of Kilroot Power Station provide a focus for miles around. Other ribbon development extends along the A2 and B90.

2.42 The linearity of the Carrickfergus Shoreline is emphasised by the roads, railway and transmission lines that pass along it. Views of the sea are a fundamental aspect of the local landscape character and, while coastal development blocks visibility from many locations inland, there are a number of significant waterfront viewpoints, such as Carrickfergus Castle. The railway follows the edge of the shoreline east of Carrickfergus, with excellent views across the Lough.



Rivers, Lakes and Wetlands

- 2.43 In Mid and East Antrim, the largest rivers form part of the Lough Neagh hydrological system which enters the sea via the Lower Bann, other small rivers and tributaries flow in an easterly direction towards the North Sea, small streams around Carrickfergus flow southwards into Belfast Lough. Many of river systems within the Borough are of good ecological status though some have been detrimentally impacted by increased levels of organic pollution and nutrient enrichment from sources such as agriculture and sewage discharges.
- 2.44 The Maine and Braid Rivers are visible hydrological features of the landscape around Ballymena, they meet at Galgorm where the waters merge and continue to flow southwards, entering Lough Neagh near Randalstown. Electro-fishing in the lower reaches of the River Maine has found trout, roach, gudgeon, stone loach, minnow, three-spined stickleback, bream and perch with pike also being present and becoming more common. The upper tributaries of the Maine River are important spawning areas for salmon and trout, with the Clough also being an important juvenile salmon river and the Kells Water an important nursery stream for trout.
- 2.45 The Six Mile Water rises near Ballyboley Forest and flows westwards into Lough Neagh at Antrim. There are important trout spawning areas in its upper reaches and its tributaries are the only location in Ireland for river water-crowfoot, a subaquatic plant with long, leafy stems. Recently native white-clawed crayfish have been reported from an upper section of the catchment. This is an unexpected discovery as crayfish were considered to be absent from County Antrim. White-clawed crayfish are declining across Europe and although Ireland has the largest remaining population, this is at risk from crayfish plague which is carried by non-native species.

- 2.46 Throughout the Borough there are attractive riverside walks, quiet places away from traffic where wildlife can be enjoyed. In Larne there is the Inver River Walk. In Ballymena there are surfaced paths along the Braid at Tullagharley Bridge and from the town centre to the Ecos Centre, along the Maine from Galgorm to Cullybackey and at Lisnafillan, and by a section of the Deerfin Burn at Ballee. There are also paths by waterways at Kells, Broughshane and along parts of the Lower Bann. The small National Trust property at Gleno includes a spectacular waterfall.



- 2.47 Lakes and small waterbodies at Garron are associated with some rare invertebrate and plant species including opposite-leaved pondweed, which occurs at Loughnatrosk, situated in the hills above Carnlough. Species of biodiversity interest can also be found at man-made ponds in heavily modified environments - a survey of the Mill Ponds by the Amphitheatre Leisure Centre in the heart of Carrickfergus noted an uncommon, pea sized bivalve, the lake orb mussel, which thrives on the muddy bottom. The fluctuating water levels of the North and South Woodburn and Copeland Reservoirs in the uplands near Carrickfergus provide habitat for some rare mosses which grow on mud exposed around the margins of these waterbodies.

Built and Cultural Heritage

2.48 Mid and East Antrim Borough Council has a wide and diverse range of archaeology and built heritage. The evidence of the historical development of the Borough can be clearly seen in our rich archaeological sites such as tombs, forts, castles and churches, vernacular and listed buildings. These markers and reminders of how the Borough has evolved over time are to be valued and protected as they provide a tangible link between the present and the past.



2.49 The Boroughs built heritage can play a vitally important part in helping to encourage growth and stimulate national and local economies. Local authorities through their planning function are at the forefront of ensuring due consideration is given to this rich legacy by enabling the successful management of change. Having access to appropriate expertise can ensure that decisions affecting our historic buildings and archaeological sites are based on sound and well-informed information thereby creating successful places in which people will choose to live, work and visit.

2.50 The diverse and rich nature of our cultural heritage assets is recognised through the number of regionally important sites located within Mid and East Antrim Borough Council. As custodians it is our responsibility to ensure their continued protection and enhancement. At many levels, development pressures can potentially adversely impact on our heritage assets. It is therefore important to strike a balance which will ensure that any potential impacts,

whatever the scale, are identified and if possible mitigated through the planning process. Archaeological features and heritage assets such as tombs and ring forts, historic and vernacular buildings, planned parklands, buildings and features associated with industrial heritage, are all important sources of information about our past, and are often significant landmarks in the present townscape and countryside.

2.51 The earliest known inhabitants of the area were Mesolithic hunter-gatherers of pre-Celtic origin. Saint Patrick has associations with the area at Slemish and Skerry Church. Slemish, approximately eight miles east of Ballymena is notable as being the scene of St Patrick's early life. According to tradition Saint Patrick was a slave for seven years, near the hill of Slemish, until he escaped back to Great Britain. Also connected with the saint is Glynn Old Church. This is among the oldest ecclesiastical sites in east Antrim and St Patrick is said to have founded a church in the valley of Gleannindeachta, or Glynn. Between the 8th and 11th centuries Antrim was exposed to the inroads of the Vikings. In the late 12th century Antrim became part of the Earldom of Ulster, conquered by Anglo-Norman invaders. A revival of Gaelic power followed the campaign of Edward Bruce in 1315, leaving Carrickfergus as the only significant English stronghold. During the 16th century numerous parties from Britain attempted to colonise the region; many Scots settled in Antrim around this time.

2.52 The antiquities of the borough consist of cairns, mounts or forts, remains of ecclesiastical and military structures. There are some remains of the ecclesiastic establishments at Kells, Glenarm and Glynn. The castle at Carrickfergus dating from the Norman invasion, is one of the best-preserved medieval structures in Ireland. There are, however, remains of other ancient castles that include; Olderfleet/Curran Castle, Castle Chichester, and Clough Castle. There are also well-preserved seventeenth century castles that include; Glenarm Castle, Ballygally Castle and Galgorm Castle. The eighteenth century features a number of important architectural examples in the region that include; churches within the Ballymena & Larne regions that feature in each area's church trail.

2.53 There is also the important Moravian settlement of Gracehill by John Cennick that has left a considerable architectural imprint on the village, the first designated conservation areas in Northern Ireland. Other conservation areas include Carrickfergus, Carnlough, Glenarm and Whitehead. Post 1800, architecture includes; the Town Halls at Carnlough and Larne, Seapark House, Carrickfergus, Magheramorne House, Larne, Barbicon House, Glenarm and Whitehead Excursion Station. This period also includes a broad range of impressive buildings by Charles Lanyon and Lanyon, Lynn. There are a number of well-preserved industrial and maritime buildings, including; Flame Victorian Gasworks in Carrickfergus, Houston's Mill, Broughshane and Blackhead Lighthouse. Finally, there are a limited amount

of important buildings from the 20th century, including Our Lady of Bethlehem Abbey, Portglenone and the Antrim County Hall, Ballymena.

2.54 In terms of residential buildings, there is limited accessibility in Mid and East Antrim as properties are all in private hands and generally not open to the public. According to Charles Brett; "The dividing line between really 'grand' houses and middling ones is not an easy one to draw. I suppose, however, that most connoisseurs of grandeur would accept; Galgorm Castle; Castle Dobbs; Glenarm Castle; Red Hall; Leslie Hill; Benvariden and Dundreave. It is interesting that of these eight houses, five are still owned and occupied by descendants of their original builders.

State Care Archaeological and Monuments

2.55 There are seven sites (3% Northern Ireland total) within Mid and East Antrim in State Care, one example is Ballylumford Dolmen which is situated near the north-west tip of the Islandmagee peninsula and is known locally as the "Druid's Altar", and could be 4000 years old

Archaeological Sites and Monuments (Scheduled)

2.56 According to HED, the list of Scheduled Historic Monuments contains a total of 159 (8% of Northern Ireland total) scheduled archaeological monuments in Mid and East Antrim Council area. An example is Glynn Old Church, suggested as the site of a Patrician foundation Glenn Indechta.

Archaeological Sites and Monuments (Unscheduled)

2.57 Large numbers of known archaeological sites are likely to remain unscheduled, and whether or not they are preserved will depend on the value of the remains, the commitment of owners and the public and the policies of public agencies. Currently there are over 1200 Unscheduled Archaeological Sites and Monuments located within Mid and East Antrim.

Knockdhu Area of Archaeological Significance (ASAI)

2.58 The only ASAI in Mid and East Antrim is designated at Knockdhu, an upland area within the Antrim Coast and Glens AONB. This unique historic upland landscape contains a wide array of prehistoric and historic archaeological sites and monuments. The landscape of the ASAI is highly vulnerable to insensitive change. In particular, the erection of masts, pylons,

wind turbines and associated infrastructure, or other large-scale development including large agricultural buildings or quarrying and mining activities are likely to adversely impact on the distinctive landscape character and the historic environment assets, including the archaeological sites and monuments.

2.59 An additional area of land has been identified by HED for inclusion within the Knockdhu Area of Significant Archaeological Interest, it is located to the north (focused on Scawt Hill with its scheduled hilltop cairn) and along the northeast and east of the current designated area.

Area of Archaeological Potential

2.60 There are 3 Areas of Archaeological Potential in our council area. Currently, these comprise the historic cores of Ballycarry, Carrickfergus and Whitehead. They indicate to developers those areas, where on the basis of current knowledge, it is likely that archaeological remains will be encountered in the course of future development or change.

Listed buildings

2.61 Listed Buildings are those designated through listing as being of 'special architectural or historic interest'. Listing covers the complete interior and exterior of the building and can also extend to fixtures and free-standing objects within its curtilage. Buildings included in the statutory list are divided into different grades: A, B+, B, B1 and B2. However, the statutory controls apply equally to all listed buildings, irrespective of grade.

2.62 There are 8,900 Listed Buildings in Northern Ireland, with 683 (8% of Northern Ireland total) located within Mid and East Antrim. Ten are shown as Grade 'A' in table 1.0 below..

Table 1 - Grade A Listed Buildings Mid and East Antrim

| HB Ref | Extent | Townland | Current Use |
|---------------|--|-----------------|---------------|
| HB22/08/001 A | Church, boundary wall and gates and gate pillars | Carrickfergus | Church |
| HB22/13/001 A | House and outbuildings | Dobbsland | Country House |
| HB06/02/001 A | House | Glenarm Demesne | Country House |

| | | | |
|---------------|---|---------------|-----------------|
| HB06/03/011 | Castle, boundary walls, piers, and circular flanker towers. | Ballygalley | Hotel |
| HB06/05/013 A | House and walling enclosing open area at north end. | Redhall | House |
| HB06/05/013 B | Country house, including wall and entrance screen to yard and outbuildings within yard. | Redhall | Country House |
| HB07/15/001 A | Outbuildings within the bawn wall & walling. | | Country House |
| HB07/15/002 | Moravian church and 21 and 25 church road Gracehill | | Church |
| HB07/15/003 | Early Memorials in Graveyard of Moravian Church Gracehill | | Memorial |
| HB22/08/020 | Former Gasworks buildings and walling | Carrickfergus | Gallery/ Museum |

2.63 Historic Environment Division is continually adding and removing buildings from the list. Any list prepared is therefore from 'a point in time' and is subject to change as buildings are added to and removed from the register. A full list of current listed buildings within the council area is available on the Department for Communities website.⁷

Conservation Areas

2.65 Many of our towns and villages contain areas of architectural or historic interest which have a particular character considered worthy of conservation. Buildings within these areas vary in age and style and reflect important eras in our architectural, economic and social history – for example, the 17th century plantation settlements; the Victorian legacy of industrial growth - factories, mills, warehouses, banks, offices and department stores; the post-war era of new towns and suburban expansion, as well as a profusion of architectural styles, for example, Georgian, Victorian, Edwardian and modern. The combination of built heritage and historic street patterns and spaces has helped to create a rich tapestry of settlements which are both rewarding to the eye and abounding in character.

2.66 Within our area there are five Conservation Areas each with their own specific design advice contained in the relevant designation booklets. These Conservation Area guides

should be used by developers when bringing forward development proposals in these areas. Below is a list of existing conservation areas and the associated design guides along with the dates that each Conservation Area was designated by the Department of the Environment:

2.66 **Carnlough Conservation Area** - Designated as a conservation area in 1981. The conservation area includes the historic core of the village and the listed harbour area. The current Conservation Area Design Guide was published in April 1994.

2.67 **Carrickfergus Conservation Area** - The historic core, Castle and harbour area were designated as a conservation area in 1991 due to its unique architectural inheritance, layout and arrangement of the buildings and terraces within the town walls which provides a unique pattern to the local townscape, it has remained largely unaltered since the 13th Century. Carrickfergus Conservation Area Design Guide was published in June 1989.

2.68 **Glenarm Conservation Area** - Designated as a conservation area in 1978, the conservation area includes the historic core of the village, the harbour area and Glenarm Castle and its extensive and impressive gardens and parkland. Glenarm Conservation Area Design Guide was published in April 1994.

2.69 **Gracehill Conservation Area** - Designated as a conservation area in 1975 (Variation 1997). The conservation area includes the historic core of the village, formal street pattern, principal buildings and public and private spaces and the Moravian Church and Graveyard. Gracehill Conservation Area Design Guide was published in January 2003.

2.70 **Whitehead Conservation Area** - Designated as a conservation area in 1992, the conservation area includes the historic core of the town and radiates out from the Railway Station towards the coastline at Marine Parade and the fine Victorian and Edwardian residential villas to the west. Whitehead Conservation Area Design Guide was published in November 1992.

⁷ <https://www.communities-ni.gov.uk/services/buildings-database>

Historic, Parks, Gardens and Demesnes

- 2.71 The character and appearance of the modern landscape of Mid and East Antrim owes much too ornamental parks and gardens associated with our country houses, institutions and public parks. For over three centuries they have been an important feature of the countryside. Many are distinguished by their carefully composed designs of trees, meadow and water, perhaps as a setting for a building; some boast a valuable collection of trees, shrubs or plants; others may provide a significant historic record, either of a particular era or showing how the design has changed over the centuries. Aside from their contribution to the quality and character of our local landscape, those that are open to the public provide an important recreational resource.
- 2.72 The Register of Parks, Gardens and Demesnes of Special Historic Interest aims to identify those sites that can be considered of exceptional importance within the Northern Ireland. Councils should identify Historic Parks, Gardens and Demesnes along with their settings through the LDP, having regard to the register and supplementary lists and bring forward local policies or proposals for the protection of the overall character and integrity of these distinctive areas, in consultation with the Department.
- 2.73 Within Mid and East Antrim the following ten Registered Historic Parks, Gardens and Demesnes are noted, with an additional nine Supplementary sites included on the register:

Table 2 - Ten Registered sites are noted below;

| Registered Sites within Mid and East Antrim | Reference |
|---|-----------|
| Carnfunnock Country Park | AN/136 |
| Castle Dobbs | AN/014 |
| Chaine Park | AN/029 |
| Drumalis | AN/024 |
| Drumnasole | AN/025 |
| Glenarm Castle | AN/033 |
| Hillmount | AN/008 |
| Magheramorne House (Hotel) | AN/109 |
| People's Park | AN/152 |
| Red Hall | AN/071 |

Table 3 - Nine Supplementary sites are noted below;

| Supplementary Sites within Mid and East Antrim | Reference |
|--|-----------|
| Cairndhu | AN/013 |
| Cleggan Lodge | AN/121 |
| Craigdun | AN/018 |
| Garron Tower | AN/031 |
| Glebe House | AN/032 |
| Kilwaughter Castle | AN/046 |
| Portglenone House | AN/058 |
| Random Cottagean | AN/153 |
| Sea Park or Seapark House | AN/016 |

Non-listed Locally Important Building or Vernacular Building

- 2.74 Historic Environment Division retains a database containing records of unlisted buildings of architectural and historic interest which have been identified during the past 48 years. The Buildings Database can be accessed online via the Department's website and provides details of listed and unlisted buildings surveyed by the Division. Unlisted buildings are identified as 'Record Only'. These are all buildings which were once considered for listing, or which were once listed, but which are not currently considered to meet the statutory test of 'special architectural or historic interest'.
- 2.75 Within Mid and East Antrim there are a total of 701 buildings recorded on the database as being 'Record Only', with 106 Grade B listed buildings now having a reduced status of 'Record Only' since the first survey.

Industrial Heritage

- 2.76 The council area also contains a wealth of remains of industrial heritage, all of which are reminders of economic development in the area. The Northern Ireland Environment Agency record and update data containing industrial heritage. Industrial heritage sites would include former mills, factories, bridges and railway fixtures.

2.77 There are 1245 industrial sites within the Council area (11% of Northern Ireland Total), reflecting the significance of industry in the audit area. The majority of the sites are related to manufacturing, with at least 524 mill sites including flax mills, corn mills, and cotton mills and over 109 related sites such as mill races, dams and ponds, bleaching greens and cotton print works. One industrial site, Carrickfergus Gas Works is in State Care and another. There are a number of sites relating to the Belfast to Larne railway opened in 1848 by the Belfast & Ballymena Railway. The 1848 line originally terminated at Carrickfergus before being extended to Larne in 1862 by the Carrickfergus & Larne Railway.

Defence Heritage

2.78 Northern Ireland's defence heritage represents a significant cultural legacy. There are many 20th-century defensive structures dotted around the countryside and coast. The council area contains a wide range of defence heritage features ranging from airfields, anti-aircraft batteries, observation posts, pillboxes and hangers to machine gun ranges. The majority of these are derelict, some have been reused or altered, and others are in a state of decay or have been demolished. There is also one Regional Government Headquarters Nuclear Bunker located near to Broughshane.

2.79 Carrickfergus Castle was utilised during WWI World War I when anti-submarine guns were mounted within the castle on one of the platforms for the defence of Belfast Lough alongside Grey Point Fort in Helen's Bay, Co. Down. During World War II, the basements of the Keep were used as air-raid shelters.⁸

2.80 From its earliest days, medieval Carrickfergus had a turbulent existence and was the subject to frequent attack by the Irish, English and Scots, as well as the. Defensive walls are thought to have been erected early in its history, with the town walls seen today completed by Sir Arthur Chichester in 1615. There are 11 battle sites within the audit area, mainly focused around town walls.

2.81 One of the sites is also on the Sites and Monuments Register (ANT053:014). The Annals of Ulster record this battle fought in Kilroot in 1199, when Hugh O'Neill engaged and defeated an Anglo Norman force. Following de Courcy's expulsion, King John created de Lacy the 1st Earl of Ulster, and Carrickfergus became the seat of the Earldom. Subsequent battles were focussed around the castle and town walls. .

Marine Heritage

2.82 Northern Ireland's inshore and offshore regions contain a rich archaeological record spanning the previous 9,000 years. Shipwrecks have been likened to archaeological time capsules, capable of revealing information about life, technology, trade and warfare at the specific moment they were lost. This ability to inform us about many aspects of our history makes them of interest to archaeologists and part of our shared heritage. A number of our historic shipwrecks are also important tourist assets attracting recreational divers and bringing additional benefits to local economies. The marine historic environment can be characterised as comprising the following principal types of heritage asset:

- wrecks of ships, boats and aircraft
- submerged prehistory, such as artefacts, structures and deposits that are presently submerged as a consequence of sea-level rise, but which originated from human activities on land, and
- coastal and intertidal archaeology, which covers a very wide range of artefacts, structures and deposits that originated from inhabitation or use of the coast.

3.49 There are currently 87 records of known wreck remains⁹ found within the sea adjacent to the coastline of Mid and East Antrim, for example the SS Tiberia was a British steam-propelled cargo ship of 4880 tons built by the Northumberland Shipbuilding Co. Ltd. in Newcastle in 1913. She was a steel-hulled clinker-built vessel and schooner rigged with two masts. On 26th February 1918, she was torpedoed by a submarine U-19 and sunk 3 km east from Black Head, Belfast Lough.

Heritage Assets at Risk

3.50 The Ulster Architecture and Heritage Society in conjunction with the Department for Communities, compiles a list of buildings considered to be at risk in Northern Ireland (the BHARNI register). Though the vast majority of heritage assets are well looked after, a small proportion (around 5% of listed buildings in Northern Ireland) are considered to be at risk. The majority of assets on this register are listed buildings. Some unlisted historic buildings of local interest and some historic monuments are also included.

3.51 Currently there are 29 (9% of the Northern Ireland total¹⁰) historic buildings at risk within Mid and Antrim, ranging from the Grade 'B' listed sprawling complex of the former Sir Thomas and Lady Dixon Hospital located at Cairndhu Ballygalley Larne to the remarkably

⁸ <https://www.communities-ni.gov.uk/sites/default/files/publications/communities/heritage-asset-audit-carrickfergus.pdf>

⁹ <https://www.opendatani.gov.uk/dataset/protected-wreck-sites/resource/1c0cf393-fda4-45d1-a763-a6ce34235cc8>

¹⁰ <https://www.communities-ni.gov.uk/sites/default/files/publications/communities/dfc-heritage-at-risk-report-jan19.pdf>

intact early-17th century, cruck framed dwelling house located at Straid Road Ballyminstra
Ahoghill.

Forces for change



Forces for Change

General

- 3.0 Our countryside is constantly changing in response to human activity and natural processes. In certain areas the cumulative effect of change has become more obvious in recent years, generating a concern for the erosion or loss of local character. The perception of what is considered “appropriate” development in the countryside may also change over time. Similarly change which is regarded as positive by some may be considered as negative by others.
- 3.1 There is a perception that the pace of change is now much more rapid compared with previous centuries and the demands upon the landscape are more diverse. New patterns of agricultural use and land management combine with demands for new roadways and infrastructure, retail and residential development on the edge of towns. Ease of transport and improved communication technology have fuelled the desire to live in the countryside and intensified the pressure to expand or infill our villages and towns. The current commercial incentive to convert or improve traditional buildings is evident to anyone travelling through the countryside.
- 3.2 Many diverse factors can contribute to change in the landscape:
- *Changes to agriculture and land management;*
 - *Built development;*
 - *Infrastructure;*
 - *Mineral extraction and waste disposal;*
 - *Recreation and tourism;*
 - *Renewable energy;*
 - *Climate change, and*
 - *Small scale incremental change.*

Agriculture

- 3.3 Our agricultural landscapes experienced major changes to character and biodiversity in the second half of the twentieth century under the influence of National and European Community legislation. The desire for increased productivity through technological improvements resulted in the loss of many traditional landscape features and a drastic reduction in wildlife and habitats. In recent decades the increasing awareness of the wider

environmental impact of such policies has led to a fundamental change in emphasis, with efforts directed towards a more sustainable approach.

- 3.4 The key forces for change in agriculture are likely to be:
- Certain forms of development associated with farm diversification can have a negative impact upon landscape character. This may involve the loss of traditional buildings and the re-use of existing buildings and their surrounds for industrial, commercial and storage uses. New uses can contribute to the loss of tranquillity in rural areas, e.g. new retail uses attracting increased levels of road traffic.
 - Continuing change in the pattern of land ownership with a move towards larger land holdings. A likely demand for more centralised and larger buildings with increased visual intrusion and associated changes to landscape character.
 - Continuing decline in the traditional management of hedgerows, leading to the loss of the historic field pattern and increasing use of fencing.
 - Increase in part-time “hobby farming” with associated changes to land ownership, fragmentation of traditional landholdings and decline in traditional farming practices.
 - Pressure for new uses for marginal land in some areas, such as horse paddocks or leisure use.
 - Increase in areas under arable crops and a trend towards silage production. Possible move towards energy crops with associated changes to landscape character.
 - Continuing decline in traditional land management practices leading to reduction, fragmentation and deterioration of habitats. Loss of ponds through drainage and in-fill plus nutrient run-off from surrounding farmland. Decline in species-rich hedgerows at some locations. Intensification of grassland management leading to loss of species-rich grassland.
 - In uplands areas reduction or abandonment of grazing, often evident in smaller marginal enclosures, may lead to scrub encroachment.
 - Lack of a sustainable grazing regime for the moorland areas. Over-grazing can lead to species impoverishment and soil erosion. Under-grazing can lead to natural succession to scrub and woodland at inappropriate locations.

- Farmland in the urban fringe is often subject to additional pressures such as recreational activities, trespass, vandalism and fly tipping. New road schemes can lead to fragmentation of ownership making the movement of stock more difficult. Increased traffic levels contribute to the loss of tranquillity and erosion of rural character.

Woodland and Forestry

- 3.5 Today, Northern Ireland ranks badly as one of the least wooded regions in Europe with just 8% woodland cover, compared with the European average of 46%. In addition, almost 60% of our woodland is in the form of recent conifer plantations. Ancient woodland – that’s our last remaining link with the original wild wood established after the Ice Age – is a particularly scarce resource. This precious habitat makes up just 0.08% of the Northern Ireland landscape¹¹. Mid and East Antrim is a sparsely wooded county with less than 4% woodland cover.
- 3.6 Many smaller woodlands are not actively managed. The key forces for change related to woodland and forestry are likely to be:
- Continuing decline in woodland management. The continued health of woodland depends upon suitable management to ensure a succession of growth, productivity and the maintenance of habitat diversity. Traditional management techniques, e.g. coppicing, have been abandoned for some time. Lack of management may allow invasive alien or introduced species to overwhelm the original woodland plant community.
 - The isolation and fragmentation of relic areas of ancient woodland means they are highly susceptible to pressure from surrounding land uses such as intensive agriculture, built development or industry. In such situations the lack of protection or positive intervention may lead to further decline and shrinkage.
 - The historic introduction of conifers into ancient woodlands presents continuing management problems and threat to traditional ground flora.
 - Where woods are grazed there is little natural regeneration and an impoverished ground flora, leading to loss of biodiversity and eventual decline.
 - A continuing search for alternative recreational activities for existing woodlands such as paint-balling, mountain bike courses etc. Such activities can create unsightly scars within the landscape, in addition to the adverse impact upon biodiversity and natural regeneration.

Built Development and Infrastructure

- 3.7 The location of Mid and East Antrim, as a predominantly rural borough located within easy commuting distance of Belfast has generated a great demand for built development and improved communications. The key forces for change related to build development and infrastructure are likely to be:
- Expansion of our towns and infill development in rural areas where the scale and pattern of the new build is not in sympathy with traditional development or existing landscape character.
 - The use of standard designs or inappropriate building materials which fail to reflect traditional building styles and materials and contribute to the erosion of local distinctiveness and character.
 - The expansion of retail, leisure, commercial and industrial developments on the outskirts of towns, where the larger scale and introduction of new building materials diminishes the rural character of the surrounding area, and
 - New overhead power lines and pylons can cause substantial visual disruption leading to loss of tranquillity and erosion of rural character.

Minerals & Waste

- 3.8 Mid and East Antrim possesses mineral resources of regional importance in the form of lime, salt and basalt. Information obtained from QPANI suggests there are 10 major extraction areas located in the Borough, producing approximately 3.2 million tonnes of aggregates each year. This equates to an annual value of approximately £13.7 million and creates employment for 396 people in the quarry industry¹². The county council is also under pressure to identify additional landfill waste disposal facilities to satisfy the future needs of community and industry. The key forces for change related to minerals and waste are likely to be:
- The large sites required for waste disposal operations and mineral extraction sites can result in the loss of extensive areas of land. In the case of agricultural land this may involve the loss of historic landscapes with their ancient field patterns, traditional features such as hedgerows and ponds and associated habitats.
 - The restoration of mineral extraction or waste disposal sites can provide an opportunity for the creation of new habitats and landscapes. Sensitive planning and design can replicate some of the features lost to the development and reinforce the character of the surrounding landscape. Such sites may provide new opportunities for public access and enjoyment.

¹¹ <https://www.woodlandtrust.org.uk/about-us/where-we-work/northern-ireland/>

¹² https://www.midandeantrim.gov.uk/downloads/12_Minerals_Development.pdf

- The machinery and traffic associated with the site during the operational period may generate noise or visual intrusion leading to loss of tranquillity and rural character.

Recreation and Tourism

3.9 Many visitors are drawn to particular parts of the Borough by the attractive character of the landscape. The elevated landscapes of Garron Plateau, the stunning Coast Road, the scenic glens and historic parklands are all particularly popular for informal countryside recreation. The key forces for change related to recreation and tourism are likely to be:

- Increased demand for additional recreational facilities at popular locations. The visual intrusion associated with car-parks, visitor centres etc. can have an adverse effect upon landscape character.
- Increased recreational activity can lead to erosion, disturbance and disruption of sensitive habitats and species.
- Increased demand within certain areas for visitor accommodation such as caravan parks, holiday homes etc. The change of land use and the potential visual intrusion of the new development can lead to the loss of agricultural landscapes with consequential changes in landscape character.

Climate change

3.10 There is increasing evidence of global climate change. The government has been advised that the implications for the UK climate could include the following scenarios:

- An increase in average temperatures.
- Milder-wetter winters with fewer frosts and less snow.
- Hotter, drier summers with more frequent droughts.
- More frequent occurrence of extreme events such as floods and storms.

3.11 The exact changes are difficult to ascertain at a local level but there are likely to be both direct and indirect impacts upon our landscapes. The key forces for change related to climate change are likely to be:

- Higher temperatures and changes in rainfall patterns are likely to affect the biodiversity of the county, with the loss or adaptation of certain habitats or species on the edge of their range. This may involve the localised extinction of some species and the introduction of new plants and animals. There may be possible gains in some areas as the milder climate allows the northern expansion of certain species within the UK.

- Drier summers may lead to a reduction in groundwater levels and a drying out of ponds and wetlands. Fragile habitats such as blanket bog, lowland raised mire and wet woodlands may be particularly vulnerable. Veteran and mature trees that are already under stress from other factors such as close ploughing or compaction are likely to be very vulnerable to periods of drought.
- Increased frequencies of winter storms may result in more storm damage to woodland.
- Warmer drier summers may lead to an increase in the incidence of fires in moorland, heathland and woodland.
- Increased investment in irrigation reservoirs to store winter rainfall, with associated issues of visual intrusion within the countryside.
- Rising sea levels may affect coastal habitats and could result in the loss of certain areas such as saltmarsh along Larne Lough.
- Increased investment in coastal defences and flood protection measures, with associated issues of visual intrusion and change in character along the Causeway Coastal Route.
- Increased periods of saturation and flooding in heavy, poorly drained or retentive soils such as clays.
- An increase in the length of the growing season and changing patterns of rainfall may lead to changes in agriculture. This could involve an increase in arable cultivation and the replacement of traditional crops by drought tolerant species such as maize. Land management practices in the upland fringes may adapt to the warmer climate with an increase in arable crops and new patterns of animal husbandry.
- Warmer drier summers may lead to increased demand for outdoor recreational use of the countryside and facilities with associated problems such as erosion, visual intrusion and loss of tranquillity.
- It is possible that certain locations in the more elevated parts of the Borough will be further targeted for the location of wind turbines and potential solar. Such structures are likely to be highly contentious due to their prominent location and the associated visual impact.

Small scale incremental change

3.12 By their nature small-scale developments are usually low profile and do not often feature in the headlines or public debate. Over time however, the incremental impact of a series of poor quality developments or inappropriate changes to landscape character arising from different management regimes, can have a major impact upon the quality of the environment. The key forces for change related to small-scale incremental change include:

- The erosion of the built environment character by failing to respect local building styles and vernacular materials when undertaking property improvements. The use of inappropriate building materials can diminish local distinctiveness and contribute to the gradual imposition of a bland homogeneous building style across the Borough. The "improvement" of the surroundings to rural buildings may be carried out in an inappropriate suburban style which further diminishes rural character.
- Increased traffic in some rural areas can create a demand for small scale road improvements, often required because of concerns for safety and improved visibility. Some engineering works can lead to the loss of existing features such as roadside trees or field boundaries. Others may require new signage or lighting. All such efforts can contribute to the loss of local distinctiveness and the erosion of landscape character. The cumulative effect is often the urbanisation of the countryside.
- The localised introduction of inappropriate species on field boundaries, such as conifer windbreaks in the vicinity of fruit farms, resulting in locally dominant but alien features within the landscape.
- Poor or inappropriate management of field boundaries can have a subtle, almost intangible but ultimately insidious affect upon landscape character. In Mid and East Antrim, the field pattern and associated hedgerows or drystone walls are an essential component of the local character and landscape. Any loss or decline in these features would lead to a fundamental change in the landscape and the erosion of local distinctiveness.

Methodology



Landscape Character Assessment

Methodology

4.0 Key Principles for undertaking a Landscape Character Assessment

4.1 The following principles should be adhered to when conducting a Landscape Assessment (Natural England, 2014):

1. Landscape is everywhere, and all landscape and seascape have character.
2. Landscape occurs at all scales and the process of Landscape Character Assessment can be undertaken at any scale.
3. The process of Landscape Character Assessment should involve an understanding of how the landscape is perceived and experienced by people.
4. A Landscape Character Assessment can provide a landscape evidence base to inform a range of decisions and applications, and
5. A Landscape Character Assessment can provide an integrating spatial framework – a multitude of elements and features combine to give us our distinctive landscapes.

4.2 Landscape Character Assessment Objectives – in context of Local Development Plan for Mid and East Antrim Borough

1. To update the original evidence base provided by NILCA 2000, as it applies to MEA, taking particular account of subsequent publications and development patterns.
2. To use the updated evidence base to identify significant changes in landscape character in LCAs, or parts of LCAs, that fall within MEA, but particularly within LCAs that contain areas of exceptional or high landscape/scenic quality.
3. To use the landscape character assessment to inform the LDP in regard to identifying discreet areas of exceptional or high landscape/scenic quality that may warrant further study to assess if any of these areas could benefit from a spatially defined landscape designation(s) and associated planning policy for the management of development in order to protect important landscape assets.
4. To promote an awareness of landscape character in MEA and the importance of landscape conservation, enhancement and restoration.

5. To use the landscape character assessment to assist with monitoring change of landscapes within MEA.

Methodology

Stage 1 - Define the Purpose and Scope of the Landscape Assessment

Stage 2 – Desktop Research

Stage 3 – LCA Field Survey

Stage 4 – LCA Character Review – Outputs

4.3 Stage 1 – Define the Purpose and Scope of the Landscape Assessment

4.4 The purposes of the landscape character assessment are set out in the objectives above. The landscape character assessment is concerned with identifying characteristics that are distinctive, unique or special within surveyed LCAs.

4.5 One important output of this for the LDP will be to focus attention on those areas emerging from the study as being of exceptional landscape quality and which may merit protection in accordance with the requirements of the Strategic Planning Policy Statement (SPPS).

4.6 For surveyed LCAs, the study will seek to review the original NILCA 2000 description of landscape character, landscape sensitivity and forces for change (observable past and present forces for change and potential future forces for change). The study will give particular emphasis to gathering evidence in areas with significant views, features and/or landscape elements (quality or degraded) as identified by NILCA 2000. In doing so, account will be taken of development patterns since 2000 and ongoing development pressure, particularly in the most sensitive areas.

4.7 The assessment can be used to inform policy development and principles for accommodating new development e.g. with regard to renewable energy and single dwellings in the countryside. Further, the study aims to produce an evidence base for the assessment of the need to retain existing strategic LDP designations, amend strategic LDP designation boundaries and/or to introduce new strategic LDP designations.

4.8 This study will not conduct an assessment of character areas within settlement development limits. However, it will indicate the significant landscape features that help to define the setting of selected settlements.

4.9 Stage 2 - Desktop Research

1. Record information for each LCA - "Collated Information Sheet"

This sheet was used to record information on the following factors:

- a) LCA Reference;
- b) Regional LCA ref(s);
- c) Regional Seascape Character Area reference(s);
- d) Location – brief description of LCAs location within the council area;
- e) Landscape Type(s) – list any readily identifiable landscape types in the LCA – areas which are relatively homogenous in character and generic in nature e.g. escarpment, woodland, lowland, pasture, upland farmland, moorland, coast, urban etc.
- f) Current land uses – the most notable land uses outside of settlement development limits;
- g) Extant development plan designations;
- h) Nature conservation interests (International, European, National, Local) –
 - i) *Designated Sites*: record the site's reference number and briefly describe the reason for the site being designated.
 - ii) *Local nature conservation interest*: list and describe any local features identified in extant development plans or in information provided by DAERA;
- i) Physical Influences – brief description of:
 - I. elevation – highlight the elevation(s) within the LCA shown by the contour map,
 - II. topography,
 - III. geodiversity,
 - IV. hydrology;
- j) Settlements – record any significant information on the location and origin of key settlements, pattern of settlement growth etc.
- k) Historic environment assets –
 - I. archaeological sites and monuments – record reference and name for state care and scheduled monuments located outside of settlement development limits or on shoreline;
 - II. listed buildings – record reference, grade and location for listed buildings outside of settlement development limits or on shoreline;
 - III. historic parks gardens and demesnes - record reference, name and location if located outside of settlement development limits or on shoreline;
 - IV. industrial heritage assets – record asset type if located outside of settlement development limits or on shoreline;

- V. defence heritage – record asset type if located outside of settlement development limits or on shoreline;

l) Land cover/Vegetation cover – based on NILCA 2000 and other relevant publications describe the land cover/vegetation cover which contributes significantly to the character of the LCA,

m) Field Patterns and Boundaries – based on NILCA 2000 and other relevant publications describe the distinctive field patterns / boundaries / features that are generally represented in the LCA or in significant parts of the LCA.

n) Landscape Features and Landform – record information on the following:

- I. distinctive landscape settings,
- II. key views,
- III. vistas,
- IV. prominent ridgelines,
- V. prominent hills,
- VI. escarpments,
- VII. glens,
- VIII. other important landscape features;

o) Recreation – record any formal or informal recreational use that contributes to tourism, community recreation opportunities, the area's attraction as a destination, and/or the area's unique amenity value.

p) Perceptual Characteristics – highlight how each of the following perceptual elements contribute to the aesthetic/visual characteristics of the landscape:

- I. Tranquillity – input information from RLCA, NILCA 2000, NI Regional Seascape Character Assessment and Wind Energy Development in NI Landscapes. Update after LCA survey. The following should be considered: Perceived naturalness, visible human impact, settlement pattern and artificial lighting.
- II. Views - input information from RLCA, NILCA 2000, NI Regional Seascape Character Assessment and Wind Energy Development in NI Landscapes. Update after LCA survey. The following should be considered: views within the LCA, Views to the LCA from surrounding areas, views from the LCA to surrounding areas.

q) Landscape Condition – input information from RLCA, NILCA 2000, NI Regional Seascape Character Assessment and Wind Energy Development in NI Landscapes. Update after LCA survey. The following should be considered:

- I. Detracting Features, and
- II. Physical State of Individual Elements / Landscape.

r) Landscape Sensitivity – summarise the landscape sensitivity with regard to landscape character, the environment and visual considerations using the following:

- I. NILCA 2000,
- II. Wind Energy Development in NI's Landscapes,
- III. Regional Landscape Character Assessment.
- IV. NI Regional Seascape Character Assessment.

s) Key Issues and Forces for Change – record information on the following using NILCA 2000, Wind Energy Development in NI's Landscapes, the Regional Seascape Character Assessment, RLCA, media reports and other sources of information:

- I. Observable change (past and present) within the LCA which has impacted the character of the LCA,
- II. Potential Future Forces for Change – this data can draw on information from the above sources and also development pressure analysis and trends, planning applications and information from consultees.

t) Planning History Check – record within the “Collated Information” sheet any planning applications related to renewable energy schemes and other planning applications considered of such significance that they should be highlighted. The following should be recorded:

- i) Proposal,
- ii) Location,
- iii) Decision,
- iv) Decision Date;

2. GIS Information

(some information may not be available before site survey stage)

a) Create map of LCA to show its location within the council area.

b) Create maps to show the following:

- i) settlement development limits,
- ii) nature conservation designations (Ramsar, SAC, SPA, ASSI, Nature Reserves, extent of the Antrim Coast and Glens AONB),
- iii) archaeological sites and monuments,
- iv) Areas of Significant Archaeological Interest (ASAI),
- v) listed buildings,
- vi) historic parks gardens and demesnes,
- vii) any significant industrial heritage and defence heritage sites.

c) Create a map of LCA and contours (lowland: 0 - 50m, transitional landscape: 51 – 200m, upland: 200m+).

d) Create maps showing development pressure related to:

- Single dwellings,
- Wind Turbines.

Stage 3 – LCA Field Survey

The field survey should focus attention on the key landscape characteristics identified on the LCA maps produced by the NILCA 2000 assessment i.e. distinctive landscape settings, ASQs, key views, landmarks, prominent ridges and prominent hills.

a) For each survey site record the site location and note how the following key observable features/characteristics contribute to the landscape character of the area: topography, land cover, field patterns and boundaries, hydrology, built and historic environment, recreation, critical views and visual exposure.

Consideration should be given to the following factors:

- Key landscape features/characteristics,
- Scale,
- Landform,
- Landscape pattern and complexity,
- Settlement and human influence,
- Historic Character and influences,
- Critical views,
- Inter-visibility with adjacent landscapes,
- Perceptual aspects,
- Habitats and biodiversity.

b) For each survey site note how the perceptual and experiential characteristics contribute to the landscape character of the area.

c) Landscape Condition and Forces for Change –

- Assess visual unity/intactness of the landscape with account taken of any observable land management issues or adverse visual impacts on the landscape.
- Assess the physical state of key individual elements e.g. ridgelines, prominent hills and field boundaries (in general). Assess the condition of the setting of prominent or landmark historic environment assets.
- Comment on any visual/noise intrusion in the area focusing on how this has impacted on key characteristics/features in the landscape.
- Note any observable impacts development has had on the landscape in the area e.g. consider the cumulative impacts of development, any development unsympathetic to

existing character, any development which may have changed the character in the area etc.

d) Photographs -

Photographs should be taken at each survey point. They provide an important supplementary record and point of reference. Consider photographs of the following:

- key/prominent elements and features;
- significant critical/scenic views;
- significant vernacular buildings;
- areas with significant field patterns and/or strong boundary features;
- observable forces for change.

Stage 4 – LCA Character Review - Outputs

The outputs of the Landscape Character Assessment review will include the following:

- A contextual description of the study area,
- Maps that display significant landscape assets within an LCA
- Maps that display the topography within an LCA
- A list of key characteristics that contribute to defining the character of the LCA.
- A description of an LCA's landscape which refers to significant elements that contribute to the LCAs character.
- A description of the scenic quality of an LCA, or parts thereof.
- A geodiversity profile of an LCA based on NILCA 2000.
- A biodiversity profile of an LCA based on NILCA 2000.
- A list of nature conservation sites within an LCA.
- An assessment of an LCAs 'sensitivity to change'.
- Outline significant landscape features that help to define the setting of selected settlements.
- An assessment of development pressure in relation to single countryside dwellings, wind energy and solar energy.
- A list of discreet areas of exceptional or high landscape/scenic quality that have been identified for further study to assess if any of these areas should be protected through the LDP.

1. Contextual Description of the Study Area

The contextual description of the study area may include a description of the broad landscape context of the council area, and individual landscapes found within the Borough, having regard to the wider regional context.

2. LCA Maps

See section Stage 2 – Section 2 – GIS Information.

3. List of LCA key characteristics

An "Approach to Landscape Character Assessment" (Natural England, 2014) states that landscape descriptions should be accompanied by a separate list summarising the key characteristics of each landscape character area.

Key characteristics are the mix of elements which together contribute to an area's distinctive sense of place. Key characteristics should be genuinely characteristic of the whole LCA, rather than being strictly local in occurrence. If these characteristics change, or are lost, there are likely to be significant impacts on the current landscape character. Therefore, these key characteristics are useful reference points against which to assess changes in the landscape, and can be used for monitoring change.

Key characteristics are usually described in brief statements and normally include a summary of the landform, land cover, semi-natural vegetation, field pattern, aspects of settlement and aesthetic characteristics e.g. factors which influence the setting and character of the area.

This Landscape Character Assessment review will produce a list of the key characteristics within an LCA based on those key characteristics identified in the following publications: NILCA 2000, NIRLCA, the Regional Seascape Character Assessment and the Wind Energy in NI's Landscapes publication.

4. LCA Landscape Description

The aim of the description is to describe the overall character of the landscape with reference to key characteristics and elements, and to set out how these key characteristics and elements interact and are generally perceived in terms of their contribution to the character of the LCA.

The description of the LCA will largely rely on the NILCA 2000 assessment as it takes account of the long term evolution of the landscape which is unlikely to have changed fundamentally in the past 18 years. However, any significant observable change will be highlighted in this section.

Photographs

Photographs will accompany this document as they are useful to illustrate the landscape being described.

5. Description of Scenic Quality

The classification of an area within an LCA as an Area of Scenic Quality (ASQ) will be based on the NILCA 2000 assessment, unless the scenic quality of such an area is observed to have significantly deteriorated. The classification of an area of an LCA as a "distinctive landscape

setting” or a “degraded landscape” will be based on the NILCA 2000 assessment, unless the landscape character has significantly changed.

6. LCA Geodiversity Profile

The geodiversity profile of each LCA will be based on the NILCA 2000 assessment.

7. LCA Biodiversity Profile

The biodiversity profile of each LCA will be based on the NILCA 2000 assessment.

8. LCA Nature Conservation Sites

A list of nature conservation sites contained within an LCA will be collated.

9. Assessment of LCA Landscape Condition and Sensitivity to Change

Landscape Condition

A summary of landscape condition in the LCA will be based on the NILCA 2000, Wind Energy in Northern Ireland’s Landscapes, RLCA and NI Regional Seascape Character Assessment publications. Any significant observable changes in regard to field patterns, cumulative impacts of development and/or visual impacts of human intervention will be noted throughout the LCA review process. However, it should be noted that the primary focus for this study is to assess the landscape condition in regard to visual elements. A robust assessment of biodiversity, ecology, and ecosystem services is outside of the scope of this study.

Landscape Sensitivity to Change

A summary of an LCA’s sensitivity to change, or that of its’ constituent parts, will be based on the NILCA 2000, Wind Energy in Northern Ireland’s Landscapes, RLCA and NI Regional Seascape Character Assessment publications.

Landscape Sensitivity to change is an assessment of the extent to which the inherent character and visual amenity of a landscape is vulnerable to change. When assessing landscape sensitivity to change the following shall be considered:

- **Landscape Character Sensitivity** – the degree to which a LCA is vulnerable to future changes in the landscape which are likely to impact on the character of the LCA (**see Table 1 – Annex 3**);
- **Visual Sensitivity** – the degree to which a particular view or visual landscape experience is vulnerable to future changes in the landscape (**see Table 2 – Annex 3**);
- **Landscape Value** – this refers to the intrinsic value attached to a landscape, often reflected in designation of protected areas (natural or built environment) and/or landscape classifications and expressed national or local consensus as to the degree of importance of a landscape (**see Table 3 – Annex 3**).

Landscape sensitivity will be unique to each LCA and each LCA may have different sensitivity levels to various types of development. The following criteria are used to assess landscape sensitivity:

- a) **Natural beauty and amenity** – based on the presence of flora, fauna, geological and physical geography features, and less tangible factors such as remoteness, tranquillity and aspects of landscape experience. *Tranquillity* is related to low levels of built development, traffic, noise, and artificial lighting. Skylines, settings, visibility and critical views are important considerations.
- b) **Landscape value** - The following landscape criteria can be used to assess landscape value:
 - **Landscape Quality** – the general condition of features and elements;
 - **Scenic Quality** – describes landscapes which appeal primarily to the visual senses;
 - **Rarity** – the presence of rare features and elements in the landscape, or the presence of a rare landscape character type;
 - **Representativeness** – the presence of particular landscape features and/or landscape character that stakeholders consider to be valuable.
 - **Conservation interests** – features of wildlife, earth science, archaeological, historical and cultural interest have intrinsic value and can add value to a landscape;
 - **Wildness** – wild (or relatively wild) character can contribute to creating a sense of place;
 - **Associations** – e.g. cultural and historical associations.
- c) **Recreational opportunity** – consideration of formal and informal opportunities for open-air recreation within the LCA.

10. Assessment of Development Pressure

The following types of development may result in a change in landscape character:

- Agriculture,
- Forestry,
- Residential development,
- Minerals development,
- Industrial development,
- Infrastructure development,
- Renewable Energy,
- Tourism,
- Recreation.

PPS 21 (para 4.2) advises that an analysis of development pressure is normally included in countryside assessments which seek to provide an evidence base for local policy development in the development plan process. It is generally considered that wind turbines and single dwellings have had the most significant visual impact in the countryside, particularly in regard to the cumulative impacts of such development. Therefore, development pressure analysis has been undertaken (see Appendix B of Technical Supplement 10 – Countryside Assessment) to identify

areas which have been impacted by development pressure for wind turbines and single dwellings and those areas which are particularly vulnerable to pressure for such development. Impacts from solar energy development have also been considered as this type of development can be obtrusive in the landscape and any increase in pressure for such development could have significant adverse impacts on landscape character.

LCA sensitivity to change (see section 9) can vary between LCAs, and within LCAs, and is influenced by landform, land cover, visual exposure, perceptual qualities, natural and cultural heritage features and cultural associations. This study will consider the cumulative impacts of development and the sensitivity of an LCA, or constituent parts of an LCA, to development (or particular forms of development).

In attempting to give consideration to potential future pressures from the renewable energy sector, it is considered that development pressure from renewable energy sources may increase if subsidies for 'clean energy' schemes become available or increase, and that this could potentially lead to an increase in development pressure from solar energy schemes given the decreasing costs of solar energy technology. In recognition of the significant visual impacts commercial-scale solar energy schemes can have on the landscape, it is considered prudent to assess the current development pressure from solar farm schemes within MEA and consideration of areas that may be sensitive to this type of development. To inform this section of the development pressure analysis, Annex 4 includes background information in regard to solar energy schemes in a planning policy context.

11. Identification of distinctive and/or sensitive landscapes - areas for further study

Discreet areas within some LCAs will be identified for their exceptional or high landscape/scenic quality. Such areas of exceptional or high landscape/scenic quality are likely to be the areas in the Borough that are most sensitive to change. These discreet areas will be identified using the collated evidence for each LCA and, after identifying the most sensitive areas within each LCA, evaluating these discreet areas against 7 criteria. The 7 'landscape assessment' criteria are based on factors that relate to the following (see section 9 above):

- Landscape Character Sensitivity,
- Visual Sensitivity, and
- Landscape Value

The evaluation criteria set out in Annex 3 will be used to guide the assessment of the sensitivity of each area.

The 7 assessment criteria used to score each area are:

1. **High Landscape Quality** (AONB/ASQ/Scenic River Corridor/Coastal Shoreline/significant influence of an internationally or nationally significant Site(s) of Nature Conservation Importance)

2. **Scenic Quality** (AONB/ASQ)
3. **Visually Exposed/Prominent Landscape Features** (Ridgelines/ Headlands/ Hills/ Slopes/ Floodplains/ Coastal Shoreline) **that are highly distinctive and/or highly significant for the setting of landmark features/ escarpments/ settlements**
4. **Distinctive features that contribute significantly to the setting of a settlement(s)** (e.g. river corridor/ woodland/ prominent features of visual importance).

NB: for the purposes of this assessment 'settlement' refers to any town or village included within the preferred option (2a) of Key Issue 2: Settlement Hierarchy in the MEA Preferred Options Paper. The justification for this is because these 'settlement tiers' are considered to include settlements most likely to experience pressure for outward expansion, and therefore, most likely to require strategic designations to protect important landscape assets abutting, or adjacent to, the settlement edge).

5. **Sites of Natural Heritage Conservation Importance** (international/national significance)
6. **Historic Environment Features - significant contribution to landscape value of the whole Area of Highest Landscape Value, or a significant part thereof** (ASAI/ State Care Monument/ Scheduled Monuments/ Historic Park, Garden and Demesne/ Significant groups of Listed Buildings/Conservation Area/Landmark Listed Structures)
7. **Unique Amenity Value** (Significant Community/Recreation/Tourism resource and/or highly significant cultural associations)

NB: A significant community/recreation/tourism resource can include areas that are formally or informally used for recreation, areas with infrastructure that support leisure such as marinas or recognised walking routes, and areas that provide a unique setting for a tourism asset and thereby add value to that tourism asset etc. Features with strong cultural associations can include features (built or natural heritage) that contribute to community use of an area or a community's sense of identification with an area, for example, landmarks or significant natural heritage sites that add cultural value to a place.

It is anticipated that only the highest scoring sites (scoring 5 and above) will be taken forward for further analysis which will involve an in-depth study of each subject area using the framework set out in Annex 5. A report on each subject area will be produced to recommend **i)** whether or not the discreet area would benefit from a spatial policy designation that seeks to provide additional protection for the important landscape assets contained within it, and **ii)** what type of spatial designation and level of policy protection is appropriate to meet the aims of the designation.

NB: although an area may not be considered for further study in regard to the **appropriateness of a 'strategic landscape designation'**, this does **not** preclude such an area from consideration for a 'lower' level landscape designation. It should also be noted that there may be instances in

which a 'low scoring' site may warrant inclusion within a strategic designation, for example, agricultural fields which help to maintain the separate identities of settlements.

Annex 1: Glossary of Terms

Landscape – an area, as perceived by people, whose character is determined by the action and interaction of natural and/or human factors (Natural England, 2014).

Key Characteristics – those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particular distinctive sense of place (Natural England, 2014). If key characteristics were to change or be lost there would be significant impacts on the current landscape character.

Landscape Character – may be defined as a distinct, recognisable and consistent pattern of elements in the landscape that make one landscape different from another, rather than better or worse (Natural England, 2014). Factors such as geology, landform, soils, vegetation, land use and human settlement create landscape character. Character makes each landscape distinct and gives each a particular sense of place (The Countryside Agency and Scottish Natural Heritage, 2002).

Landscape Character Type - distinct types of landscape that are relatively *homogenous* in character and *generic* in nature. Areas of a particular landscape type may occur in different areas and will share broadly similar combinations of geology, topography, drainage patterns, vegetation, historic land use and settlement pattern (Natural England, 2014). Areas of the same landscape type are not necessarily identical, rather, there is a common pattern which can be discerned.

Landscape Character Area (LCA) – these are **unique** geographical areas of a particular landscape type. Landscape Character Areas share generic characteristics with other areas that include the same landscape type, but LCAs have their own particular identity (Natural England, 2014). LCAs can provide a spatially referenced framework which describes patterns of local distinctiveness and factors influencing sense of place.

Landscape Quality (or condition) – this is based on judgements about the physical state of the landscape and its intactness in terms of visual, functional and ecological qualities. Landscape quality/condition also reflects the condition of individual features and elements which contribute to landscape character (Natural England, 2014).

Landscape Sensitivity – this is the extent to which a landscape can accommodate change of a particular type and scale without unacceptable adverse effects on its character (Natural England, 2014).

Landscape Value – based on the relative value or importance attached to a landscape, which reflects national or local consensus, owing to its qualities, for example, scenic beauty, tranquillity or wildness, cultural associations, or other conservation issues (Natural England, 2014).

Landscape Capacity – the degree to which a particular landscape character type or area is able to accommodate change without significant adverse impacts on its character. Landscape capacity will tend to vary in relation to the type and nature of the proposed change (Natural England, 2014).

Forces for Change – these are issues and pressures affecting the landscape and its key features. For example, forces for change could be various types of development, development trends, land management trends, and natural forces such as flooding and climate change (The Countryside Agency and Scottish Natural Heritage, 2002).

Annex 2: Assessment Aids

Assessment Aid: Topography:

| | | |
|-----------------|-------------------|---------------------|
| Flat | Ridgelines | Dry valley |
| Undulating | Lowlands | Deep gorge |
| Rolling | Plateau | Broad valley |
| Steep | Scarp/cliffs | Narrow valley |
| Vertical | Hills | Upland |

Assessment Aid: Land Cover and Landscape Elements

| Built Environment | Heritage | Farming | Land cover | Woodland/trees | Hydrology | Communications |
|---------------------|-----------------------------|------------------|------------------------|-----------------------|----------------|--------------------|
| Farm building | Vernacular building | Walls | Parkland | Deciduous woodland | River | Road |
| Masts/pole | Country house | Fences | Scrub | Coniferous plantation | Stream | Track |
| Pylons | Field system | Hedges | Marsh | Mixed woodland | Floodplain | Footpath |
| Industrial building | Prehistoric ritual site | Fields | Peatbog | Shelterbelt | Estuary | Lane |
| Settlement | Hill top enclosure/fort | Arable | Moor/heath | Boundary trees | Coast | Railway |
| Urban | Ecclesiastical building | Improved pasture | Rough grassland | Orchard | Reservoir | Bridge |
| Military barracks | War monument | Rough grazing | Grassland | Group of trees | Dry valley | Pylons |
| | Coppice | Orchard | Species rich grassland | Isolated trees | Lake | Communication mast |
| | Parks, Gardens and Demesnes | | Water meadow | | Pond | |
| | | | | | Drainage ditch | |

Annex 3: Assessment of Landscape Sensitivity to Change

The following tables are not designed to be prescriptive tools used to assess landscape sensitivity to change, rather they are intended to be used as a guide to inform the assessment of landscape sensitivity.

TABLE 1: ASSESSMENT OF LANDSCAPE SENSITIVITY

| Landscape Sensitivity | Consideration |
|-----------------------|---|
| High | <p>Landscape character considered highly vulnerable to change from development. These landscapes would typically:</p> <ul style="list-style-type: none"> ▪ Be high quality landscapes with unique features/characteristics which contribute positively to landscape character, sense of place and local distinctiveness. ▪ Have features/characteristics that are rare and could not be replaced. |
| Medium | <p>Landscape character considered to be able to accommodate some change resulting from development, although these landscapes have distinctive landscape features/characteristics that should be protected from development. These landscapes would typically:</p> <ul style="list-style-type: none"> ▪ Have features/characteristics that contribute positively to landscape character, sense of place and local distinctiveness but which are unexceptional in character. ▪ Have some features/characteristics which could not be replaced. |
| Low | <p>Landscape character considered not vulnerable to change resulting from development. These landscapes would typically:</p> <ul style="list-style-type: none"> ▪ Have some features/characteristics that are degraded and/or not harmonious resulting in indistinct character with little or no sense of place. ▪ Likely to have few, if any, features/characteristics that could not be replaced. |

TABLE 2: ASSESSMENT OF VISUAL SENSITIVITY

| Visual Sensitivity | Critical Views/Viewing Points |
|--------------------|--|
| High | <p>LCA typically has long distance critical views.</p> <p>LCA typically has viewing points with critical views of interesting surroundings or prolonged views. These viewing points can include the following:</p> <ul style="list-style-type: none"> ▪ Scenic/tourist routes ▪ Visitor/recreational sites ▪ Recognised walking/cycle routes ▪ Residential areas |
| Medium | <p>LCA typically has medium distance critical views.</p> <p>LCA typically has viewing points with critical views of surroundings or with intermittent views. These viewing points can include the following:</p> <ul style="list-style-type: none"> ▪ Public open space ▪ Walkways ▪ Roads |

Low

LCA typically has short distance critical views.

LCA typically has viewing points with only fleeting/intermittent critical views of surroundings. The surroundings are generally of limited interest. These viewing points can include the following:

- Major roads
- Commercial and industrial buildings
- Centres of employment
- Indoor facilities

TABLE 3: ASSESSMENT OF LANDSCAPE VALUE

| Value | Qualities |
|---------------|---|
| High | <p>LCA has many positive qualities in regard to landscape value. For example:</p> <ul style="list-style-type: none"> ▪ Landscape designations ▪ Strong aesthetic and perceptual qualities ▪ Limited or no degradation of features/characteristics resulting in a landscape which is generally intact with limited/no intrusive development. ▪ Contains features/characteristics valued by the community/interest groups. ▪ Contains features/characteristics important for tourism/recreation. |
| Medium | <p>LCA has some positive qualities in regard to landscape value. For example:</p> <ul style="list-style-type: none"> ▪ Landscape designations ▪ Some aesthetic and perceptual qualities ▪ Some areas have a mixed character ▪ Some degradation of features/characteristics resulting in a landscape which is partly intact with some intrusive development. ▪ Contains some features/characteristics valued by the community/interest groups. |
| Low | <p>LCA has limited qualities in regard to landscape value. For example:</p> <ul style="list-style-type: none"> ▪ No landscape designations ▪ Limited aesthetic and perceptual qualities ▪ Few valued features/characteristics ▪ Mixed character ▪ A disjointed landscape with intrusive development. ▪ Limited use by the community/interest groups. |

Annex 4: Solar Energy

Solar Farms (sometimes known as solar parks or solar fields) are commercial-scale energy schemes that use multiple solar photovoltaic (PV) panels to generate electricity, which usually feed into the national grid. Solar energy schemes are a renewable source of energy which generate inward investment and create jobs in the 'clean energy' sector, whilst reducing the reliance on fossil fuels which contribute significantly to global warming.¹³

Strategic Planning Policy (Renewable Energy) – 'Call for Evidence'

On 7th March 2016, The Department for Infrastructure announced 'Calls for Evidence' to help inform the scope of a proposed focused review of strategic planning policy for Renewable Energy Development (and strategic planning policy for Development in the Countryside). Following on from this consultation exercise, an emerging issues paper with emerging 'Key Themes' was published in September 2016 and highlighted that, in relation to solar energy schemes, the following factors are key considerations:

- i) visual amenity impacts, and
- ii) integration of solar farms.

From the emerging issues paper, it was also highlighted that respondents were in favour of a balanced policy approach which would recognise the need to meet renewable energy targets whilst protecting key environmental assets. Some respondents desired a more strategic approach in relation to selection of the most appropriate sites and locations for renewable energy development, and also indicated a need to address the cumulative impacts of renewable energy developments.

Strategic Planning Policy Statement (SPPS)

The SPPS advocates a cautious approach for renewable energy development proposals within designated landscapes which are of significant value, such as Areas of Outstanding Natural Beauty (AONB) and their wider settings. In such sensitive landscapes, it may be difficult to accommodate renewable energy proposals without detriment to the region's cultural and natural heritage assets.

The SPPS also stresses active peatland is of particular importance to Northern Ireland for its biodiversity, water and carbon storage qualities, and that any renewable energy development on active peatland will not be permitted unless there are imperative reasons of overriding public interest.

The SPPS recognises that some landscapes may be able to accommodate solar farms more easily than others on account of their topography, landform and ability to limit visibility.

NI Context: statistics

Across Northern Ireland, 37 applications for Solar Farm development have been identified in a 'broad search' exercise of applications between January 2008 and January 2018, and of these applications, 27 were approved, 3 were refused, 3 were withdrawn and 2 are current applications. Of the 3 refusals 1 has since been appealed and upheld. 3 of the 37 applications were located within the MEA Borough Council area and received planning permission. The site of an application pending Public Inquiry abuts the MEA council boundary.

NB: Of the 37 Planning Applications received between 2008-2018, 20 applications were received in 2015.

A 32MW solar energy project in Northern Ireland is made up of a network of five sites, linked by a single connection to the electricity grid. The projects are located at sites at Lough Road, Moira Road, Belfast Road (Nutts Corner), Knockcairn and Hillside (all located in County Antrim) and each project is between 5 and 10MW.¹⁴

Site Specific Considerations

UK government planning guidance has advocated brownfield sites and flat land as appropriate sites for solar farm development¹⁵. However, often flat land is productive agricultural land and the same guidance advocates the avoidance of high grade agricultural land due to factors such as significant reductions in agricultural productivity. There is currently no planning policy in NI to refuse development on this basis of 'loss of high grade agricultural land'. Generally, it is accepted that solar farms can significantly reduce the agricultural productivity of high grade agricultural land, however, it should be recognised that dual purpose land use is feasible within sites of solar farms, for example, the land between and underneath rows of PV modules may be available for grazing of small livestock and other productive options such as 'bee keeping' have been demonstrated. Notably, limits have been applied to the Common Agricultural Policy (CAP) funding of solar farms on agricultural land and farmers who choose to use fields for solar farms are no longer eligible for farm subsidy payments.¹⁶ The rationale for this change was based on the view that solar farms by their very nature do significantly hamper agricultural activity, even if that activity is just grazing, as there will be limitations on how the animals may graze in a field covered by solar panels.¹⁷

The solar resource is a critical factor for any solar farm and this resource is likely to be restricted by features such as woodland, single large trees and mobile phone masts which may cast shade. Areas restricting the viability of solar farm development include built-up areas, woodland or mountainous areas.

For best performance, PV modules need to be inclined at an angle of 20-40 degrees, depending on the latitude, and orientated facing due south. Some degree of flexibility in inclination and

¹³ Solar Trade Association, Explainer: Solar Farms

¹⁴ Lightsources, Turning Northern Ireland's largest Solar Project

¹⁵ Palmer D, Gottschalg R, Betts T, The future scope of large-scale solar in the UK: Site suitability and target analysis, Renewable Energy (2018)

¹⁶ DECC, Consultation on changes to financial support for solar PV, 22 July 2015

¹⁷ DEFRA Freedom of Information Release, Common Agricultural Policy (CAP) subsidy on solar arrays, 16 Feb 2015

orientation is acceptable although this will be at the expense of best performance. To function well PV installations need to be inclined at between 10 and 60 degrees, and orientated facing from east to west (i.e. within 90 degrees of due south) (PPS18 'Renewable Energy' Best Practice Guidance, August 2009).

With regard to policy guidelines, the preferred location of solar farms may be summarised as flat land or land with an appropriate slope angle, land in relative close proximity to electricity transmission infrastructure and with good road links, brownfield land and areas outwith environmentally sensitive areas. If agricultural land is being considered, it is preferable that the best and most versatile arable land is avoided. There is less emphasis placed on proximity to a river (water is required for panel cleaning) for sites in the UK where rain is generally relied upon for cleaning. Therefore, best practice is to avoid locations close to rivers where there is a risk of flooding and coastal areas where the risk of salt mist requires extra cleaning and causes corrosion.¹⁸

Generally, potential solar farm development should not adversely impact on the key visual and environmental characteristics of a landscape including the natural beauty of an area, the scheme should not cause significant adverse impacts to nearby domestic properties or roads, and the site should be predominantly flat and well screened by hedges and tree lines.

Ancillary buildings and structures associated with Solar Farm proposals (substations, communications buildings, storage shed and inverter cabinets) typically have a small floor space area, are normally single storey in height, and are usually sited along boundaries and adjacent to site access roads. Therefore, these ancillary buildings are not normally overly dominant structures in the landscape, with the greater visual impact of solar farms usually related to fencing and solar panels.

Network Constraints

In the UK, larger solar farms (50 MW or more) are required to connect to the national grid at the 33kv level. Smaller solar farms up to 10 MW connect to the 11 KV lines, but feed up to the higher level. There are also no definitive specifications as to how close to the grid a solar farm must stand. Generally, developers engage with the relevant power distribution network provider to evaluate sites prior to submitting a planning application.¹⁹

Conclusions

Solar farms by their very nature can be considered as a modern intrusion into the rural landscape and their visual impact is likely to be exacerbated due to factors such as poor siting relative to local topography, inadequate screening and/or lack of appropriate landscape mitigation. Without sensitive site selection or appropriate measures to mitigate any adverse visual impact, solar farms could create an industrial type appearance which could have a significant adverse impact on the rural character and landscape setting of an area. However, it should be recognised

¹⁸ Palmer D, Gottschalg R, Betts T, The Future scope of large-scale solar in the UK: Site Suitability and target analysis, Renewable Energy (2018)

that these renewable energy schemes can provide clean, locally produced energy and, if sensitively sited, represent an appealing renewable energy option, particularly if the costs of required infrastructure fall to a level that improves the financial viability of this renewable energy option. In this context, consideration of potential solar farm development in MEA is expedient.

Annex 5: Considerations regarding Designation of Special Countryside Areas (SCA) and Other Strategic Landscape Designations

Para 6.75 of SPPS indicates that 4 main criteria should be considered in designation of SCAs:

- Subject area should be of **exceptional landscape quality**;
- Subject area should be of **unique amenity value**;
- Subject area is vulnerable to **development pressure** from **unnecessary development**;
- Subject area is vulnerable to **development pressure** from **inappropriate development**.

Accordingly, all of the above factors need to be assessed to inform any SCA designation.

When considering Landscape Policy Area designation (a less stringent landscape policy area designation than SCAs), an assessment of landscape/scenic quality, unique amenity value, development pressure from unnecessary development and development pressure from inappropriate development are factors that should be considered.

Additionally, for both types of designation, an assessment of 'landscape sensitivity' should be considered because areas experiencing low 'demonstrable' development pressure may experience 'higher' development pressure in the future or be vulnerable to **any** development pressure. Therefore, when considering this 'high' landscape sensitivity alongside other factors listed above, it may be justified to provide these areas with additional policy protection despite low 'demonstrable' development pressure on the basis that any (or low) development pressure is a **risk** to the unique/distinctive character or features of the area.

Steps to determine appropriateness of a 'Strategic Landscape Designation'

1. Assessment of whether area is of **exceptional or high landscape/scenic quality**

An assessment of an areas' landscape/scenic quality will be informed by a review of the **Landscape Character Areas** taking account of NILCA 2000 and any AONB designation.

2. Assessment of **landscape sensitivity**

The *identification of distinctive and/or sensitive landscapes* will be an output of this review of Landscape Character Areas. These areas will be identified using the assessment criteria set out

¹⁹ House of Commons Briefing Paper No.07434: Solar Farms: Funding, planning and impacts.

in the tables in Annex 3 (see Stage 4 – Section 11) and will be taken forward for further study as **candidate ‘Sensitive Landscape Areas’**.

3. Assessment of whether areas is of **unique amenity value**

An assessment of an areas’ amenity value, or identification of discreet areas within a landscape that have a certain amenity value, will be informed by a review of the **Landscape Character Areas**. It is recognised that the visual experience provided by exceptional or high scenic quality contributes to an area’s unique amenity value as such high scenic quality encourages recreational (formal or informal) activity in these areas and contributes to attracting visitors/tourists.

Evidence may include the following factors:

- Its use for various recreational activities (eg hill walking, cycling, horse riding, angling, orienteering etc);
- Its importance to natural , built, archaeological heritage;
- Its value as an ecosystem service.

4. Assessment of **development pressure** (single countryside dwellings/wind turbines/solar farms)

Potential spatial landscape policy designation(s) should take account of an assessment of development pressure from types of development that have the potential to be obtrusive elements in the landscape or which can lead to adverse impacts on landscape character due to the cumulative impacts of such development. Any development types that can have a significant adverse impact on the environmental quality of an area should also be considered when assessing the appropriateness of a potential spatial landscape policy designation(s).

Assessment should consider:

- Trends relating to development pressure ‘hot spots’ (see Appendix B of Technical Supplement 10 – Countryside Assessment)
- What has been built since the date of the previous Landscape Character Assessment (NILCA 2000)
- What the cumulative impact of development has been on landscape/scenic quality and amenity value
- What scope there is for the landscape to absorb further development

5. Assessment of **site-specific factors**

The following factors should also be considered when assessing whether or not a spatially defined landscape policy area is appropriate:

Natural Factors

- Rarity (the presence of rare features and elements in the landscape, or the presence of a rare landscape character type)
- Distinctive/sensitive landscape features (particularly distinctive/sensitive topographical features, loughs, coastal shorelines, river corridors, landscape designations)
- Hydrology (particularly flood areas or areas at risk of flooding, river corridors, wetland habitats, peatland, nature conservation designations)
- Land Cover (particularly habitats protected by international/national conservation designations, woodland, nature reserves)
- Geology (particularly ASSI designations)

Cultural/Social Factors

- Land-use (particularly noting areas impacted by development)
- Enclosure (particularly noting distinctive field patterns and boundaries (rural) and the condition of these)
- Time-depth (particularly any significant archaeological sites, historic field patterns)
- Landmarks (particularly those that are important for the identity of the Borough or which have unique amenity value)
- Settlement (particularly noting features/areas important for a settlement’s setting, settlement pattern and major constraints to development)
- Significant cultural associations with the landscape or features within the landscape
- Sites important for the local community

Perceptual and Aesthetic Factors

- Historical context (historical importance for nature conservation, settlement pattern, economic development, tourism, recreation)
- Perceptions (particularly sense of wildness, remoteness and tranquillity)
- Critical views (significant views from receptor sites such as settlements, tourist attractions, tourist/visitor routes, viewing areas, recreational areas (formal/informal), recognised walking routes, public roads etc.)

6. **Recommendation: main outputs**

The main outputs of this further study include the following:

- If a Strategic Landscape Designation if considered appropriate for a candidate Sensitive Landscape Area, to determine the most appropriate type of Strategic Landscape Designation for that area.
- If a Strategic Landscape Designation if considered appropriate for a candidate Sensitive Landscape Area, to determine the spatial extent of the designation.
- If a Strategic Landscape Designation if considered appropriate for a candidate Sensitive Landscape Area, to determine the proposed policy approach.

The evidence base associated with each candidate 'Sensitive Landscape Area' will be analysed and presented in a report that puts forward a recommendation as to whether or not a spatially defined landscape policy area is considered appropriate for that individual candidate 'Sensitive Landscape Area'. If it is recommended that a landscape policy area is appropriate, recommendations will be presented on the nature and strength of the policy to be associated with the potential designation and a suggested defined boundary for the potential designation.

Candidate Sensitive Landscape Areas



Candidate Sensitive Landscape Areas – Selection Process

- 4.11 Paragraph 6.75 of the SPPS states that where our 'countryside exhibits exceptional landscapes, such as mountains, stretches of the coast or lough shores, and certain views or vistas, wherein the quality of the landscape and unique amenity value is such that development should only be permitted in exceptional circumstances. Where appropriate these areas should be designated as **Special Countryside Areas** in LDPs, and appropriate policies brought forward to ensure their protection from unnecessary and inappropriate development.'
- 4.12 The evidence base provided through this LCA is robust and based on a sound methodology which allowed for the systematic evaluation of existing LCAs. As part of this process the identification and review of a number of discreet areas of exceptional or high landscape value will be undertaken. These areas (detailed as Candidate Sensitive Landscape Areas CSLAs) will be subject to further analysis in a separate study which will consider their merits for protection through appropriate strategic landscape designations in the emerging Local Development Plan (LDP).
- 4.13 Designating a landscape indicates that it is of particular merit or value. A clear statement of these values is a vital part of the designation and should include the criteria used in the assessment process and a statement of why they are considered important. The process to be adopted in determining areas for designation should be systematic, consistent and transparent. The initial part of the process should involve the assessment, survey and description of local landscapes, followed by a selection and validation process for each proposed designated area.
- 4.14 These areas have been identified using the methodology set out in Annex 5 of the LCA methodology and are brought forward as areas to be assessed against the following

Landscape Assessment Criteria to determine if they meet the minimum threshold for further detailed analysis.

Criterion 1 - High Landscape Quality (AONB/ASQ/Scenic River Corridor/Coastal Shoreline/significant influence of an internationally or nationally significant Site(s) of Nature Conservation Importance)

Criterion 2 - Scenic Quality (AONB/ASQ).

Criterion 3 - Visually Exposed/Prominent Landscape Features (Ridgelines/ Headlands/ Hills/ Slopes/ Floodplains/ Coastal Shoreline) **that are highly distinctive and/or highly significant for the setting of landmark features/ escarpments/ settlements**

Criterion 4 - Distinctive features that contribute significantly to the setting of a settlement(s) (e.g. river corridor/ woodland/ prominent features of visual importance)

Criterion 5 - Sites of Natural Heritage Conservation Importance (international/national significance)

Criterion 6 - Historic Environment Features - significant contribution to landscape value of the whole Area of Highest Landscape Value, or a significant part thereof (ASAI/ State Care Monument/ Scheduled Monuments/ Historic Park, Garden and Demesne/ Significant groups of Listed Buildings/Conservation Area/Landmark Listed Structures)

Criterion 7 - Unique Amenity Value (Significant Community/Recreation/Tourism resource and/or highly significant cultural associations)

The "scoring justification table" provides information on the basis for each score. The areas which scored 5 points or more based on the criteria in the scoring matrix were brought forward to be assessed within the Candidate Sensitive Landscape Report. Other highly sensitive areas were also assessed despite a score lower than 5 if this was considered justifiable.

This further analysis will be an in-depth study of each discreet area using criteria set out in Annex 5. A report on each '**Candidate Sensitive Landscape Area**' will be produced to recommend;

- Whether or not the discreet area would benefit from a spatial policy designation that would seek to provide additional protection for the important landscape assets, and

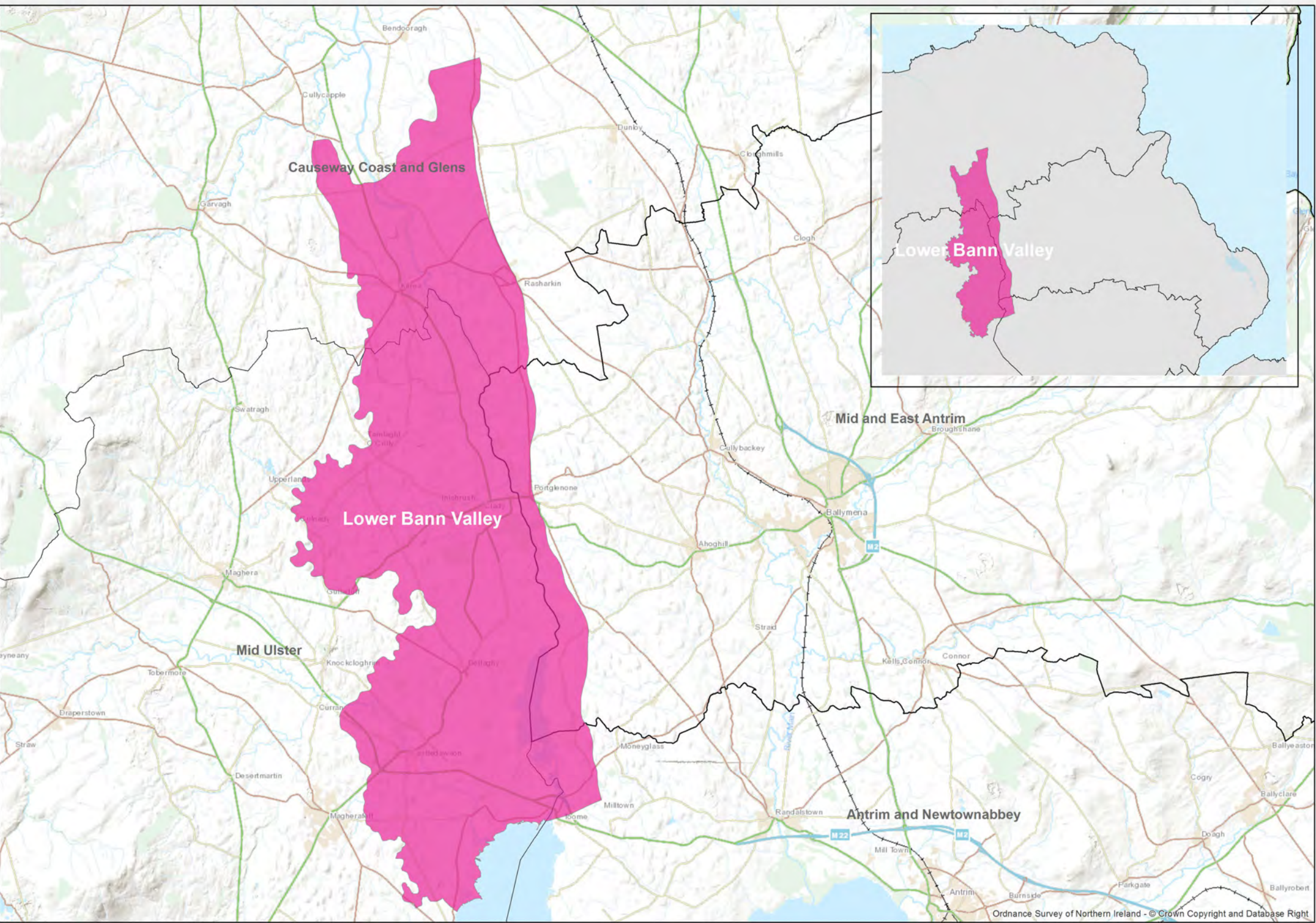
- What type of spatial designation and level of policy protection is appropriate to meet the aims of the designation

| LCA | Discrete Landscape Area Identified | High Landscape Quality (AONB/ASQ)/Scenic River Corridor/Significant Area covered by Site of Nature Conservation Importance | Scenic Quality (AONB/ASQ) | Visually Exposed/Prominent Landscape Features (Ridgelines/ Headlands/ Hills/ Slopes/ Floodplains/ Coastal Shoreline) that are highly distinctive and/or highly | Distinctive features that contribute significantly to the setting of a settlement(s) (e.g. river corridor/ woodland/ prominent features of visual importance) | Sites of Natural Heritage Conservation Importance (international/national significance) | Historic Environment Features - significant contribution to landscape value of the whole Area of Highest Landscape Value, or a significant part thereof (ASAV/ State Care | Unique Amenity Value (Significant Community/Recreation/Tourism resource and/or highly significant cultural associations) | TOTAL (Number of criteria satisfied) |
|---------|--|--|---------------------------|--|---|---|---|--|--------------------------------------|
| LCA 52 | Lough Beg and fringe area and Lower Bann River Corridor (south of Portglenone) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 7 |
| LCA 58 | Peatland (Craigs Road area) | Yes | No | No | No | No | No | No | 1 |
| LCA 59 | River Maine Corridor (north of Cullybackey) | Yes | No | No | No | Yes | Yes | No | 3 |
| | Clogh River Corridor | Yes | No | No | No | No | No | No | 1 |
| LCA 60 | River Maine Corridor (Galgorm Castle and Gracehill area) | Yes | No | No | Yes | No | Yes | Yes | 4 |
| | Kells Water river corridor | Yes | No | No | No | No | No | No | 1 |
| LCA 98 | Carrickfergus Escarpment ASQ | Yes | Yes | Yes | Yes | No | Yes | Yes | 6 |
| | Ridgeline east of New Line (Carrickfergus) | No | No | No | No | Yes | No | No | 1 |
| LCA 115 | Kells Water River Corridor | Yes | No | No | No | No | No | No | 1 |
| | Six Mile Water River Corridor | No | No | No | No | No | No | No | 0 |
| LCA 116 | Braid River Corridor (outside of settlement development limits) | Yes | No | Yes | Yes | No | No | Yes | 4 |
| | Kells River Corridor | Yes | No | No | Yes | No | No | Yes | 3 |
| LCA 117 | Northern Glen (area within AONB) | Yes | Yes | Yes | Yes | No | No | No | 4 |
| | Ridge between Glenarm and Glencloy Glens | Yes | Yes | Yes | Yes | No | No | No | 4 |
| | Slemish Slopes | Yes | Yes | Yes | No | Yes | Yes | Yes | 6 |
| LCA 118 | Area within AONB | Yes | Yes | Yes | No | Yes | No | No | 4 |
| LCA 122 | Eastern ridge | Yes | Yes | Yes | Yes | Yes | No | No | 5 |
| | Western ridge and hills adjacent Cargan | Yes | Yes | Yes | Yes | Yes | No | No | 5 |

| | | | | | | | | | |
|----------------|--|-----|-----|-----|-----|-----|-----|-----|---|
| LCA 123 | Coastal Area and Headlands | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 7 |
| | Glenarm Glen | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 7 |
| | Glencloy Glen | Yes | Yes | Yes | Yes | No | No | No | 4 |
| | Basalt Cliffs and Scarp Slops (west and north of Carnlough) | Yes | Yes | Yes | Yes | Yes | Yes | No | 6 |
| LCA 124 | Slemish and surrounds | Yes | Yes | Yes | No | Yes | No | Yes | 5 |
| | Agnews Hill/ Sallagh Braes/ Knockdhu/ Scawt Hill/ Black Hill/ Mullaghane ridgeline | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 7 |
| LCA 125 | AONB and area east of Ballynulto Road | Yes | Yes | Yes | No | No | No | No | 3 |
| | Glenworry Valley | Yes | No | Yes | No | No | No | No | 2 |
| LCA 126 | Coast Road (including Ballygalley Head, Cairndhu and Carnfunnock) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 7 |
| | Foreground to Knockdhu/ Scawt Hill / Black Hill/ Ladys Hill ridgeline | Yes | Yes | Yes | Yes | No | Yes | No | 5 |
| LCA 127 | Foreground to Sallagh Braes/ Knockdhu | Yes | Yes | Yes | Yes | Yes | Yes | No | 6 |
| | Glynn River valley and wooded escarpments | Yes | No | Yes | Yes | Yes | No | No | 4 |
| | Dunisland Water valley | No | No | No | Yes | No | No | No | 1 |
| | Larne Lough Shoreline | Yes | No | Yes | Yes | Yes | No | No | 4 |
| LCA 128 | Islandmagee: Gobbins Coast (Browns Bay to Whitehead) and central ridges | Yes | Yes | Yes | Yes | Yes | No | Yes | 6 |
| | Ridgeline - western farmland slopes | No | No | Yes | Yes | No | Yes | No | 3 |
| | Larne Lough shoreline | Yes | No | Yes | No | Yes | No | No | 3 |
| | 'Green Wedge' area b/w Jordanstown and Greenisland ' | No | No | Yes | Yes | No | No | Yes | 3 |
| | Green Wedge' area b/w Greenisland and Carrickfergus | No | No | Yes | Yes | No | No | No | 2 |
| | Belfast Lough Shoreline | Yes | No | Yes | Yes | Yes | Yes | Yes | 6 |
| LCA 130 | Carrickfergus Escarpment and foreground | Yes | Yes | Yes | Yes | No | No | Yes | 5 |
| | Upper slopes east of New Line (Carrickfergus) | No | No | No | No | Yes | No | No | 1 |

LCA 52 - LOWER BANN VALLEY





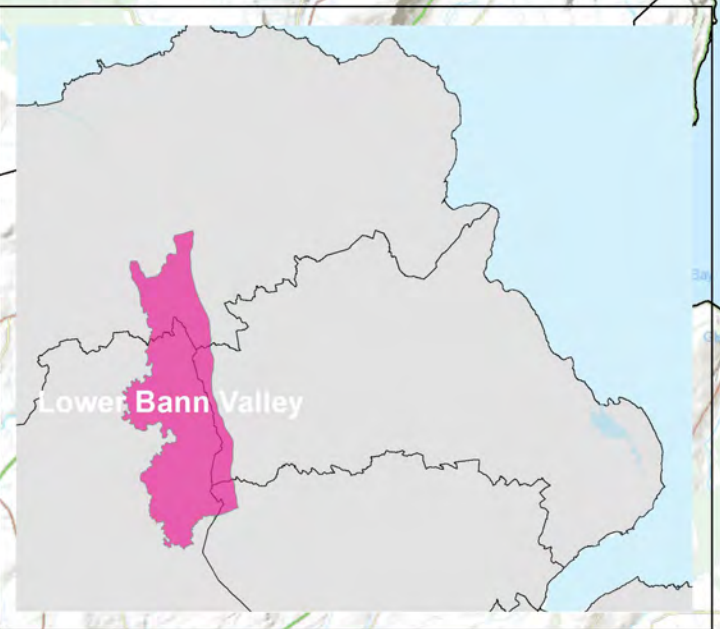
Causeway Coast and Glens

Lower Bann Valley

Mid Ulster

Mid and East Antrim

Antrim and Newtownabbey



Lower Bann Valley

Key Characteristics – LCA 52

- Relatively flat, expansive landscape on the lower reaches of large rivers and fringes of Lough Neagh and Lough Beg.
- Shallow drumlins form 'islands' surrounded by flat, open pastures; they have a diverse landscape pattern, with farmsteads and mature trees.
- Large open fields on floodplain, often surrounded by straight drainage ditches.
- Some poorly-drained areas within the farmland; large wet woodlands and bog on more extensive low-lying land.
- Extensive ribbon development along straight roads, which often end at farms towards the fringes of Lough Neagh and Lough Beg.
- Mature hedgerow oak trees are prominent features in a well-connected network of hedgerows.
- Belts of mixed woodland are features of the Bann Valley near Portglenone

Landscape Character Description

Much of this LCA, as defined by NILCA 2000, falls within the Mid Ulster District Council area, with only a small fringe area to the east of Lough Beg and the Lower Bann River included in Mid and East Antrim. Within Mid and East Antrim, this LCA extends from Tamlaght Road in the north, southwards to Lough Beg. The Lower River Bann and Lough Beg define the boundary between Mid and East Antrim and Mid Ulster District Council (MUDC).

On the Mid and East Antrim side, the Lower Bann River floodplain is a relatively flat landscape which rises moving east towards Long Mountain Ridge. The area immediately to the north of Lough Beg has open fields on the floodplain of the Lower Bann River which are generally defined by straight drainage ditches. Other areas on the Lower Bann River floodplain are more enclosed by belts of mixed woodland and a strong network of mature hedgerows and hedgerow trees. Some hedgerow removal has occurred north of Portglenone and there are extensive views across this area from higher ground.

Away from Portglenone, within Mid and East Antrim, this LCA has a peaceful and secluded character with the fringes of Lough Beg being particularly remote and tranquil. In the Mid and East Antrim part of this LCA woodland, hedgerows and in some parts the topography screen from view the shore of Lough Beg and the banks of the Lower Bann River.

Portglenone Forest has long-established woodland present and there are also areas of mixed woodland along the Lower Bann River. The LCA (in its entirety) has one of the major concentrations of Lowland Raised Bog in NI. Within Mid and East Antrim, there are two significant areas where peat cutting is occurring and both of these areas are located in the Lough Beg Road area. This peat cutting has degraded the landscape.

The historic pattern of development has seen urban development concentrated in Portglenone. Elsewhere, the dominant pattern is one of single dwellings along rural roads. On some rural roads, a linear pattern of development is evident and where ribbon development has occurred it has had a detrimental impact on rural character. In some parts, single dwellings have started to encroach on areas close to the banks of Lough Beg and the Lower Bann River, for example, in the Ballyscullion Road and Gortgole Road areas.

Physical Influences – Geodiversity

The LCA lies within the region described as the Central Lowlands. This region owes its large-scale morphology to the early Tertiary subsidence of the Lough Neagh basin into the magma chamber from which the basalts that underlie much of the landscape originated. This has produced a largely centripetal drainage system from the rim of the basin into Lough Neagh that ultimately drains northwards via the Lower Bann River.

There are no strong topographical barriers in the region and boundaries between LCAs tend to be subtle. The low gradients of rivers, especially on the clay lowlands immediately around Loughs Beg and Neagh, create inherent drainage problems in the LCA. The Lower Bann Valley landscape is characterised by the wider floodplain of the Lower Bann River. Stretches of the Lower Bann River are often hidden from view by extensive woodland on wet, low-lying land.

Key site: Culnafay ASSI represents the largest good quality deposit of diatomite remaining in the area and is amongst the most important post-glacial freshwater diatomite deposits in the world. Diatomite is of international importance for biological, geological, hydrological and climatological reasons and it has considerable archaeological significance.

Altitude range

The land in this part of the LCA is under 50m AOD.

Topography

The land is relatively low-lying with a transition from shallow drumlins on the edges of the floodplains, to extensive flat pastures, bog and woodlands on the fringes of Lough Beg and the Lower Bann Valley. The land rises from the flat Lower Bann River floodplain towards the slopes of Long Mountain Ridge to the east.

Biodiversity and Land Cover - Key Characteristics

- Lough Neagh and Lough Beg Ramsar site is a wetland of international importance for biodiversity conservation.
- This LCA has one of the major concentrations of lowland raised bogs in Northern Ireland, however, these lowlands raised bogs are more predominant on the Mid Ulster side of the Lower Bann River. Ballyscullion Moss is a lowland raised bog located within Mid and East Antrim.

- Within Mid and East Antrim, the land cover is predominately pasture.
- There are significant areas of woodland adjacent to the Lower Bann River.

Woodlands

Woodlands occupy approximately c. 4% of the entire LCA. Within Mid and East Antrim, woodland is found mainly on the fringes of Lough Beg and the Lower Bann River including Portglenone Forest and Bann Woods South. Portglenone Forest is known to have been woodland since the early 1830s and has ancient woodland and long-established woodland present. Records show that the forest was once part of a much larger woodland comprising Mountreivelen, Killetra, and Glenconkeyne Woods. These woods formed one of the biggest oak forests in the country. In 1607 Sir John Davys, the Irish Attorney-General, described this area as “well nigh as large as the New Forest in Hampshire and stored with the best timber in Ireland”.

The ground flora contains extensive colonies of ancient woodland indicator species such as bluebell, wood anemone and wild garlic. These plants take centuries of woodland cover to grow. Observant walkers may enjoy these features which provide the wood with its important conservation and educational aspects.

Grassland and Arable

Improved grasslands occupy c. 58% of the entire LCA and arable c. 10%. Arable land is mainly located on the low drumlins and better drained soils beyond the river floodplain. Generally, improved grasslands have little biodiversity value, however, in winter months whooper swans (*NI Priority Species*) are attracted to flat fields around parts of Lough Beg and Lough Neagh, where they graze on the grass. The fields fringing Lough Beg and Lough Neagh are also a hotspot for tree sparrows (*NI Priority Species*), which feed in the agricultural land around the shores of the loughs and by drains and ditches. Tree sparrows are in decline across the UK. Some areas of rough pasture are present, sometimes associated with damper areas around cut-over bog.

Heaths and Bogs

The LCA has one of the major concentrations of Lowland Raised Bogs (*NI Priority Habitat*) in NI and contains some of the largest areas of uncut lowland raised bog. These mainly occur on the Mid Ulster side of the Lower Bann River, however, Ballyscullion Moss is a lowland raised bog which is located within Mid and East Antrim. Lowland bogs typically have a raised, domed, profile. They are rainwater-fed and associated with a distinctive range of plants that can survive the waterlogged, nutrient-poor and acidic environment.

Within Mid and East Antrim, there are two significant areas of peat cutting at Ballyscullion Moss in the Lough Beg Road area. These areas have experienced large-scale mechanical peat extraction. These areas are partially enclosed by woodland.

Wetlands and Lakes

Lough Beg and the Lower Bann River are significant wetland features of this LCA. Lough Beg is

has a mean depth of 1-2 metres. This lough is part of Lough Neagh and Lough Beg RAMSAR and SPA sites of international importance and is a designated ASSI. These designations reflect its importance as a valuable wetland habitat for internationally important concentrations of wintering wildfowl and migrant waders and for submerged aquatic vegetation. Lough Beg and its fringes is an important habitat for NI Priority Species such as *Whooper Swan*.

The Lower Bann River (*NI Priority Habitat*) flows along the western boundary of Mid and East Antrim and has significant stocks of Atlantic Salmon, Brown Trout (*NI Priority Species*) and eels.

Field Boundaries

This LCA generally has a regular field pattern with a strong network of hedgerows (*NI Priority Habitat*) and mature hedgerow trees, although some areas, particularly to the north of Portglenone, have experienced hedgerow removal and replacement by post-and-wire fencing. On the floodplain immediately to the north of Lough Beg the fields are open and often surrounded by straight drainage ditches.

Natural Heritage Conservation Sites – Designations

International Sites

- Lough Neagh and Lough Beg RAMSAR
- Lough Neagh and Lough Beg Special Protection Area (SPA)

National Sites

- Lough Beg Area of Special Scientific Interest (ASSI)
- Culnafay ASSI

Local Sites

- No formal designations

Historical and Cultural Influences

Settlements

Portglenone is designated as a village within the Ballymena Area Plan 1986-2001 and is the only settlement within the Mid and East Antrim part of this LCA. The focal point of this settlement is a bridging point over the Lower Bann River. The river has, since earliest times, been a strategically important location as a crossing point. Despite centuries of political change, the river continues to be a significant administrative and diocesan boundary.

Portglenone has a very long history of human settlement. In Portglenone and the surrounding countryside, items from the Stone Age, Bronze Age, Iron Age and Medieval period testify to a landscape that was rich and inviting for farming communities, and this remains the case. With its ‘square’, Portglenone shows some signs of having been planned, and for a village of its size, it also retains a remarkable number of high quality, historic buildings. The Lanyon Bridge, the First Presbyterian Church, the Church of Ireland Church and St Mary’s Catholic Church are all significant historic structures.

Historic Environment

There are archaeological sites scattered throughout this LCA. A scheduled monument consisting of prehistoric standing stones is located on the north-eastern fringe of Lough Beg. The area around Portglenone has the largest concentration of archaeological sites and include Bishop's Well, Holy Well, a mound and a fortification. There are three listed buildings located on the southern edge of Portglenone and two of these are associated with the Cistercian Abbey within Portglenone House Historic Park, Garden and Demesne.

Portglenone House is a supplementary Historic Park, Garden and Demesne. Portglenone house (listed HB 07/06/10) was built in 1823 for Bishop Alexander and is set in parkland by the River Bann. The present house is now part of a Cistercian Abbey, which also has further buildings added from 1962 in the grounds. This includes the Our Lady of Bethlehem Abbey (listed HB 07/06/40), which was built in 1948 to the designs of Patrick Murray. Part of the gardens are private to the monks (the walled garden); parts are ornamental grounds for the Abbey and parts are cultivated for organic vegetables.

There are mature trees in the remnants of former parkland, an ice house, the Bishop's Well and two 19th century gate lodges. Within the walls, part of the demesne is a forest, which was planted from the 1950s. There is public access and paths are laid out. In a glade in the forest there is a commemorative plot to Augustine Henry, who was reputedly born nearby. It was laid out in 1969 with examples of some of the plants that he discovered or introduced from the far east.

Heritage – Defence and Industry

Outside of Portglenone there are no significant historic defence sites within the Mid and East Antrim part of this LCA. The Lower Bann Valley is rich in industrial heritage, particularly in relation to the linen industry and fisheries, and historically, was an important transport corridor. Historic industrial sites include, for example, various flax mill sites, corn mill sites and a brick yard at Culnafay.

Transport Infrastructure

Local transport routes heading north, south, east and west radiate out from Portglenone including the main road to Ballymena (A42) and Maghera (A42). Townhill Road (leading north) and Largy Road (leading south) run between the Lower Bann River and Long Mountain Ridge.

Leisure & Recreation

The Lower Bann River has high amenity value. The Lower Bann River Canoe Trail provides opportunities for canoeing and there is a water sports centre based at Newferry. The Lower Bann also provides opportunities for fishing and boating along its length, with Portglenone Marina providing a base for boating and other water-based pursuits. The tranquil setting of the Lower Bann River offers opportunities for walking and ornithology, for example, within Portglenone Forest Park and at Newferry.

Visual and Sensory Perception

Tranquillity

The landscape is deeply rural and tranquil away from the main roads, particularly areas adjacent to the Lower Bann River corridor and Lough Beg. Other than pockets of residential development around the Ballyscullion Road area, the fringe area of Lough Beg is generally unspoilt and has a sense of remoteness and tranquillity. In this area woodland and hedgerows screen the shores from surrounding areas.

Views

There are expansive views over this LCA from the slopes of Long Mountain Ridge, for example, there are views of the valley floor from Largy Road and Carmagrim Road. From some vantage points west of the Lower Bann River, the Lower Bann floodplain and the slopes of Long Mountain Ridge can be viewed. From within Mid and East Antrim, there are long-distance views of the hills to the west and the slopes of Long Mountain Ridge to the east, for example, from Townhill Road.

North of Portglenone, there are views across the flat floodplain from the Gortgole Road, and there are expansive views from the Townhill Road, although in this area, hedgerows and hedgerow trees can impede views and create a sense of enclosure in some parts.

South of Portglenone, landscape is generally flat and open, however, views can be restricted by undulations in the topography, hedgerows, trees and woodland. In this area, there are views of the Lough Beg floodplain from Lough Beg Road, the westernmost part of Ballyscullion Road and Newferry Road. The Lower Bann River floodplain is readily viewed from Largy Road and Newferry Road, however, when travelling north towards Portglenone, woodland and hedgerow trees increasingly impede views of the Lower Bann River from the Largy Road.

Landscape Condition and Sensitivity

Areas of Scenic Quality

Lough Neagh Fringe Area of Scenic Quality (ASQ) was identified by NILCA 2000. Within Mid and East Antrim, this ASQ stretches from the southern edge of Portglenone to the fringes of Lough Beg.

NILCA 2000 Assessment

This LCA is particularly sensitive where the flat floodplain landscape is overlooked by the ridges to the east of Portglenone, and in areas where there is extensive wetland habitat. The open floodplain landscape to the north of Lough Beg typically contains birch scrub, marshy grassland and heather, but much of the bog has been subjected to extensive peat cutting, transforming large areas into featureless bleak expanses which has had a profound impact on the local landscape character.

Lough Neagh and Lough Beg are within designated ASSI, Ramsar and SPA sites. The extensive wetland fringes of both loughs are particularly sensitive to change. The area around Toome has a particularly degraded character, with extensive loss of hedgerows and poorly sited, prominent industrial development close to the river bank.

Wind Energy Development in NI's Landscapes (2010)

While the relatively simple and flat topography found in this floodplain landscape in theory makes it suited to wind energy development, this LCA has a wealth of nature conservation interest and designed parkland landscapes as well as areas of high scenic quality associated with Lough Beg and Lough Neagh. These qualities act as key constraints to wind energy development. The river valley floodplain of the Lower Bann and tributary river valleys are also particularly sensitive to wind energy development because of their openness and small-scale drumlin landscape features.

The landscape is somewhat less sensitive where the topography is relatively simple; vegetation provides localised enclosure and potential screening, and there are fewer sensitive cultural or natural heritage sites.

Overall Sensitivity - High

Assessment of Development Pressure

Wind Energy

Since 2000, the southern section of the MEA part of this LCA has experienced no pressure for wind energy development. In this period, the northern section of the MEA part of this LCA has experienced low pressure with four sites having applications for single wind turbines. Only one of these four sites relates to a proposal for a large-scale (over 15 metres) wind turbine and only one application did not receive planning permission. Since 2000, there has been no proposals for wind farm development.

South of Portglenone and within the MEA part of this LCA there are key constraints to wind energy development; much of this area has been identified as an Area of Scenic Quality in the NILCA 2000 study, there are important nature conservation sites associated with Lough Beg and this area provides a setting for the largely undeveloped floodplain area of Lough Beg and the Lower Bann River. Further, this area is relatively flat and open to views from Newferry Water Sports Centre and medium-long critical views from public roads.

There is a single wind turbine at Newferry within the Mid Ulster District Council area which is particularly prominent in long range views, for example, in views from Largy Road. This wind turbine highlights the significant adverse impact that such prominent vertical structures could have on the unspoilt landscape character around Lough Beg and the Lower Bann River

Solar Energy

There have not been any applications for solar farm development in the Mid and East Antrim part of this LCA. The relatively flat terrain and openness of much of this low-lying landscape make this area highly visually sensitive to solar farm development, particularly as this area contributes to the setting of Lough Beg and the Lower Bann River.

Dwellings in the Countryside

Ribbon development was identified as an issue within this LCA in the NILCA 2000 study and ribboning along public roads is evident in some areas of the MEA part of this LCA. **Between 2003 and June 2010 (introduction of PPS 21)** this LCA experienced relatively high pressure for residential development in the open countryside. Permission has been granted for dwellings close to the river corridor and the shores of Lough Beg and, although the number of approvals is relatively low, the river corridor and Lough Beg fringes are areas highly sensitive to change. The high amenity value along this river corridor and the undeveloped character of some areas could be adversely impacted by the addition of new dwellings, particularly if poorly sited.

Since the introduction of PPS 21 in June 2010 there has generally been low pressure for dwellings in the open countryside within the MEA part of this LCA. Development pressure analysis identified a pocket of relatively high residential development pressure in the area around the Kilcurry Road/Largy Road junction. Ribbon development has occurred along the Kilcurry Road and, along with other residential development, has adversely impacted on the rural character of this area. Since the introduction of PPS 21, applications for residential development in this area of 'high' pressure have largely related to farm dwellings and 'infill' dwellings.

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- The Lough Beg shoreline and Lower Bann River corridor present a unique landscape character shaped by the water environment and the relatively unspoilt nature of the associated fringe areas/wetlands. This landscape character is not replicated anywhere else within Mid and East Antrim and, therefore, is unique in the context of the Borough.
- The unique character outlined above creates a sense of place and local distinctiveness in this LCA.
- Even limited development in this area would have an irreversible impact on the unique landscape character as the extensive wetland habitat is particularly sensitive to change and the open nature of the landscape makes it difficult to conceal development.
- Other features that contribute positively to landscape character, sense of place and local distinctiveness include the following.
- Areas of woodland are important elements in the landscape, particularly Portglenone Forest which is important for the setting of Portglenone.

- Portglenone House historic demesne and other historic environment assets contribute much to a sense of place and local distinctiveness in the environs of Portglenone.
- This LCA generally has a regular field pattern with a strong network of hedgerows and mature hedgerow trees.

Visual Sensitivity: Key Points

- The fringe areas around Lough Beg and the Lower Bann River, particularly to the south of Portglenone, are valued for their scenic quality, as demonstrated by the NILCA 2000 study which identified this area as an Area of Scenic Quality (ASQ).
- This LCA is particularly visually sensitive where the flat floodplain landscape is open to long distance critical public views. For example, Lough Beg and the area immediately to the north can be viewed from Carmagrim Road, Largy Road and Newferry Road.
- The river corridor to the north of Portglenone is exposed to long distance critical views from Gortgole Road and Townhill Road, albeit that these may be impeded in places by forest and woodland.
- There are short-medium range views of Lough Beg and the Lower Bann River floodplain from Newferry and its associated recreational facilities (both Mid and East Antrim and MUDC council areas). The visual experience in this area is particularly pleasant and interesting.
- Hedgerows and hedgerow trees can impede short-medium distance views and create a sense of enclosure in some parts.

Landscape Value: Key Points

- The landscape value of this LCA arises not only because of the scenic quality, but also from a range of related elements which combine to give 'added value', thereby reinforcing local distinctiveness and sense of place.
- The area around Lough Beg and immediately to the north is a largely unspoilt with a strong sense of tranquillity and naturalness. The area around the fringe of Lough Beg is particularly remote and tranquil.
- Lough Beg and its fringe area is part of Lough Neagh and Lough Beg RAMSAR and SPA sites of international importance and is a designated ASSI. These designations reflect its importance as a valuable wetland habitat for internationally important concentrations of wintering wildfowl and migrant waders and for submerged aquatic vegetation.
- A scheduled monument consisting of prehistoric standing stones is located on the north-eastern fringe of Lough Beg. Immediately north of Lough Beg, Culnafay ASSI represents the largest good quality deposit of diatomite remaining in the area and is amongst the most important post-glacial freshwater diatomite deposits in the world.
- The Lower Bann River corridor has high amenity value for activities such as angling, boating, canoeing, ornithology and walking.
- The Lower Bann River Canoe Trail provides opportunities for canoeing and there is a water sports centre based at Newferry.
- The Lower Bann also provides opportunities for fishing and boating along its length with Portglenone Marina providing a base for boating and other water-based pursuits.

- Newferry and Portglenone Forest are popular areas for walking and ornithologists.
- The Lower Bann River is an important conduit for migrating eels and salmon, which are economically important species.
- Portglenone House historic demesne is located on the southern edge of Portglenone and includes Our Lady of Bethlehem Abbey, Holy Wells, a mound and fortification. Three listed buildings are located in this area and two of these are associated with the Cistercian Abbey.
- Areas of woodland such as Portglenone Forest and Bann Woods South are important elements which add to the value of the landscape.

Sensitivities and Forces for Change

Climate Change - With increasing incidence of summer droughts, the remnant bog lands, wet woodland and forests will come under increasing stress. Low water flows associated with drought conditions are likely to adversely impact the water quality of Lough Beg and the Lower Bann River with the potential for increased eutrophication arising from intensive agricultural practices.

Peat Extraction - sensitivities and forces for change: The remnant lowland peat bogs within the Mid and East Antrim part of this LCA are small in extent and have been extensively cut for peat extraction. Pressure on remaining areas of peat could lead to erosion of the resource with consequences for biodiversity and carbon sequestration.

Planning and Management Guidelines

- The control of peat cutting, particularly where mechanised techniques are used, is advisable to prevent total destruction of the raised bog and to avoid adverse effects to landscape character and views from more open parts of the landscape.

Trees, woodland and forestry- sensitivities and forces for change: Tree coverage is sparse within this LCA and is mainly confined to small stripes located along the edge of the River Bann and Lough Beg. Native woodland cover is limited, but with a significant example of an Ancient Woodland located at Portglenone Forest. The Forest Service NI has provided visitor facilities in the forest that includes picnic tables, toilets with wheelchair access, and a number of waymarked trails leading down to the Bann River. The ground flora contains extensive colonies of Ancient Woodland indicator species which take centuries of woodland cover to establish.

Planning and Management Guidelines

- Coniferous woodland situated along the River Bann should be small scale only and well-integrated into the landscape with broadleaved planting and should avoid masking important views of the river corridor and Lough Beg.
- Existing broadleaved woodland should be retained, with the framework of broadleaved woodland strengthened with new planting where possible.

Agriculture - sensitivities and forces for change: There is evidence of hedgerow removal and field amalgamation in some areas. If this trend continues it will likely lead to a more open character in some areas of this landscape and may adversely impact on biodiversity.

Planning and Management Guidelines

- Encourage the retention and enhancement of wooded field boundaries where possible and promote environmental initiatives.
- Low intensity farming in more marginal areas would be beneficial.
- Where development is permitted existing boundary vegetation should be retained and augmented with additional native planting.

Development - sensitivities and forces for change: There have been some new single houses in the area, some of which contrasts in style to the older farm houses and other dwellings. Housing development has the potential to be quite prominent in the exposed and relatively treeless landscape. The cumulative impacts of single dwellings in the countryside has the potential to impact on the character of this LCA, particularly along the relatively undeveloped river corridor and lough fringe area. Where ribbon development has occurred within the Mid and East Antrim part of this LCA, it has adversely impacted on rural character.

Planning and Management Guidelines

- The protection of the distinctive undeveloped setting of Lough Beg and its fringes is advisable.
- Dwellings should correspond to traditional styles and be of a sympathetic scale e.g. single or one and half stories with whitewashed walls.
- Broadleaved trees and woodland planting would assist with integrating new dwellings.

Tourism and Recreation - sensitivities and forces for change: Future development of Portglenone Marina could potentially increase the pressure for development along the Lower Bann and possibly intensify the use of the river for water-based activities. The impacts of both scenarios on the river ecosystem and landscape would need careful consideration.

Planning and Management Guidelines

- ensure that any future marina development is located within and relates to the existing built form of Portglenone and does not encroach further into the adjacent open countryside;

- car parking for tourism and recreation has the potential to be prominent in the landscape and should be sited to benefit from topographic containment and include vegetative screening;
- the siting and design of tourist facilities requires careful consideration in this sensitive landscape; and
- where there is a requirement for signage or information boards a consistent signage strategy would assist in providing a unified identity to the area.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: As a predominately low-lying land landscape which is strongly characterised by Lough Beg and the Lower Bann River, and whilst there has been low development pressure for wind energy, this LCA may come under pressure for wind energy development, for example, new wind energy proposals or applications to increase the height of existing turbines.

The fringe area of Lough Beg is highly sensitive to development due to the presence of international and national nature conservation sites, its importance as a grazing area for migrating birds, the undeveloped and remote character of this area and its exposure to long range views. Wind turbines would have a significant adverse impact on this landscape.

Weirs along the Lower Bann could potentially be utilised for hydro-electric power generation, with possible adverse consequences for hydrology and biodiversity.

Planning and Management Guidelines

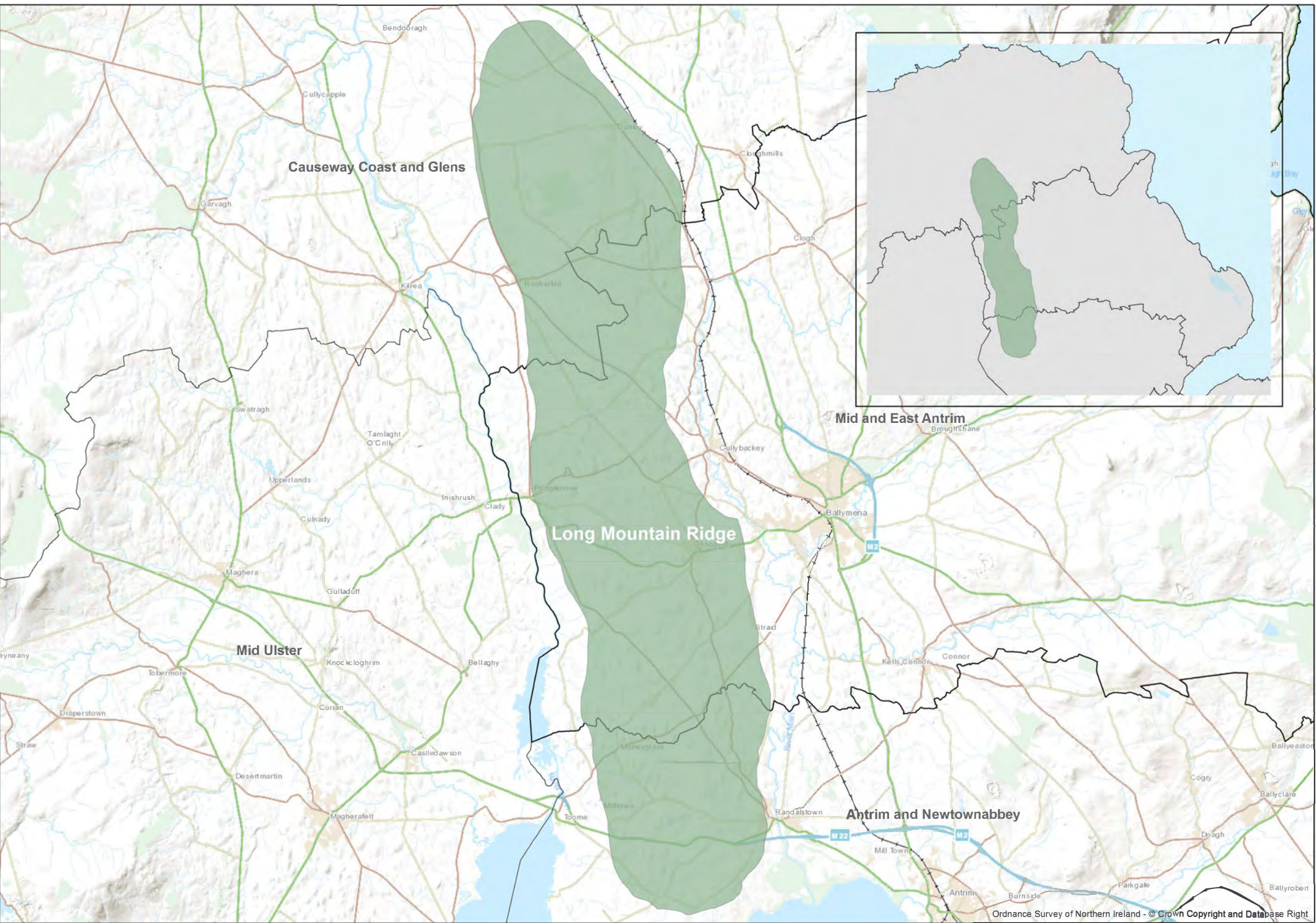
- Wind energy developments of all scales should generally be avoided in this landscape, other than very small-scale domestic developments which should be sited with existing buildings where possible and located away from the lough fringe and river corridor to ensure they do not dominate the lowland landscapes.
- Larger scale electricity transmission lines should be routed to avoid the low-lying areas adjacent to the lough shore and the river. Skylining of electricity transmission lines on the higher ground to the east as seen from the surrounding lowlands, should be avoided.
- Telecommunications or radio transmission mast should be sited away from lough fringe and river corridor.

Tranquillity

The deep rural character and tranquillity of this area could be affected by further residential development, expansion of peat extraction, or upgrades to roads in the area. Consideration should be given to the potential landscape and visual impacts of development, including any cumulative impacts.

LCA 58 - LONG MOUNTAIN RIDGE





Causeway Coast and Glens

Long Mountain Ridge

Mid Ulster

Mid and East Antrim

Antrim and Newtownabbey

Key Characteristics – LCA 58

- Distinct rounded ridge orientated north-south with undulating side slopes and a broad rounded crest.
- Pastoral farmland with strong hedge line geometry and numerous trees; patches of moss on the exposed ridge top, especially towards the north.
- Wooded estates, with distinctive buildings, designed landscapes and avenues of beech on lower slopes overlooking the River Maine valley.
- Settlements and houses frequent and are regularly distributed, often on raised areas; more numerous on ridge sides, but rarely a dominant feature.
- Scale varies considerably; large at bottom in flat, open terrain, medium-small on intricate, undulating sides and vast at the top when there are open views to adjacent LCAs.
- Distant elevated views into lowlands and across to other ridges.

Landscape Character Description

This landscape character area comprises a long ridge of land, known as the 'Long Mountain', that runs from Ballymoney in the north to Randalstown in the south. This distinct rounded ridge has been created by the lowering of softer bands of Lower Basalt on either side of it which are now occupied by the Lower Bann and River Maine valleys to the west and east respectively. The ridge is orientated north south and despite variations in topography and character, the ridge reads as a single feature in the landscape.

It has complex and undulating side slopes and has a strong horizontal form when viewed from the east and west making it a distinctive skyline feature. Scale varies considerably within this LCA, for example, the bottom of the ridge in the flat, open terrain the landscape exhibits a large-scale character. On the intricate undulating slopes on the sides of the ridge the landscape scale is medium to small, with the top of the ridge distant elevated views out over the lowlands and across other ridges creates the impression of a large-scale, expansive landscape.

This LCA is dominated by pasture which is supported by the fertile Antrim lavas which underlie it. Field size and structure varies with landform, with fields becoming larger on flatter terrain on the top of the ridge. Trees are prevalent in hedges and shelterbelts and as small isolated stands, however, woodland in the south is uncommon. To the north, on the higher slopes, pasture gives way to areas of moorland scrub which intermix with farmland to create diverse land cover. Craigs Wood is a large conifer plantation that is located outside, and to the north of, the Mid and East Antrim Council boundary.

Settlements are located on the sheltered side slopes of the ridge and rural dwellings are frequent and regularly distributed, however, they are rarely a dominant feature due to their location and the topography of the land. A complex network of roads with telegraph poles adds to a 'well-

settled' landscape. There are many small wooded estates on the lower slopes overlooking the River Maine valley which have associated stone walls, designed landscapes and avenues of trees, and there are attractive outbuildings or small groups of estate cottages found on these lower slopes.

Physical Influences

Geodiversity

This LCA lies within the region described as the Central Lowlands, owing its large-scale morphology to the early Tertiary subsidence of the Lough Neagh basin into the magma chamber from which the basalts that underlie much of the landscape originated. This has created a large centripetal drainage system from the rim of the basin into Lough Neagh that ultimately drains northwards via the Lower Bann.

Long Mountain Ridge was created by the relative lowering of softer bands of Lower Basalt on either side of it which are now occupied by the Lower Bann and River Maine valleys to the west and east respectively. The former extent of the Upper Basalt cover is indicated by outliers of these strata to the south-east of Portglenone and at Millars Corner east of Rasharkin. This ridge reads as a single feature in the landscape and has a north-south orientation. The lower slopes on the north-eastern flank of the LCA overlap with the Glarryford esker complex (a ridge created by deposits from a stream running beneath a glacier), where the ridge and mound topography adds interest to this area and to the low-lying, frequently bog-dominated valley of the River Maine. The south of the LCA also extends into the drumlin field that occupies the lower valley sides of the River Bann.

Altitude range

Within Mid and East Antrim, the land in this LCA is between 50m and 180m AOD.

Topography

Long Mountain Ridge LCA comprises a long ridge of land that has a north-south orientation. Within Mid and East Antrim, the top of Long Mountain ridge varies between approximately 120m and 180m AOD. The ridge has a higher altitude in the north and becomes progressively lower towards the south. Despite variations in topography, the ridge reads as a single feature in the landscape with undulating side slopes and a broad rounded crest.

Biodiversity and Land Cover - Key Characteristics

- Woodlands account for less than 1.5% of the land cover, a very low percentage even in comparison with the Northern Ireland average (c. 8%).
- Broadleaved and conifer woodland each comprise about half the woodland total.
- Native broadleaved woodland scarce and confined largely to small patches of hazel-oak on rocky outcrops.

- Planted broadleaved/mixed woodland in part of Portglenone Forest and in a few estates.
- Grassland covers approximately 77% of the LCA and almost nine-tenths of this is improved pasture of generally low biodiversity.
- Extensive blanket bog, especially in the north. Much of this has been cut-over, drained, reclaimed or afforested, but some relatively large intact areas remain.

Woodlands

Woodland accounts for less than 1.5% of the land cover which is a very low percentage, even when compared with the Northern Ireland average of c.8%. Broadleaved and mixed woodland accounts for half of the woodland area. Two parts of Portglenone Forest are located within the LCA and these are on former estate land that was planted by the 1830s (parts of the woods are at least long-established woodland). Craigs Wood, located outside of Mid and East Antrim, is the largest woodland in the LCA and is managed by the Forest Service. In this forest Sitka spruce dominates and biodiversity is generally low. Small broadleaved woodlands associated with rocky outcrops occur in the north of the LCA. Moneyglass House is located outside of Mid and East Antrim and has a large parkland with extensive planting of broadleaves that pre-date 1833.

Grassland and Arable

Grassland covers approximately 77% of the LCA and almost nine-tenths of this is improved pasture (generally of low biodiversity value). Apart from small pockets of damp grassland along streams and between drumlins, rough grassland is generally confined to cut-over peatlands and where this occurs it is frequently intermixed with patches of heath and remnant bog. These rough grasslands provide habitats for waders such as Curlew and for Irish Hare (*both NI Priority Species*). Arable land accounts for approximately 9% of the land cover in this LCA (NI average is 6%) and is scattered throughout the LCA with no spatial concentrations. The hedgerows in the LCA are important contributors to biodiversity, providing a refuge for many woodland and farmland plants and animals.

Heaths and Bogs

Blanket bog is extensive in the north of the LCA and although much has been cut-over, reclaimed for grazing or afforested, there are some intact areas remaining. However, as altitude declines southward, classification into blanket or lowland bog becomes more difficult. To the south-east of Craigs Wood intact blanket bog is more extensive, although threatened by machine cutting. Common heather dominates with Hare's Tail Cotton Sedge and a generally high ground cover of bog mosses. The (possibly) lowland raised bogs (*NI Priority Habitat*) at Casheltown and Ballybollen are affected by past and recent cutting, although Ballybollen has some intact bog remaining.

The peatlands of Long Mountain have one of the largest concentrations of machine peat cutting in Northern Ireland, with limited pockets of hand cutting. Large scale peat removal poses a significant threat to local biodiversity and to internationally important habitats. Machine cutting leaves large tracts of bare peat that only slowly recover and are prone to erosion. If repeated over

cutting of a site occurs, the site cannot recover. Heath has developed mainly in areas of cut-over or drained bog or where thin peat has extended from basins over a rock outcrop.

Wetlands and Lakes

Patches of fen (a low, marshy or frequently flooded area of land) in this LCA are generally small and associated with small ponds or loughs. A fen is present at Artoges Dam which is located outside Mid and East Antrim and north of Moneynick Road.

None of the rivers have records of Priority Species, but it should be noted that they feed into major rivers that have both Priority Species and are salmonid rivers.

Field Boundaries

Field size and structure varies with landform within this LCA. On the undulating side slopes fields are smaller and hedges more extensive with their curving lines emphasising and complementing the landform. Fields become larger on the top of Long Mountain ridge where the terrain is flatter. Generally within the LCA, hedgerows are well-maintained and there is a strong hedge-line geometry. Trees are prevalent in hedges and shelterbelts and as small isolated stands, however, woodland in the south is uncommon.

Natural Heritage Conservation Sites – Designations

International Sites

None

National Sites

- Killydonnelly Area of Special Scientific Interest (ASSI)

Local Sites

- No formal designations

Historical and Cultural Influences

Settlements

Portglenone is designated as a village within the Ballymena Area Plan 1986-2001. Refer to LCA 52 for further information on Portglenone.

Ahoghill is designated as a village within the Ballymena Area Plan 1986-2001. A religious site is believed to have been founded here in the late 500s by Colmanell, a nephew of Columba. Tradition has it that this was the fourth oldest church in County Antrim. Around 1375 the rector of Ahoghill was promoted to Bishop of Connor, suggesting that this was an important parish.

Grange Corner is designated as a hamlet within the Ballymena Area Plan 1986-2001.

Historic Environment

There are archaeological sites scattered throughout this LCA including numerous scheduled raths from the early Christian period, prehistoric standing stone sites close to Portglenone and Ahoghill and a prehistoric megalithic tomb south-east of Ahoghill. There are 15 listed buildings located within this LCA and these are predominantly located in the southern part of this landscape. Examples include Ballyscullion Parish Church and St. Mary's Church which are Grade "B" listed buildings.

Glebe House is a supplementary Historic Park, Garden and Demesne. Ahoghill Glebe House was built in 1815 and the OS map of 1835 shows surrounding trees had been planted to give good shelter at the elevated site. This shelter is largely extant today. In the late 1940s, Lady O'Neill of the Maine created a notable ornamental and productive garden. There are herbaceous borders, a woodland garden where rhododendrons were a speciality and an arboretum planted by Lord O'Neill. Much of the planting from this era remains. The gate lodge was added c.1840. This historic park, garden and demesne is a private site.

Heritage – Defence and Industry

Outside of settlements there is only one significant historic defence site recorded – an observation post. The industrial heritage in this LCA is primarily related to the linen industry and farming. Historic industry sites include various flax mill sites, a weaving factory and corn mill sites.

Transport Infrastructure

The main local transport routes running through this LCA include the main road linking Portglenone, Ahoghill and Ballymena (A42), Craigs Road linking Cullybackey and Rasharkin, and the Portglenone Road/Largy Road (B52) linking Randalstown with Portglenone. Grange Corner is located west of the Largy Road and is accessed from this road via the Taylorstown Road.

Leisure & Recreation

Leisure and tourist attractions in this LCA are limited. There is a walking route from Portglenone towards Lough Beg via the Largy Road, however there is no designated road space for walkers, joggers or cyclists along this relatively busy road.

Visual and Sensory Perception

Tranquillity

The relatively open crest and moorland scrub areas have a sense of relative wildness and remoteness. Elsewhere the rural and treed character of the landscape gives rise to a high degree of tranquillity. This landscape is intensely used as an agricultural resource and is a "well-settled" landscape with single dwellings, farmsteads and roads prevalent throughout. A complex network of telephone poles and existing telecommunications masts stand out on the skyline and wind turbines are notable features within this landscape. These elements add to the impression of a well settled landscape.

Views

Views constantly change in this landscape as a result of the diverse scales, land cover and complex topography of the rolling sides of Long Mountain ridge. From Long Mountain ridgeline there are long range views into the river valleys and to the Antrim Plateau to the east and the Sperrins to the west. For example, there are long distance views of Slemish and the Antrim Plateau from Killagan Road. There are long range views to Lough Beg, the Lower Bann River floodplain and hills to the west from, for example, Roguery Road, Carmagrim Road and Largy Road. The extent of views on Long Mountain Ridge are constantly changing and are widely restricted by undulations in the topography and a strong network of hedgerows and hedgerow trees.

This landscape forms an important skyline feature when viewed from the lower-lying adjacent landscapes as Long Mountain ridge is the main area of elevated land situated between the Sperrins and Antrim Coast and the Glens. The slopes of the ridge form part of the eastern setting of Lough Beg and the Lower Bann River Corridor.

Landscape Condition and Sensitivity

The moorland areas on the crest of the ridge are fragmented and under-managed but otherwise the condition of this landscape is fair to good. Land cover is predominantly pastoral farmland with strong hedge-line geometry and numerous trees. Hedgerows are generally well-maintained.

Areas of Scenic Quality

Within this LCA there are no extant landscape designations within Ballymena Area Plan 1986-2001 and NILCA 2000 did not identify any areas of scenic quality.

NILCA 2000 Assessment

The landscape is intensively used as an agricultural resource, for housing and for roads. Moderate increases in these will not substantially alter its character, although proliferation of housing could threaten landscape character. The moorland is quite fragmented and substantially undermanaged; its conservation is paramount to local landscape character on the upland ridge top. Peat cutting, windfarms, pylons and telecommunication masts are pressures for change in this moorland area. The estate woodlands on the eastern slopes of the ridge are particularly prominent in views from the River Maine valley and are relatively sensitive to change. There are signs that some of the woodlands are undermanaged and that prominent stands of trees may be in the early stages of decline.

Wind Energy Development in NI's Landscapes (2010)

The gentle convex shape of the ridge and its relative simplicity of character tend to reduce this landscape's sensitivity to wind energy development; and although the area is visible over a wide area, close range views are generally filtered by existing vegetation. In addition, this LCA is not of

exceptional landscape or scenic quality. This means that, overall, the landscape sensitivity is medium.

The side slopes and southern sections of the ridge are of a lower elevation and have a more complex topography as well as smaller scale field patterns which increase sensitivity. The southern sections of the ridge (not within Mid and East Antrim council boundary) also form a setting to Lough Neagh. Landscape features such as craggy outcrops at the head of streams, archaeological sites, estate landscapes and dispersed pattern of settlement are key constraints in some areas.

Overall Sensitivity – Medium

Assessment of Development Pressure

Wind Energy

The Wind Turbine Pressure Analysis indicated that this LCA has generally experienced low to medium pressure for wind energy development. The areas of medium pressure are generally found in areas between Craigs Road and Hiltonstown Road/Ballyconnelly Road; and between Ballynafie Road, Largy Road and Portglenone Road. There has been no or low development pressure for wind energy development in the northern section of the MEA part of this LCA where the landscape has a relative sense of remoteness; and in this part of the LCA some proposals for wind energy development have been resisted.

Within the Mid and East Antrim part of the LCA the majority of proposals have been for large-scale wind turbines (over 15 metres) with approximately 10% of proposals for turbines of a domestic scale (15 metres and under). There has been applications to increase the height of 'approved' turbines at two sites however, hitherto no 'height increases' have been approved. There has been no pressure for wind farm development within the Mid and East Antrim part of this LCA.

The gentle convex shape of Long Mountain ridge, its relative simplicity of character and existing vegetation in the form of robust hedgerows and numerous trees have helped this landscape absorb current wind energy development. Although this landscape is not of exceptional landscape or scenic quality, the cumulative visual impacts of wind energy development should be a key consideration, along with any visual impact on the settings of key settlements and the Lough Beg and the Lower Bann River Corridor.

Solar Energy

There have been no applications for solar farm development in this LCA. Long Mountain Ridge is visible over a wide area and has a strong horizontal form when viewed from the east and west making it a distinctive skyline feature. However, this LCA is not of high scenic quality, and parts of this LCA may be suitable for solar energy development, particularly where screening is

provided by undulations in topography, trees and strong hedgerows. Proposals for solar farms are not likely to be acceptable on the slopes that are widely visible from surrounding areas.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) the MEA part of this LCA experienced relatively high pressure for residential development in the open countryside.

Since June 2010, the pressure for residential development in the open countryside has been low to medium with pockets of high pressure. There has been relatively high residential pressure around the Kilcurry Road/Largy Road junction, the Kilcurry Road/Loughbeg Road junction, the Ballybollen Road, an area to the south/south-east of Ahoghill, the Largy Road, and areas to the north of Portglenone and to the west of Cullybackey.

Some ribbon development has occurred along the Kilcurry Road which has adversely impacted on the rural character; since June 2010 the high residential pressure in this area has primarily related to applications for farm dwellings and 'infill' dwellings.

The MEA part of this LCA has a strong landscape structure and relatively 'lower' landscape sensitivity compared to some other LCAs within the Borough. However, the cumulative impacts of new dwellings in the open countryside needs consideration as such impacts may lead to the erosion of rural character.

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- NILCA 2000 did not identify any areas of scenic quality within this LCA and there are no areas considered to be of exceptional landscape quality.
- Generally, the condition of this landscape is fair to good. However, moorland areas on the crest of the ridge are fragmented and under-managed. The relatively open crest and moorland scrub areas have a sense of relative wildness and remoteness represent significant biodiversity and conservation interest in this LCA.
- The LCA has a strong hedge-line geometry with numerous trees. Hedgerows are generally well-maintained in the LCA.
- Areas of peatland in the Craigs Road area (Saugh Island Bog) and Killydonnelly ASSI are examples of sites of nature conservation importance within this LCA.
- Within Mid and East Antrim, the slopes of the ridge form part of the eastern setting of Lough Beg.
- This LCA contains some important historic environment features such as archaeological sites and estate landscapes.
- The landscape is intensively used as an agricultural resource and is a "well-settled" landscape.

Visual Sensitivity: Key Points

- This landscape is exposed to long-distant views from adjacent LCAs and forms an important skyline feature when viewed from adjacent LCAs, for example, from the Lower Bann River Corridor, the Sperrins and from the western edge of the Antrim Coast and Glens AONB.
- Within this LCA, long range views are generally impeded by existing vegetation and undulations in the topography.
- Within Mid and East Antrim, the slopes of the ridge form part of the eastern setting of the Lough Beg and Lower Bann River corridor which is an important scenic area within Mid and East Antrim and has high amenity value attached to it. These slopes are visually sensitive where they are open to long range views from this river corridor.
- This LCA is not considered to be of exceptional scenic quality.
- The conservation of the moorland on the ridge is important for local landscape character.
- The estate woodlands on the eastern slopes of the ridge are particularly prominent in views from the River Maine valley and are relatively sensitive to change.
- The gentle convex shape of the ridge and its relative simplicity of character tend to reduce this landscape's visual sensitivity.

Landscape Value: Key Points

- Long Mountain ridge is the main area of elevated land between the Sperrins and Antrim Coast and the Glens and is a significant skyline feature.
- Long Mountain ridge forms an important backdrop for the Lough Beg and Lower Bann River corridor which is a significant area for leisure, recreation and tourism opportunities.
- Within Mid and East Antrim, landscape features such as archaeological sites and estate landscapes are features which add to the visual amenity and cultural value of particular areas within this LCA.
- Within Mid and East Antrim, this landscape is "well-settled" and is a relatively busy rural area.
- Areas of peatland in the Craigs Road area (Saugh Island Bog) and Killydonnelly ASSI are examples of sites of nature conservation importance within this LCA.

Sensitivities and Forces for Change

Climate Change - An increasing incidence of summer droughts would impact on the remaining active bogs in this area, leading to increases in fen and dry heath habitats, and stress on other wetland habitats and woodland. Hedgerow trees would be adversely affected by drier conditions

Heath and Bogs - sensitivities and forces for change: Raised bogs/blanket bogs are of national and international importance; this LCA contains some good examples of diverse peat bog habitats. Some remnant lowland peat bogs in this landscape have experienced peat cutting. Pressure on remaining areas of peat could lead to erosion of the resource with consequences for biodiversity and carbon sequestration. There is active peat cutting on-going in the Craigs Road area (Saugh Island Bog).

Planning and Management Guidelines

- The control of peat cutting, particularly where mechanised techniques are used, is advisable to prevent total destruction of the raised bog and to avoid adverse effects to landscape character and views from more open parts of the landscape.
- Maintain the integrity of existing lowland raised bogs by for example, preventing infilling, fly-tipping, fires, new drainage.
- Consider restoration of raised bog habitats through appropriate water level management and phasing out peat cutting.
- Maintain the remaining intact blanket bog by preventing further drainage, extension of peat cutting, and fires and by removal of conifers colonising from adjacent forest.
- Consider restoration of blanket bog by damming drains and appropriate water level management.
- Discourage new conifer planting on blanket bog.

Trees, woodlands and forestry – sensitivities and forces for change: Woodland cover within the LCA is extremely low, the largest area of woodland (8.63 ha) being Top Wood which is located south east of Portglenone on the slopes of Tully Hill. This wood is an attractive narrow belt of mainly broad-leaved trees that follows a zigzag route for about 700m.

Planning and Management Guidelines

- Encourage the planting of broadleaved woodlands.
- Encourage the management and regeneration of existing broadleaved woodlands, for example through management of grazing or replanting.
- Coniferous woodlands should be small scaled and integrated into the landscape through interplanting/ fringing with broadleaves and/ or set within the exiting framework of wooded field boundaries.

Agriculture - sensitivities and forces for change: Poor biodiversity of farmland. Agricultural improvements may lead to loss of character from removal of wooded field boundaries.

Planning and Management Guidelines

- Encourage the retention and enhancement of wooded field boundaries where possible and promote environmental initiatives.
- Low intensity farming in more marginal areas would be beneficial.

Development - Sensitivities and Forces for Change: Pressure for new housing development may continue. Housing development located on ridgelines has the potential to be quite prominent in the exposed and relatively treeless landscape.

Planning and Management Guidelines

- New dwellings should be of a scale which is sympathetic to the scale of traditional dwellings and buildings and be located in sheltered sites avoiding hill tops or prominent slopes.
- Houses in promontory locations may provide a focus for views but should be carefully designed; sheltered locations are more appropriate.
- The settings to archaeological features require protection. Specific viewpoints with interpretation boards would add to visitor interest.
- Use of tree shelter will help to blend houses with the landscape and enhance the woodland structure of the landscape
- Development should be concentrated in small clusters on the ridge top to establish a community identity and retain its open, undeveloped character.

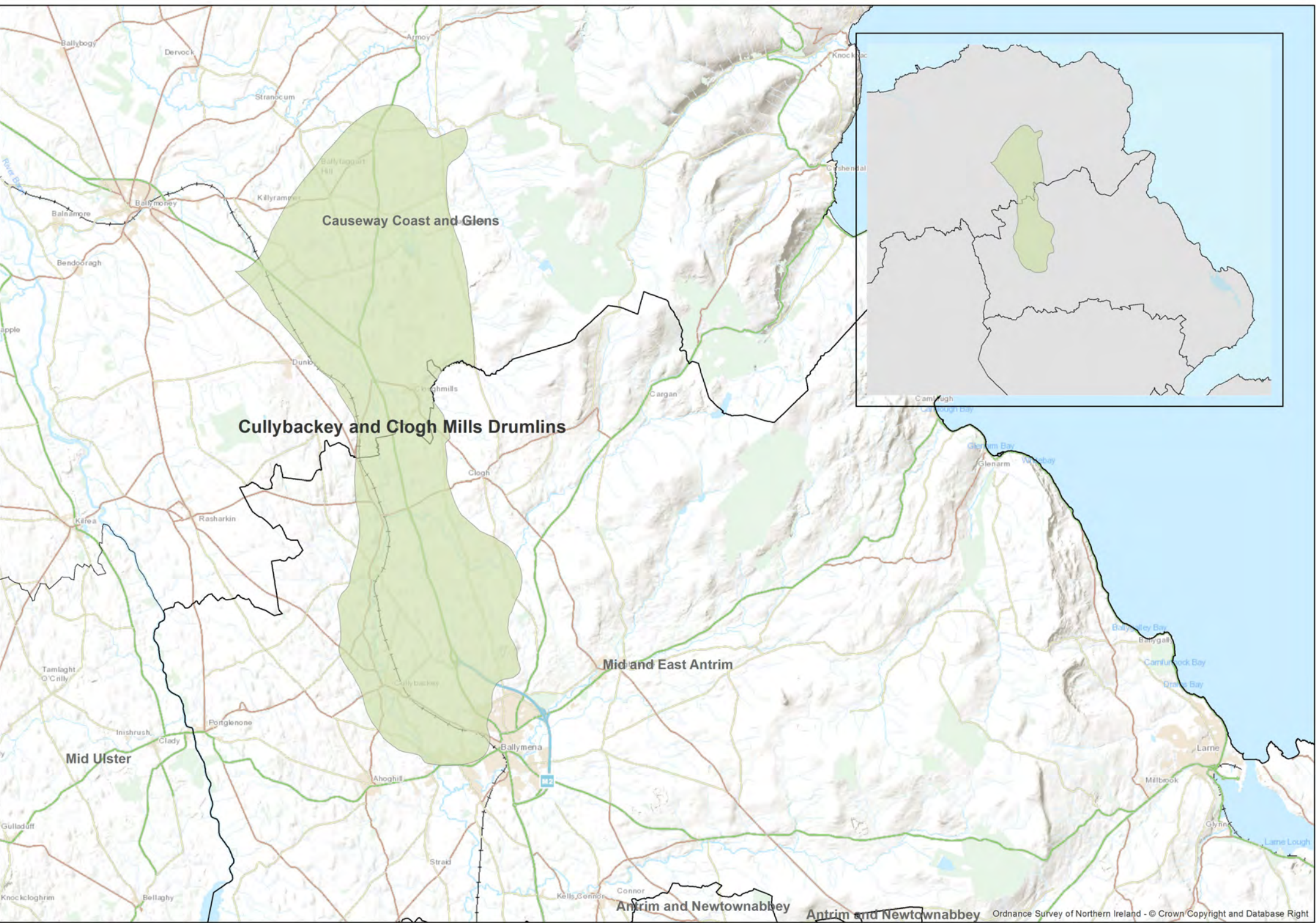
Tall Structures and Energy Infrastructure - sensitivities and forces for change: There may be pressure for further wind energy development within the area, for example associated with farm diversification. It is possible that wind energy development and other tall structures could be potentially absorbed landscape, subject to careful siting and design away from prominent ridges and slopes.

Planning and Management Guidelines

- Any proposed wind energy development should be sited with existing buildings where possible and located away from exposed ridgelines and slopes to ensure they do not dominate the lowland landscapes.
- Skylining of electricity transmission lines on the higher ground to the east as seen from the surrounding lowlands, should be avoided.
- Telecommunications or radio transmission mast should be sited away from exposed ridges and slopes.

LCA 59 - CULLYBACKEY AND CLOUGHMILLS DRUMLINS





Causeway Coast and Glens

Cullybackey and Clogh Mills Drumlins

Mid and East Antrim

Mid Ulster

Key Characteristics – LCA 59

- Distinctive rounded drumlins on the valley floor and surrounding low ridges, aligned in a north-west to south-east direction.
- Hedgerows and trees along field boundaries emphasise the undulating landform. Mature hedgerow trees stand out as silhouettes on top of the mounds.
- Small-scale field pattern which varies according to the scale of the local landform; the scale generally increases towards valley edges.
- Farmsteads display a variety of building styles and are dispersed across the hills.
- Roads follow landform, rising smoothly over and winding around the drumlins.
- Archaeological remains, including raths and mottes.

Landscape Character Description

The landscape is small to medium in scale due to the relatively low-lying topography, the character of the Clogh River and River Maine river corridors and the general enclosed field pattern. The drumlin landscape forms a wide band within the lowlands to the east of Long Mountain Ridge, traversing the steep River Maine Valley and extending south to Ballymena. The distinctive rounded drumlins on the valley floor and surrounding low ridges are aligned in a north-west to south-east direction. The land between the drumlins is often poorly drained and rush-infested and there are areas where years of localised peat-cutting has produced a hummocky, ridged landform.

Steep sided ridges, small hills and numerous troughs and hollows typify the landform along the River Maine, with the land falling gradually towards the river valley. The River Maine Valley and Glarryford esker form an important setting for Cullybackey, and the ridges and mounds of the Glarryford esker/outwash complex add interest to the low-lying, frequently bog-dominated valley of the River Maine. Red brick mills with chimneys are characteristic along the River Maine. The Clogh River meanders between the drumlins in an attractive small-scale valley, and the distinctive landforms, mottes and stone bridges in this area contribute to a particularly scenic landscape. The undulating landform helps the integration of buildings into the landscape by providing sheltered sites, and farmsteads are dispersed evenly throughout the landscape.

The historic environment and infrastructure has influenced this landscape. The A26 Crankill Road cuts directly across the landscape running north to south and roads in this LCA have curved alignments as a response to the shape of the landform. Ballymena area is affected by housing pressure and road improvements, and quarrying occurs in the Ballymena hinterland. In regard to the historic environment archaeological sites including raths and mottes are a key characteristic of this LCA with mottes forming notable landmarks, for example, Dundermot Motte. In Cullybackey, the prominent church spire of Cuninghame Memorial Presbyterian Church is a notable landscape feature and there are listed stone cottages located on the Hillmount Road.

Physical Influences

Geodiversity

This LCA lies within the region described as Central Lowlands. This region owes its large-scale morphology to the early Tertiary subsidence of the Lough Neagh basin into the magma chamber from which the basalts that underlie much of the landscape originated. The Lough Neagh Basin was a major ice accumulation centre during the Late Midlandian period and much of the lowland areas to the north and south of the Lough are dominated by extensive drumlin swarms.

This drumlin landscape forms a wide band within the lowlands to the east of Long Mountain Ridge, traversing the steep River Maine valley and extending south to Ballymena. The drumlins are distinctive amongst areas of undulating land alongside the River Maine.

The LCA contains two deglacial complexes that total 7.5 kilometres-squared and are important scientifically: 1. The Glarryford Esker/Outwash is an esker ridge and adjacent outwash spreads are located along the western side of the River Maine at Ballymoney (outside LCA); 2. Glarryford Esker is an intact, pristine, continuous esker ridge which extends along the western side of the River Maine in the centre of the LCA.

The west of the LCA also includes most of the Glarryford esker/outwash complex, where the ridge and mound topography contrasts with to the low-lying River Maine valley. The drier, agricultural, glaciofluvial landforms contrast seasonally with adjacent raised bogs and produce a distinctive rural landscape. Abandoned gravel pits exist on the main esker ridge.

Altitude range

Within Mid and East Antrim, the land in this LCA is between 50m and 130m AOD.

Topography

Relatively low-lying topography, rising to 168m AOD (130m AOD within Mid and East Antrim). There are variations in the landform which includes drumlins and steep-sided ridges that generally run north to south. The River Maine valley floor has distinct rounded drumlins. Between these drumlins occurs small hills, troughs and hollows and the Glarryford esker/outwash complex creates an area of higher undulating land in this low-lying valley. In the eastern part of the LCA, the Clogh River meanders through drumlins which have helped create an intimate undulating landscape.

Biodiversity and Land Cover - Key Characteristics

- Woodlands account for less than 2% of the land cover.
- Almost all woodland is broadleaved/mixed and is in demesnes or other planted areas.
- Grassland accounts for about 76% of the land cover (NI average 71%); over four-fifths of this is in improved pasture (NI average about 70%).

- Significant areas of damp and acid grasslands particularly important for breeding waders.
- Along the River Maine this LCA contains one of the most important concentrations of lowland raised bogs in Northern Ireland (Frosses Bog is within Mid and East Antrim).
- Raised bogs have large intact domes with good micro-topography and rare species, especially of bog mosses; makes these bogs of national and international importance.
- Rivers of importance for Priority Species and salmonid fish.

Woodlands

Woodland accounts for less than 2% of the land cover and almost all woodland is broadleaved/mixed with the majority of this being associated with demesnes and other planted areas (*NI Priority Habitat: Parkland*). Within Mid and East Antrim, these woodland areas are concentrated along the River Maine between Gledheather and Galgorm. The several estates that stretch between the Galgorm Manor Hotel and Gledheather are dominated by beech; other broadleaves include ash, sycamore, oak and lime. Springmount is surrounded by similar species.

Grassland and Arable

Grasslands account for approximately 76% of the land cover (NI average is 71%). Over four-fifths of this is improved pasture (NI average is 70%). Arable land occupies about 10% of the land (NI average is approx. 6.5%). Improved pastures are generally of low biodiversity as a result of relatively intensive management. Within this LCA there are individual fields or small groups of fields in the vicinity of dams that, together with occasional arable fields, provide a mosaic of conditions that increases biodiversity, especially for birds. Many of the *NI Priority Species* of birds are therefore found in the farmlands of this LCA, for example, curlew, reed bunting, song thrush, spotted flycatcher, linnet, skylark and yellowhammer.

Heaths and Bogs

The LCA contains one of the most important concentrations of lowland raised bog in NI (along parts of the River Maine corridor in Mid and East Antrim) which includes the Frosses Bog ASSI and Main Valley bogs SAC designations. These bogs display the classic dome formation with hummocks and hollows. The Frosses Bog has extensive cutting around the margins so that no lagg remains. The marginal cutting has produced mosaic of habitats ranging from acid pools with Sphagnum mosses through acid grassland to fen and swamp.

The abundance of cranberry throughout the intact area of bog is notable and the presence of crowberry is an unusual feature for a lowland raised bog. Killycreen Bog is a raised bog which is situated to the east of the Frosses Bog, but its surface is drier than the other bogs in this LCA and there are no evident pools.

Wetlands and Lakes

Lough Guile and Troopers Hill Lough lie outside the Mid and East Antrim boundary. The River Clogh and River Maine run through the LCA and have river water-crowfoot and otter present (*both NI Priority Species*). The River Maine is a salmonid river.

Field Boundaries

Within Mid and East Antrim, the fields in this LCA are generally divided by a strong network of hedgerows and trees which emphasise the undulating landform, although there is some evidence of field amalgamation, hedgerow removal and the introduction of post-and-wire fencing. Within Mid and East Antrim there is generally a small-scale field pattern, however, this varies according to the scale of the local landform with the scale generally increasing towards valley edges. Fields tend to be smaller in size in the inter-drumlin wet grasslands and these fields generally have overgrown and gappy hedges.

Natural Heritage Conservation Sites – Designations

International Sites

- Main Valley Bogs Special Area of Conservation (SAC)

National Sites

- Frosses Bog Area of Special Scientific Interest (ASSI)
- Glarryford ASSI

Local Sites

- No formal designations

Settlements

Ballymena is designated as a town within the Ballymena Area Plan 1986-2001. Ballymena town is built on land given to the Adair family by King Charles I in 1626, on the basis that the town holds two annual fairs and a free Saturday market in perpetuity. The Saturday market still runs and the town is a popular shopping hub within Northern Ireland.

Cullybackey is designated as a village within the Ballymena Area Plan 1986-2001. Cullybackey was part of the ancient kingdom of Dál nAraidi. Cullybackey: -CúilnaBaice meaning the “angle or corner of the river bend” is situated beside the fast-flowing River Maine which for many years powered the many linen mills along its banks.²⁰ Evidence of ancient dwellers in the area have been found throughout the years, including the remains of Crannogs and Souterrains.

In 1705 John Dickey is reputed to have been the first linen merchant to erect a power-driven bleach green in Ireland, building the Lowtown works on the left bank of the River Maine in around

²⁰ <http://cullybackeyhistory.co.uk/>

1705. Education buildings include Buick Memorial Primary School, which was originally built in 1900 and re-built in 1937, and Cullybackey College built in 1968.

Historic Environment

Within Mid and East Antrim, and outside of settlement development limits, there is a concentration of listed buildings located in the area around Cullybackey. To the south of Cullybackey there are 4 listed buildings in the area of the Galgorm Resort & Spa, and north of this settlement there are listed buildings dispersed along the Hillmount Road including a row of semi-detached Grade B1 cottages. There are other listed buildings scattered throughout the rural area of this LCA, with a significant number being located along the Dunminning Road, for example, Craigs Church of Ireland, which was designed by celebrated 19th-century architect Sir Charles Lanyon and built in 1840. Attached to the church is a very old graveyard which contains 'The Strangers Plot', where the poor of the parish were buried, including those who lost their lives in the parish during the Great Famine (Ireland).

Hillmount is a registered Historic Park, Garden and Demesne located on Hillmount Road. Hillmount House is a private mid-18th Century house (listed HB 07/02/04) which was originally a mill owners house. A lime avenue sweeps to the entrance, past fields and a modest artificial lake. The lake shores were planted from 1960 with many shrubs and herbaceous plants, which also form a pleasant and decorative vista from the house. A shelter belt of mature beech, oak and Scots pine give a background to the view. The making of the present garden is recorded in "In an Irish Garden" by Sybil Connolly and Helen Dillon. There is also a cultivated productive garden that was created in the same era. The part walled garden is grassed as it is no longer in use, having been the centre of the gardens until the present owners altered the layout.

Craigdun is a supplementary Historic Park, Garden and Demesne which is located opposite Craigs Church of Ireland. Historically, the grounds are associated with the early 17th century Craigs Castle. The present Scottish Baronial House, sometimes known as Craigdun Castle was built in 1867 (7/2/9). There are fine mature trees in the shelter belts and parkland. A champion parkland sycamore has a circumference of 11 m at the base. The walled garden is adjacent to the house and has a circular pavilion, with a conical slated roof, in one corner. This building and the walling of the garden are included in the listing, as is the gate screen. The walled garden is no longer cultivated. The big house was latterly renamed when it became an institution. A new house on the site was built for the owners in 1960 and named Craigdun. This Historic Park, Garden and Demesne is a private site.

Arthur Cottage, the ancestral home of Chester A. Arthur who was the 21st President of the United States from 1881 to 1885, is close to Cullybackey, on the B62 road from Ballymena. It is a restored 18th-century farmhouse with an open flax-straw thatched roof.

There are archaeological sites scattered throughout this LCA. Outside of settlement development limits, there are three scheduled raths from the early Christian period located to the south/south-

west of Cullybackey. Further to the north, scheduled sites include two medieval mottes and an early Christian crannog (artificial island).

Heritage – Defence and Industry

Outside of settlement development limits there is only one significant historic defence site recorded – an observation post.

This LCA has a rich industrial heritage. Within Mid and East Antrim, in the western part of this LCA, these sites are predominantly located adjacent to the River Maine and the existing railway line (Ballymena – Cullybackey – Ballymoney). Historic industry sites in this area mainly concern flax and beetling mill sites and bridges. In the eastern portion of the Mid and East Antrim part of this LCA, the historic industry sites are more dispersed and mainly concern bridges and corn and flax mill sites.

Transport Infrastructure

The A26 Crankill Road/Frosses Road is a main transport corridor which passes through the centre of this LCA running north to south. Other main routes include the road network to Clough and Rasharkin which exit off the A26. In the south-west important local routes radiate out from Ballymena to Cullybackey and Ahoghill.

Leisure & Recreation

Fishing for Brown Trout, Dollaghan and Salmon occurs along the Clogh River, and Galgorm Resort & Spa is a significant tourist and recreation site located between Ballymena and Cullybackey. Although not linked to leisure and recreation opportunities, the A26 represents the main tourist route connecting Belfast with the North Antrim Coast.

Visual and Sensory Perception

Tranquillity

Within Mid and East Antrim, this landscape is deeply rural in areas away from Ballymena, Cullybackey and the A26 transport corridor. In these deeply rural areas the landscape has a high degree of tranquillity but it is not remote or wild in character.

Views

Views tend to be restricted by the vegetation and topography with the Mid and East Antrim portion of this LCA, and as a result, this is a predominantly inward-looking landscape. There are some areas with longer views to the hills and ridges to the east, for example, from Doury Road, but the opportunities for views out across this landscape from the A26 Crankill Road/Frosses Road are intermittent.

Landscape Condition and Sensitivity

Areas of Scenic Quality

Within this LCA there are no extant landscape designations within Ballymena Area Plan 1986-2001 and NILCA 2000 did not identify any areas of scenic quality.

NILCA 2000 Assessment

Landscape condition improves to the north-east, away from Ballymena, where the scale of farmland increases, and field boundaries tend to be more continuous and better maintained. Hedgerow neglect has led to overgrown, gappy or leggy hedgerows in places. The relatively degraded character of the land around Ballymena is due to housing pressure, quarry workings and road improvements.

The landscape is able to accommodate a degree of change owing to its undulating landform and tree cover which reduce opportunities for long outward views of the surrounding landscape. The area's distinctive character is however vulnerable to activities which may degrade the landscape such as quarrying, large scale development, road straightening or excessive housing in the countryside. The scenic quality of the small-scale landscape around the Clogh River is particularly sensitive to change.

Wind Energy Development in NI's Landscapes (2010)

For much of this landscape views are inward-looking and short, interrupted by topography and vegetation. This reduces the sensitivity of this landscape to wind energy development. However, the variation in topography over short distances and the small scale of the drumlins (which are often just 20m in height) and the complex landform mean that this landscape could easily be overwhelmed by poorly sited or inappropriately scaled wind energy development, especially since there is already wind energy development in adjoining LCAs to the east and west. Local landscape sensitivity is high due to the quality of the landscape along the river valleys and the value of the local landscape features such as wetland sites and cultural heritage features.

Towards the northern part of this LCA, on the more elevated ridges, the scale of the landscape is larger and there are fewer sensitive cultural and natural heritage sites. Additionally, the influence of development and the A26 corridor in the area north of Ballymena makes this area somewhat less sensitive.

Overall sensitivity – medium to high

Assessment of Development Pressure

Renewable Energy

Wind Energy

The MEA part of this LCA has generally experienced low to medium pressure for wind energy development with pockets of high pressure in an area between the Cullybackey – Ballymoney railway line and the Crankill Road and in an area north of the M2 at Ballymena.

All proposals within the MEA part of this LCA have been for large-scale wind turbines (over 15 metres). There has been applications to increase the height of 'approved' turbines at three sites; these 3 applications have received approval. There has been no pressure for wind farm development within the MEA part of this LCA.

Within the MEA part of this LCA, some applications for wind energy development have either been resisted or withdrawn. Some parts of this landscape are particularly sensitive, for example the Clogh River and River Maine corridors are particularly sensitive to change. It is noted that in some areas of this landscape, the topography and vegetation can help mitigate the visual impact of single wind turbines. However, the complex landform has created a landscape that could easily be overwhelmed by poorly sited or inappropriately scaled wind turbines and the cumulative impacts of such development.

Solar Energy

Outside of settlement development limits, there has been one application for solar energy development in this LCA. The Clough River and River Maine valleys and areas around the Glarryford esker ridge and Frosses Bog are highly sensitive to change. The ability of this LCA to accommodate solar farm development is reduced by the variations in topography and complex landform. However, there may be potential to accommodate solar farm development along the A26 transport corridor if any adverse environmental and visual impacts can be adequately mitigated.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) much of the MEA part of this LCA experienced relatively high pressure for residential development in the open countryside, particularly to the north of Cullybackey and south of Springmount Road.

Since June 2010, the pressure for residential development in the countryside has been low to medium with pockets of high pressure. These pockets of relatively high pressure are located in areas close to the Carclinty Road/Dunminning Road junction, in the Tullygawley Road/Redford Road area and in the Cullybackey Road/Woodtown Road/Old Park Road area.

In the Cullybackey Road/Woodtown Road/Old Park Road area, the high pressure for residential development has been predominantly from applications for a 'new dwelling in an existing cluster'. North of Cullybackey, the two pockets of high pressure are predominantly due to applications for 'infill' dwellings, replacement dwellings and farm dwellings.

Landscape Sensitivity: Key Points

- The valleys of the Clogh River and River Maine are key features in this LCA and the landscape is highly sensitive in these areas.
- The ridges and mounds of the Glarryford esker/outwash complex add interest to the low-lying River Maine valley.
- The Clogh River valley is attractive and the distinctive drumlins, mottes and stone bridges in this area contribute to a particularly scenic landscape.
- Sensitive archaeological sites including raths and mottes are a key characteristic in this LCA. Historic mottes located on prominent hilltops form notable landmarks.
- Frosses Bog ASSI and Glarryford ASSI are significant natural heritage conservation sites.
- Landscape condition improves away from Ballymena, particularly where field boundaries tend to be more continuous and better maintained.
- The LCA has a high degree of tranquillity away from Ballymena and the A26 transport corridor.
- NILCA 2000 did not identify any areas of high scenic quality within the Mid and East Antrim part of this LCA.
- Landscape sensitivity is reduced around Ballymena and along the A26 transport corridor due to the presence of built development and hard infrastructure.

Visual Sensitivity: Key Points

- The valleys of the Clogh River and River Maine and the Glarryford esker are key features in this LCA and are sensitive to change.
- The River Maine Valley is important for the setting of Cullybackey.
- Areas sensitive to change include the top of drumlins, the setting of mottes, and areas of bog.
- NILCA 2000 did not identify any Areas of High Scenic Quality in the Mid and East Antrim part of this LCA, however, there are local areas of scenic quality along the river corridors.
- The visual sensitivity of this LCA is reduced as internal views are generally restricted by vegetation and topography, however, there are some views across this LCA from the A26.
- The varied topography and vegetation has the potential to mitigate the visual impact of some development, however, it should be noted that the varied topography, small-scale drumlins and complex landform means that this landscape could be easily overwhelmed by poorly sited and poorly scaled development.
- The landscape character around Ballymena has been degraded by quarrying, road infrastructure and housing development.

Landscape Value: Key Points

- The River Maine Valley is important for the setting of Cullybackey.
- Clogh River has an attractive valley and the distinctive drumlins, mottes and stone bridges in this area contribute to a particularly scenic landscape.
- Fishing for Brown Trout, Dollaghan and Salmon occurs along the Clogh River.
- Galgorm Resort & Spa is located between Ballymena and Cullybackey and is a significant tourist and recreation site.
- Frosses Bog ASSI and Glarryford ASSI are significant natural heritage conservation sites.
- Sensitive archaeological sites including raths and mottes are a key characteristic in this LCA and can form notable landmarks.
- Hillmount registered Historic Park, Garden and Demesne and Craigdun supplementary Historic Park, Garden and Demesne are located in the Hillmount Road area and there are numerous listed buildings in this area.
- The LCA has a high degree of tranquillity away from Ballymena and the A26 transport corridor.
- NILCA 2000 did not consider the Mid and East Antrim part of this LCA to have areas of high scenic quality.

Sensitivities and forces for change

Climate Change - Increased likelihood of flood events will likely impact on the pasture land and townscapes in this area and increase the potential for erosion of river banks. Increasing incidence of drought conditions will see greater occurrences of low river flows which will adversely affect water quality and increase the potential for eutrophication and algal blooms. Summer droughts will impact on the remaining active raised bogs in this area, leading to increases in fen and dry heath habitats, and stress on other wetland habitats.

Heath and Bogs - sensitivities and forces for change: raised bogs of national and international importance.

Planning and Management Guidelines

- maintain the integrity of existing lowland raised bogs by for example, preventing infilling, fly-tipping, fires, new drainage and new peat cutting.
- restore raised bog habitats through appropriate water level management, removal of colonizing conifers (as at Frosses) and phasing out peat cutting.
- ensure that adjacent raised bogs are treated as a unit for conservation, including intervening areas, so that activities outside the bogs do not affect them.

Wetlands - sensitivities and forces for change: eutrophic lake (outside MEA) and rivers of importance to Priority Species and salmonid fish.

Planning and Management Guidelines

- protect water quality of lakes and rivers through nutrient management and promote and encourage existing good farming practices so that streams and lakes are not polluted by run-off from agricultural land or seepage from silage pits.
- continued monitoring of streams below industrial plants.
- monitor streams in relation to expansion of rural/urban housing and associated septic tanks/sewage treatment plants.
- monitor suspended and deposited sediments in relation to peat cutting and river quality (in particular for salmonid fish).

Agriculture - sensitivities and forces for change: Poor biodiversity of farmland and evidence of hedgerow removal and field amalgamation in some areas. If this trend continues it will likely lead to a more open character in some areas of this landscape and may adversely impact on biodiversity.

Planning and Management Guidelines

- maintain and improve field boundaries especially hedgerows where possible and promote environmental initiatives. This may be achieved through adoption of correct cutting cycles; hedge laying and replanting where necessary.
- maintain and enhance wet grassland by restricting field or arterial drainage.
- low intensity farming in more marginal areas would be beneficial;
- adoption of less intensive management of pastures to allow reversion to more species-rich grassland and protect unsown areas of species-rich grassland, especially damp grasslands;
- where development is permitted existing boundary vegetation should be retained and augmented with additional native planting.

Trees, woodlands and forestry – sensitivities and forces for change: low level of broadleaved/mixed woodland and most of that is associated with demesnes and other planted areas (lowland woodland pasture and parkland) that are concentrated in the north at Lisanoure (outside MEA) and in the south along the River Maine between Gledheather and Galgorm.

Planning and Management Guidelines

- encourage planting of native broadleaved woodlands, through appropriate grant schemes, rather than the small conifer plantations which are of poor biodiversity and offer little landscape value.
- enhance the biodiversity value of demesne/parkland woodland through control of grazing and felling and by encouraging planting of saplings of the standard trees.
- preventing further loss of parkland.
- retention of fallen and veteran trees.
- control the spread and dominance of sycamore.

Development- sensitivities and forces for change: Ballymena has been impacted by housing pressure and will likely be the focus of larger scale residential and commercial development pressures. In relation to the rural area, there will be continued pressure for new dwellings in the countryside.

Planning and Management Guidelines

- control of multiple building styles will avoid the proliferation of buildings which are out of character or scale with the landscape.
- the undulating landform may provide opportunities to accommodate new development, particularly in areas with a robust network of hedgerows.
- avoidance of sensitive historic and riverside locations will ensure that the setting of the Clogh River and its landscape features are conserved.
- housing is best located within existing settlements or with existing groups of houses.
- the inclusion of native woodland planting with new development would assist in reducing its prominence in a relatively open landscape.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: Views are inward-looking and short, sporadically interrupted by topography and vegetation which reduces the sensitivity of this landscape to wind energy development. Variation in topography over short distances, complex landform mean that this landscape could easily be overwhelmed by poorly sited wind energy development, potential cumulative impacts of wind energy development in adjoining LCAs to east and west. A key constraint is the quality of the landscape along the river valleys and the local landscape features such as cultural heritage features, wetland sites which are of high sensitivity.

Planning and Management Guidelines

- the ridge towards the north of this LCA (where the landscape is a larger scale and away from the river valleys) and the area along the A26 corridor in the southern part of the LCA may be better able to accommodate turbines than other area.
- Domestic turbines should show a close relationship with existing buildings and tree groups and should avoid the tops of drumlins or other geomorphological features;
- Cumulative impacts of wind turbines is a consideration.

Infrastructure sensitivities and forces for change: This LCA is the main transport corridor for the A26 the principal route northwards from Antrim to Coleraine is. A major dual carriageway upgrade from Glarryford to the A44 Drones Road has been completed and the landscape around Ballymena has been impacted by road improvements and upgrades.

Planning and Management Guidelines

- Maintain the small-scale rural character of the existing road network beyond main routes through limiting urbanising features such as kerbing, lighting, and and excessive signage.

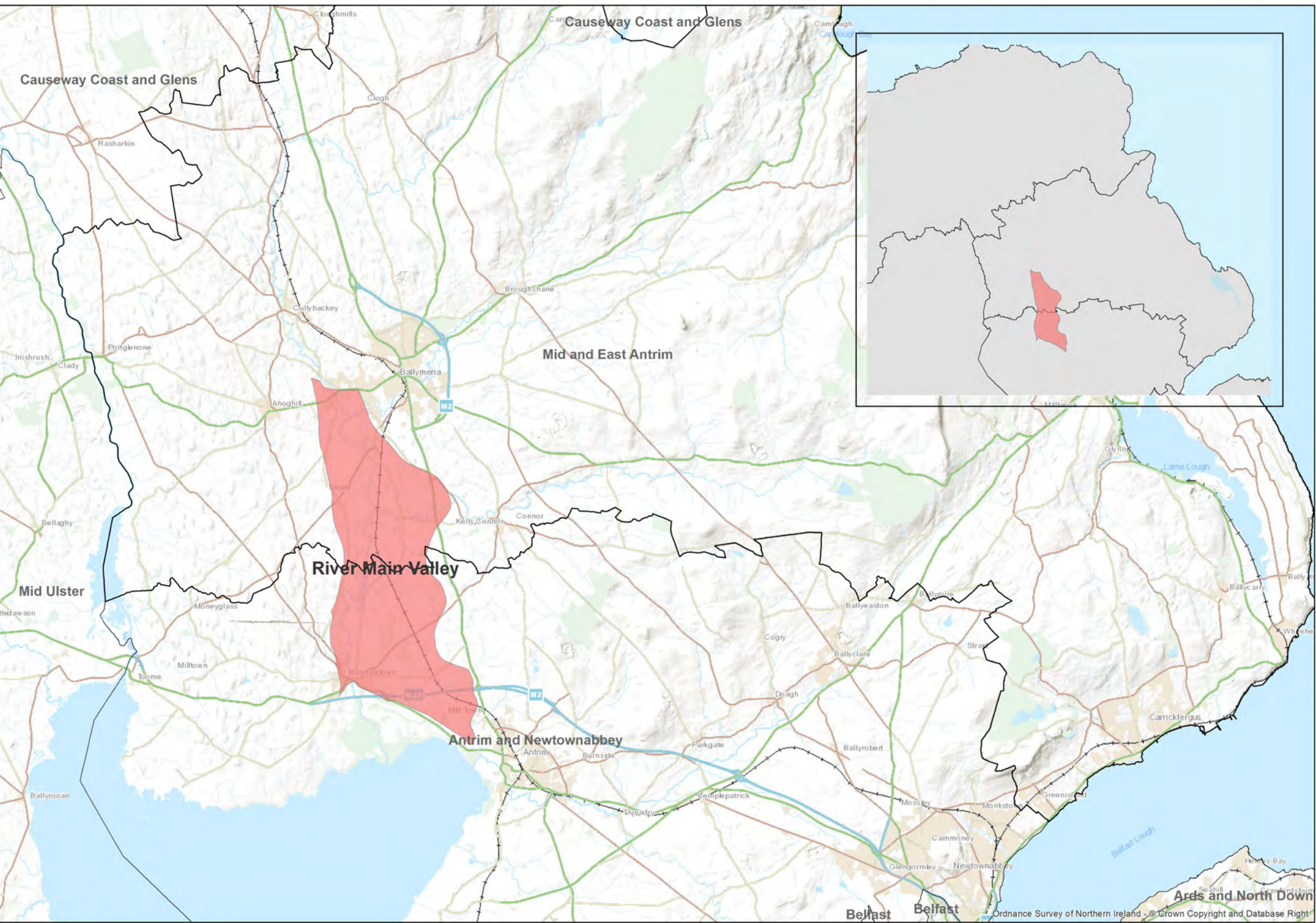
Minerals - sensitivities and forces for change: The area has historically been subjected only to a limited amount of quarrying, in particular Clinty Quarry located adjacent to the Doury Road. Due to the undulating nature of the landscape, a limited level of quarrying activity could be accommodated if sensitively sited and managed, however such operations may adversely impact on the rural character of the landscape.

Planning and Management Guidelines

- Quarries should be sited to take advantage of natural variations in topography in the undulating terrain to reduce landscape and visual impacts, utilising sympathetic bunding and tree planting.

LCA 60 - RIVER MAINE VALLEY





Causeway Coast and Glens

Causeway Coast and Glens

Mid and East Antrim

River Main Valley

Mid Ulster

Antrim and Newtownabbey

Belfast Belfast

Ards and North Down

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Key Characteristics – LCA 60

- Large scale, flat landscape.
- Robust hedgerows and treelines are prominent on the skyline.
- Appearance of a well wooded landscape, especially to south (outside of Mid and East Antrim).
- Areas of moss are often utilised for peat cutting.
- Electricity pylons are prominent features in the area of the shared boundary with Antrim and Newtownabbey Borough Council.
- Large farm buildings are prominent features in some areas.
- Occasional isolated commercial development.
- Flat valley floor is densely settled.

Landscape Character Description

This is a large-scale flat landscape which is smaller in scale in the north. The relatively flat, broad floodplain of the southern part of the River Maine lies between the undulating ridges of Long Mountain Ridge to the west and Ballymena Farmland (LCA 116) to the east. This landscape is almost uniformly flat and is distinct from the undulating ridges either side of it. The northern part of this LCA forms an important part of the riverside setting of the south-western edge of Ballymena where Gracehill is historically important and has a designated Conservation Area.

The landscape supports a mix of farmland and moss. Farmland generally consists of relatively large, open fields and a distinct hedgerow structure which emphasises any variations in landform. The floodplain appears well treed. A semi-natural cover of heather, birch scrub and marshy grassland prevails in parts of the LCA, for example, some areas west of the A26 Lisnevenagh Road, however, extensive tracts have been lost to commercial peat cutting, leaving a bleak expanse over large areas.

The valley floor is densely settled, with numerous farmhouses and dwellings prominent in the flat terrain and there are some isolated commercial developments present in the valley. Pylons across the central part of this LCA (the shared council boundary area) are prominent skyline features in this flat landscape.

Physical Influences

Geodiversity

This LCA lies within the region described as the Central Lowlands. This region owes its large-scale morphology to the early Tertiary subsidence of the Lough Neagh basin into the magma chamber from which the basalts that underlie much of the landscape originated. The low gradient of the rivers in this region create inherent drainage problems, and frequently it is only the slopes of the many drumlins that provide permanently dry sites.

The River Maine Valley (LCA 60) comprises the relatively flat, broad floodplain of the southern part of the River Maine which lies between the Long Mountain Ridge to the west and the Ballymena Farmland to the east. In the Cullybackey and Clogh Mills Drumlins character area (LCA 59) to the north, the River Maine corridor is more constrained with drumlins and glacial deposits masking the flat river course.

Extensive deposits of late Midlandian till underlie the approximate North-South oriented drumlins that dominate much of the landscape and flank the valley floor. These were formed by ice that moved northwards out of the Lough Neagh Basin.

Altitude range

The landscape is a lowland valley area with elevation predominantly lying around 40 - 50m AOD.

Topography

The landscape is an almost uniformly flat valley floor which includes the expansive floodplain of the River Maine. This landscape contrasts with more elevated ridges to the east and west.

Biodiversity and Land Cover - Key Characteristics

- Very little woodland in the LCA, just over 1%, much lower than NI average (c.8%).
- Largest areas of broadleaved woodland found around Galgorm Castle.
- Other areas exist as wet woodland and scrub around bogs.
- Grassland forms about 74% of the land cover, slightly higher than the Northern Ireland average (c. 71%)
- Almost all of the grassland is improved pasture (c. 68%), although there are some damp grasslands along the floodplain of the River Maine and Kells Water.
- Areas of lowland raised bog are found mostly to the east of the River Maine but in general they have largely been destroyed due to commercial peat extraction.
- There are no extensive areas of open water. The River Maine, Braid River and Kells Water are all have river water-crowfoot (NI Priority Species).

Woodlands

There is very little woodland in the LCA at just over 1% (NI average: c. 8%). There is some broadleaved woodland in the form of lowland woodland pasture and parkland found at Galgorm Castle and the adjacent golf course. Other wooded areas exist as wet woodland and scrub around areas of bog. These areas mainly consist of birch with occasional willow and form a wooded fringe around bogs, for example, Sluggan Moss, Ballylurgan Bog and Flow Bog.

Grassland and Arable

Grassland forms about 74% of the land cover (NI average approx. 71%). Almost all of the grassland is improved pasture (68%), although there are some damp grasslands along the floodplain of the River Maine and Kells Water. The mix of improved grasslands, arable and some woodland and

damp pastures provides habitats for farmland birds. Arable land accounts for about 7% of the LCA (similar to NI average). It is concentrated mainly to the north of the Kells Water on the better drained low hills.

Heaths and Bogs

Areas of lowland raised bog are found mostly to the east of the River Maine but in general they have largely been destroyed due to commercial peat extraction. Lowland raised bog is a rare habitat in the UK, and NI has a large proportion of the remaining lowland raised bog. Sluggan Moss (outside Mid and East Antrim), located in the south of this LCA is an extensive area of mostly cut-over bog. Sharvogues is an example of a cut-over bog in this LCA and within the Mid and East Antrim boundary. Birch woodland, marsh and wet grassland has developed on cut-over areas at Sluggan and Sharvogues. There is an area of bog at Killybegs. Within the LCA, heath has mainly developed in areas of cut-over or drained bog.

Wetlands and Lakes

There are no extensive areas of open water in this LCA, however the River Maine, Braid River and Kells Water course through the Mid and East Antrim part of this LCA.

Field Boundaries

The pastoral farmland within the LCA consists of relatively medium-large fields with a strong hedgerow pattern which emphasises any variations in landform. Robust hedgerow trees form a distinct landscape structure and are prominent on the skyline. Bogs such as Sluggan Moss (outside of Mid and East Antrim), Sharvogues and Killybegs have a wooded fringe.

Natural Heritage Conservation Sites – No Designations

Historical and Cultural Influences

Settlements

Ballymena is designated as a town within the Ballymena Area Plan 1986-2001. This settlement abuts the northern edge of this LCA and the Gracehill area of Ballymena lies within the LCA boundary. Ballymena town is built on land given to the Adair family by King Charles I in 1626, on the basis that the town holds two annual fairs and a free Saturday market in perpetuity. The Saturday market still runs and the town is a popular shopping hub within Northern Ireland.

Historic Environment

There are archaeological sites scattered throughout the Mid and East Antrim part of this LCA with scheduled mottes in the Galgorm and Whitesides Road areas being of particular note. There are numerous listed buildings located in the countryside in the Mid and East Antrim part of this LCA. There is a concentration of listed structures associated with Galgorm Castle and there is a group of 3 listed dwellings (or former dwellings) associated with the Cockhill Road area.

Galgorm Castle is in private ownership and was previously a registered Historic Park, Garden and Demesne, however this site has now been removed from the Register of Historic Parks, Gardens and Demesnes. The grounds are the site of a pre-1600 castle, the demesne dates from the early 17th century and the fine Jacobean house remains, having been altered and modernised in 1830 and 1850 (listed HB 07/15/01). There are mature trees in clumps in the parkland between the rivers Main and Braid and in wooded areas near the house. The shelter belts to the west, along the Maine, are post-1858. 91½ha of the parkland is presently used as a golf course and a commercial garden centre is now in operation in the grounds.

The walled garden is disused. There is a small enclosed cultivated garden in the area of the bawn, which retains its Victorian formal bedding. A wide grass-lined approach leads to the house. The offices and stables are listed with the house and have been converted to commercial units. The gate screen, bawn and walled garden are included in the listing. The gate lodge was added in 1852 (listed HB 07/15/43). This site also includes a scheduled motte and bailey for McQuillan's Castle, a scheduled bawn and house, enclosures and tree rings, a church in ruins, and a souterrain.

Gracehill was designated as a Conservation Area in 1975 and is considered special by virtue of both its architectural and its historic interest. Gracehill is a historically important Moravian settlement established in 1765 to accommodate a local congregation of the Moravian Church, which was founded in Bohemia and Moravia in the mid-15th Century. The church was established in Ireland in the mid-18th Century through the evangelical work of John Cennick, an English teacher and preacher. The settlement was a planned development based on a simple grid-like street layout already established in other Moravian settlements in Europe, Africa and the Americas. This layout was symmetrical and focused on the church. The balanced nature of the built forms and spaces in Gracehill makes a significant contribution to the character of the Conservation Area.

Heritage – Defence and Industry

There are no defence heritage sites of any note. Historic industrial sites are predominantly associated with former mill sites along the Kells Water, the Antrim – Ballymena railway and various bridges. There are numerous corn and flax mills located throughout this LCA.

Transport Infrastructure

Within Mid and East Antrim, the A26 Lisnevenagh Road passes through the eastern section of this LCA, and Whitesides Road runs through the western section from Ballymena heading south-west in the direction of Toome. The Antrim – Ballymena railway line passes through the centre of this LCA.

Leisure & Recreation

There are opportunities for riverside walks along the Braid River and River Maine in the Galgorm area in the north of the LCA. Galgorm Castle Golf Course is also situated in this area and is an

important recreational, tourist and visitor attraction which hosts the NI Open. Fishing for Brown Trout, Dollaghan, and Salmon occurs on the Braid River and Kells Water.

Visual and Sensory Perception

Tranquillity

The Mid and East Antrim part of this LCA is deeply rural and tranquil away from Ballymena and the main transport routes, but this landscape does not have a sense of remoteness or wilderness. Past peat cutting and electricity pylons have adversely impacted on the sense of deep rurality in some areas.

Views

There are some open and expansive views across the River Maine floodplain, particularly in the north of the LCA. For example, there are views across the River Maine corridor from Nursery Road, Straid Road and Whitesides Road. However, in many areas hedgerows and trees tend to restrict views and create a sense of enclosure, for example, in the area around the Kells Water river corridor. There are views along the Kells Water from a bridge at the Maine Road/Slaght Road junction.

There are intermittent views of higher land to the east and west and outwith this LCA. For example, there are intermittent long distant views of Slemish from Caddy Road and Nursery Road. Outside of this LCA, there are long distant views across this landscape from higher ground to the east and west.

Within the Mid and East Antrim part of this LCA, pylons are particularly prominent across the skyline in the area of the shared council boundary with Antrim and Newtownabbey Borough Council.

Landscape Condition and Sensitivity

Detracting Features

- Areas of past peat cutting, remnant moss and regenerative birch combined with pylons and other development gives the impression of a landscape impacted by man-made influences and as a result this landscape does not generally express a strong sense of wilderness or tranquillity.
- Infrastructure, commercial development and ribbon development along roads in the countryside has degraded the character and quality of the landscape in some areas.

Areas of Scenic Quality

Within the Mid and East Antrim part of this LCA there are no extant landscape designations within Ballymena Area Plan 1986-2001 and NILCA 2000 did not identify any areas of scenic quality.

NILCA 2000 Assessment

The valley floor suffered considerable degradation through peat cutting and those areas of moss that remain are particularly vulnerable, as continuance of this practice will remove this delicate and important landscape element which is of considerable ecological interest. The pattern of hedgerows and trees which enclose most fields provide an important landscape structure; they are vulnerable to removal and under-management. Woodland is also a vulnerable landscape feature, and it has an important role in helping to screen new development. Overall, the landscape is relatively sensitive owing to its flat, open character and the remaining fragmented areas of moss.

Wind Energy Development in NI's Landscapes (2010)

The relatively flat and uniform topography of this landscape suggests that there might be some scope for wind energy development. However, the northern part of the LCA is highly sensitive for its riverside landscape, settings to Ballymena and cultural heritage sites, and recreational opportunities. In these areas the small scale of the landscape is also a key constraint. The central and southern parts of this LCA are more wooded and somewhat less sensitive to wind energy development.

Overall Sensitivity – Medium to High

Assessment of Development Pressure

Wind Energy

The MEA part of this LCA has generally experienced no to low pressure for wind energy development with one pocket of medium pressure in an area west of the railway line and adjacent to the Council boundary with Antrim and Newtownabbey Borough Council.

Within the MEA part of this LCA, all of the proposals were for large-scale (over 15 metres) single wind turbines and there were no applications to increase the height of 'approved' turbines.

Planning permission was refused for wind energy development at a site in the northern part of this LCA. This part of the landscape is highly sensitive to wind energy development due to its small-scale character and the relatively open riverside landscape which provides a distinctive setting for Ballymena, Gracehill and Galgorm Castle and golf course.

Solar Energy

There have been no applications for solar farm development within the MEA part of this LCA. The northern part of this LCA is a small-scale, relatively open riverside landscape which contributes to the setting of Ballymena, particularly the Gracehill and Galgorm areas, and as such, it would be difficult to accommodate solar farm development in this part of the LCA. In other areas, scenic

river corridors and small-scale field patterns are likely to be key constraints to solar farm development within this LCA.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) the MEA part of this LCA experienced varying levels of pressure for residential development in the open countryside. For example, the northern area adjacent to Ballymena experienced relatively low pressure, whereas areas further to the south and adjacent main roads experienced relatively high pressure.

Since June 2010, residential pressure has been low to medium with some areas experiencing no pressure, although there were still pockets of high pressure adjacent to the west and east of the Lisnevenagh Road and in the Kellswater Road area.

In the area east of the Lisnevenagh Road (Kildrum Road/Woodgreen Road/Ballymacvear Road area), of which a significant part lies outside of LCA 60, pressure for dwellings has been predominantly the result of applications for infill dwellings and replacement dwellings. Ribbon development along Woodgreen Road has had an adverse impact on the rural character of this area.

In the area west of, and adjacent to, the Lisnevenagh Road (Cockhill Road/Valley Road area), pressure for dwellings was predominantly a mixture of applications for replacement dwellings, infill dwellings and farm dwellings. In the Kellswater Road area, replacement dwelling applications were the main source of dwelling pressure

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- This landscape is almost uniformly flat and is distinct from the undulating ridges either side of it.
- This landscape has a strong hedgerow pattern and robust hedgerow trees which together form a distinct landscape structure. These features increase the ability of this landscape to absorb development.
- The flat, open character and riverside setting in certain areas increases landscape sensitivity, for example, in the northern part of the LCA.
- This LCA does not have any extant landscape designations or any areas of scenic quality identified by NILCA 2000. However, there are local areas of scenic quality, for example, the Braid River and River Maine corridors in Galgorm and the surrounding area and along Kells Water in the central-eastern part of the LCA.
- The Mid and East Antrim part of this LCA is rural and tranquil away from Ballymena and the main transport routes but the landscape does not have a sense of remoteness or wilderness.

- There are no formally designated nature conservation sites in the Mid and East Antrim part of this LCA, however there are local areas important for biodiversity and natural heritage interests e.g. the river corridors.
- Some archaeological sites are scattered throughout the Mid and East Antrim part of this LCA. There is a significant historic environment interest in the Galgorm and Gracehill areas and these areas and the setting of these areas would be considered particularly sensitive to development.

Visual Sensitivity: Key Points

- This is a large-scale flat landscape which is smaller in scale in the north.
- There are long distant views across this landscape from vantage points on higher ground to the east and west.
- The northern part of this landscape is more sensitive as it contributes to the riverside landscape and setting of the south-western and western edge of Ballymena (Galgorm and Gracehill areas) and it is smaller in scale than southern areas.
- There are critical views across the northern part of this LCA from Ballymena (including Galgorm and Gracehill) and public roads, for example, Nursery Road, Straid Road and Whitesides Road.
- The river corridors of the Braid River and River Maine are visually sensitive areas exposed to critical views from public walkways, recreational areas and public roads. The Kells Water is visually sensitive and there are critical views of this river corridor from public roads and the railway.
- The central and southern parts of the Mid and East Antrim part of this LCA have a greater sense of enclosure and this reduces visual sensitivity in areas away from the river corridors.
- Infrastructure such as electricity pylons, ribbon development and past peat cutting have adversely impacted the aesthetic quality and tranquillity of the landscape in some areas.

Landscape Value: Key Points

- This LCA does not have areas of scenic quality identified by NILCA 2000. However, there are local areas of scenic quality, particularly associated with the Braid River and River Maine corridors in the northern part of the LCA.
- The northern part of this landscape is more sensitive as it contributes to the riverside landscape and setting of the south-western and western edge of Ballymena (Galgorm and Gracehill areas).
- The northern part of this LCA includes areas which have significant historic environment assets which help attract visitors and tourists to the area, for example, the site of Galgorm Castle and the unique Moravian settlement at Gracehill. It is important to protect the setting and heritage assets of these areas.
- The scenic quality in the northern part of this LCA provides a unique and pleasant setting for angling, riverside walks and recreational activities at Galgorm Castle such as golf and walking through the grounds.

- Some areas of this LCA function as infrastructure corridors for transport and electricity pylons and these are intrusive elements within the landscape which have degraded the quality of the landscape, particularly in central and southern areas.

Landscape Sensitivities and Forces for Change

Climate Change - Increased likelihood of flood events will impact on the pasture land and Ballymena town due to the potential for erosion of river banks and flood damage. Low river flows will adversely affect water quality, with increased potential for eutrophication and algal blooms. Summer drought will impact on remaining active raised bogs in this area, leading to increases in fen and dry heath habitats, and cause stress on other wetland habitats.

Heath and Bogs - sensitivities and forces for change: Extensive tracts of semi-natural cover have been lost to commercial peat cutting. It is not expected that new sites of commercial peat cutting will occur, however, extensions to existing sites may occur. Natural heritage restoration schemes of previously cut-over bogs may change the nature of these degraded areas in the future. Raised bogs are of national and international importance, but no uncut bogs remain.

Planning and Management Guidelines

- the remaining tracts of moss may be preserved by implementing management practices which enhance this habitat type.
- maintain the integrity of existing lowland raised bogs, even if cut-over, by for example, preventing infilling, fly-tipping, fires, new drainage and new peat cutting.
- consider restoration of raised bog habitats through appropriate water level management and phasing out peat cutting - in particular consider the after-use of Sluggan once extraction is complete.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: There may be pressure for further wind energy development within the area, for example associated with farm enterprises. The topography of this landscape means that there may be some scope for wind energy development. However, the northern part of the LCA is highly sensitive for its riverside landscape, settings to Ballymena and cultural heritage sites, and recreational opportunities. In these areas the small scale of landscape is also a key constraint. Pylons cross the central part of this LCA and stand out on the skyline at the boundary with ANBC.

Planning and Management Guidelines

- The southern part of this LCA, particularly where the landscape is affected by other man-made influences and where woodlands may help integrate turbines into the landscape, is likely to be better able to accommodate wind energy development than other areas.
- Care should be taken to ensure that turbine layouts relate well to the pattern of field enclosures and avoid impacts on ecological sites.

Development - sensitivities and forces for change: The larger settlement of Ballymena is likely to be the focus of larger scale residential and commercial development pressures. New single dwellings in the countryside are likely to continue to be a feature of this landscape, and the potential cumulative impacts of such development on the landscape should be considered. Ribbon development has adversely impacted the character of the countryside in some areas.

There are occasional isolated commercial developments in the countryside and a garden centre and commercial units have been established at Galgorm Castle and Golf Course. Commercial development in the countryside, particularly in sensitive locations, has the potential to impact significantly on the landscape in a localised context, or in a wider context depending on the cumulative impacts of such development

Planning and Management Guidelines

- the areas to the south west of Ballymena are under particular pressure for built development. Development could be potentially be accommodated within this flat valley farmed landscape although there is a need for sensitive design appropriate to a rural situation.
- ribbon development should be avoided.
- the woodland coverage of this area may be increased to create more local interest, break up views and provide greater screening of existing development.
- new dwellings in the countryside should adopt simple vernacular architectural designs and patterns.
- native broadleaved planting around new built development would assist in its integration into the landscape.

Wetlands - sensitivities and forces for change: The river corridor itself should be considered a priority for management action; it is important as a visual focus in the landscape and also as a wildlife habitat. All riparian vegetation should be conserved, and buffer zones created to ensure that the river corridor has some protection from fertiliser/pesticide runoff from adjacent farmland. The River Main, Braid River and Kells Water all have river water crowfoot. Otter is also found on the River Braid. The rivers are also important for salmon and trout.

Planning and Management Guidelines

- protect water quality of rivers through nutrient management and by reducing suspended sediments.
- promote and encourage existing good farming practices so that streams are not polluted by run-off from agricultural land or seepage from silage pits.
- monitor streams in relation to expansion of rural/urban housing and associated septic tanks/sewage treatment plants
- monitor streams in relation to peat extraction, particularly sediment deposition in spawning and nursery beds of salmonid fish, but also pH.
- general actions for UK and NI Priority Habitats and Priority Species are detailed in the Habitat Action Plans and Species Action Plans.

Agriculture - sensitivities and forces for change: There is evidence of hedgerow removal and field amalgamation in some areas. If this trend continues it will likely lead to a more open character in some areas of this landscape and may adversely impact on biodiversity.

Planning and Management Guidelines

- encourage the retention and enhancement of wooded field boundaries where possible and promote environmental initiatives.
- low intensity farming in more marginal areas would be beneficial.
- where development is permitted existing boundary vegetation should be retained and augmented with additional native planting.

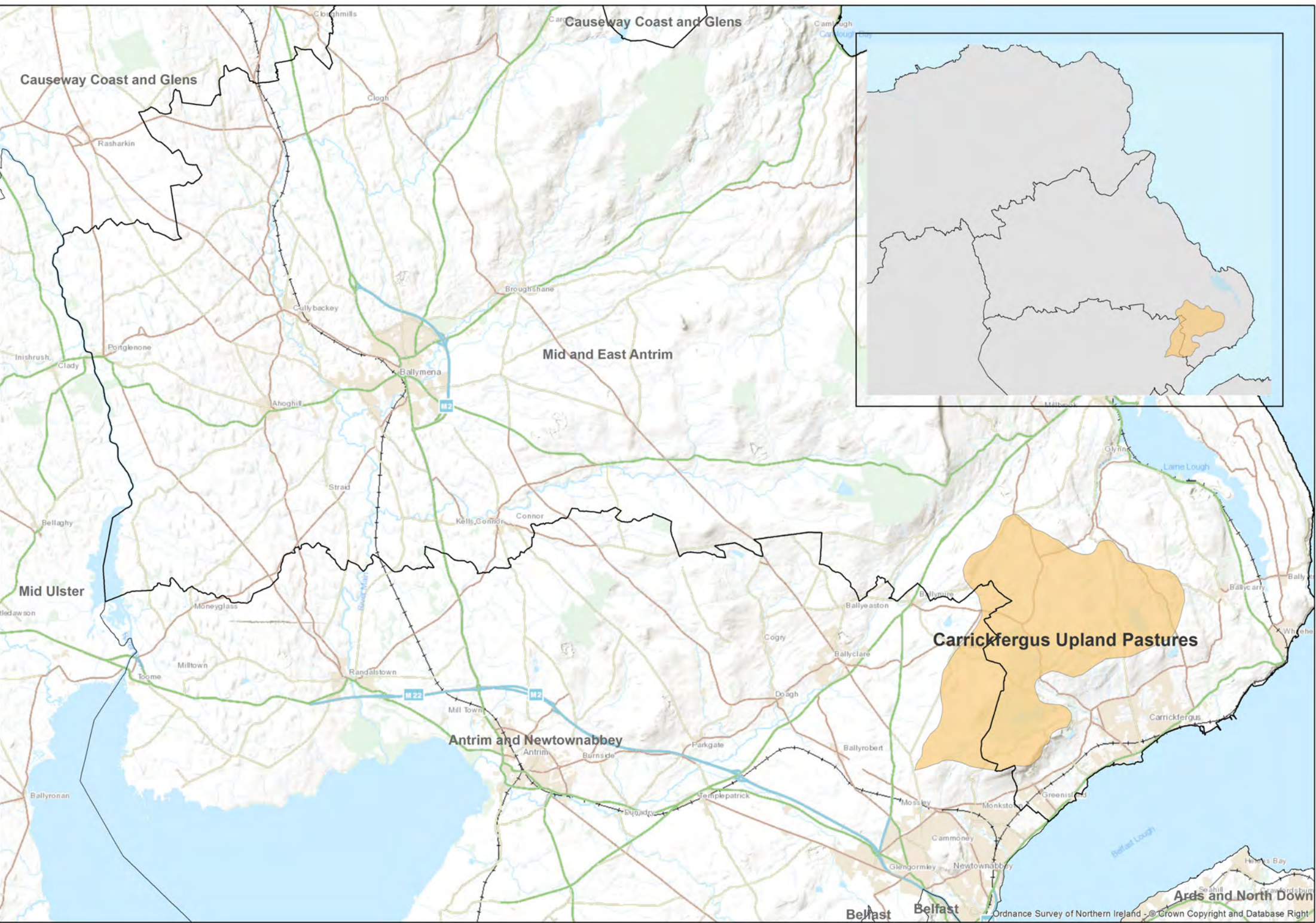
Trees, woodlands and forestry – sensitivities and forces for change: Tree coverage is sparse within this LCA and is mainly confined to small stripes located along the edge of the River Bann and Lough Beg. Native woodland cover is limited, but with a significant example of an Ancient Woodland located at Portglenone Forest. The Forest Service NI has provided visitor facilities in the forest that includes picnic tables, toilets with wheelchair access, and a number of waymarked trails leading down to the Bann River. The ground flora contains extensive colonies of Ancient Woodland indicator species which take centuries of woodland cover to establish

Planning and Management Guidelines

- Coniferous woodland situated along the River Bann should be small scale only and well-integrated into the landscape with broadleaved planting and should avoid masking important views of the river corridor and Lough Beg.
- Existing broadleaved woodland should be retained, with the framework of broadleaved woodland strengthened with new planting where possible.

LCA 98 - CARRICKFERGUS UPLAND PASTURES





Causeway Coast and Glens

Causeway Coast and Glens

Mid and East Antrim

Mid Ulster

Carrickfergus Upland Pastures

Antrim and Newtownabbey

Ards and North Down

Belfast Belfast

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Key Characteristics – LCA 98

- The southern fringe area of this LCA includes the top of a steep basalt escarpment.
- Undulating landscape of low ridges and shallow valleys.
- Fields of pasture enclosed by gappy hedges, earth banks and neglected stone walls.
- Shelterbelts and tree groups on exposed upland pastures.
- Extensive tracts of plantation forest, often enclosing loughs/reservoirs.
- Some fields encroached by scrub and heather; rushy bogs in small hollows.
- Pylons and transmission lines across the skyline.
- Dispersed single dwellings and farmsteads in exposed locations

Landscape Character Description

This landscape is the southernmost of a series of moorland summits stretching along the Antrim Coast. The moderate-scale landscape is an undulating plateau which is topped by low ridges and shallow valleys. The landscape reaches an elevation between 200 – 280m. The southern fringe area of this LCA includes the top of a steep basalt escarpment which is included within the Carrickfergus Escarpment Area of Scenic Quality (ASQ). This area provides a distinctive setting for Newtownabbey, Greenisland and Carrickfergus. The monument at Knockagh is located in this area and is a very prominent landmark locally and in the wider region. The northern edge of this LCA adjoins and frames the attractive valley landscape around Glenoe, particularly the valley associated with Dunisland Water.

There is a large-scale pattern of plantation forests (Woodburn Forest) and exposed pasture on the uplands. Plantation coniferous forests introduced along the ridge tops generally fit well with the landform. Smaller-scale landscape features are located on the enclosed lower slopes. North Woodburn and South Woodburn reservoirs and Lough Mourne are significant features within the LCA, however these features have limited visual influence on the landscape owing to the screening effect of the forests and topography of the landscape.

The area is underlain by basalt, but the shallow soils, rocky exposures and wet climate create less productive farmland than is found in other areas of the Borough. The land use is predominantly pastoral with a small-medium sized regular field pattern, with fields enclosed by gappy hedges, trees, earth banks and/or stone walls.

The wind-blown profile of relatively small hedgerow trees and shelterbelts emphasises the exposed feel of this landscape. The uplands seem relatively remote in comparison to nearby, low-lying areas, although transmission lines from Ballylumford and Kilroot Power Stations extend across this landscape and exert a strong presence along the skyline. Settlement is scarce but new dwellings and buildings, often in exposed locations, contrast with the sheltered locations of traditional stone farm buildings.

Views in this LCA are generally restricted by the enclosure provided by the topography, woodland and hedgerows, however, there are some areas where medium range views across this LCA are permitted, for example, from Paisley Road. Due to the LCA's elevated position, long views across other LCAs are possible from the edges of this LCA.

Physical Influences

Geodiversity

This LCA lies in the south east of the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh Basin. Mudstone and limestone are overlain by a thick layer of basalt following intense volcanic activity approx. 60 million years ago (RLCA, 2015). Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape. Shallow ridges extend from the basalt escarpment to the south to create an undulating plateau.

The shallow soils, rocky exposures and wet climate create less productive farmland than is found in other areas of the Borough. The poor soils are thin and rocky or strongly gleyed peaty soils. For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

Within Mid and East Antrim Borough Council area (MEA) the land in this LCA rises from approximately 170m to 280m AOD. The majority of the LCA is between 200m and 280m AOD.

Topography

This undulating landscape is the southernmost of a series of moorland summits stretching along the Antrim Coast and the plateau is topped by low ridges and shallow valleys. There is a steep basalt escarpment on the south-eastern edge of the LCA, whereas the western and northern edges are more gently sloping and rounded.

Biodiversity and Land Cover

Key Characteristics

- Cool, damp plateau of moderate altitude with poor soils – thin and rocky or strongly gleyed peaty soils.
- Predominantly improved pasture but of varied quality depending on land management and soils.
- Relatively small fields with overgrown and gappy hedges.
- Extensive coniferous forest

Woodlands

Woodlands occupy approximately 10% of the land and are almost entirely coniferous. Woodburn State Forest is located within the LCA and the main tree species are Sitka spruce, Norway spruce and Japanese larch. There are some broadleaved trees. The biodiversity value of this coniferous forest is low. Glenoe Wood is located within this LCA in which Ash is the dominant tree species. This woodland is rich in bird life with breeding buzzard and tree-creeper recorded.

Grassland and Arable

Approximately 75% of the LCA is grassland with the majority of grassland being improved pasture that is generally of low biodiversity value. Rough grassland is scattered throughout the LCA and is associated with either thin soils or damper, peaty soils. Where soils are peaty, and fields are not intensively managed, pastures become invaded by rushes. Some fields are encroached by scrub and heather.

Heaths and Bogs

Peatland is not extensive in the LCA. Any remaining areas are small and usually located on the hills. No intact peat remains as the patches are either eroded or cut-over as at Keeran Moss.

Wetlands and Lakes

Lough Mourne reservoir, at over 50 hectares, is the largest lake in the LCA. North Woodburn and South Woodburn reservoirs are generally of low biodiversity interest.

Field Boundaries

In this LCA, fields are relatively small and field boundaries generally consist of gappy hedges, earth banks, neglected stone walls, post-and-wire fences, and/or beech and conifer shelterbelts. Where hedges are thick, they give a wooded impression to the landscape as well as offering valuable habitats for wildlife.

Natural Heritage Conservation Sites – Designations

International Sites

- None

National Sites

- North Woodburn Reservoir Area of Special Scientific Interest (ASSI)
- South Woodburn ASSI

Local Sites - Belfast Metropolitan Area Plan (BMAP)

- CE02/01 Ardboley Site of Local Nature Conservation Importance (SLNCI)
- CE02/07 Keeran Moss SLNCI
- CE02/08 Knockagh-Dorisland SLNCI
- CE02/09 Lough Mourne SLNCI
- CE02/10 North Woodburn Reservoir SLNCI
- CE02/11 Slimero SLNCI
- CE02/12 Slimero Mountain Wet Grassland SLNCI

- CE02/15 Woodland West of Black Hill SLNCI
- CS14/03 South Woodburn SLNCI (eastern part outside of LCA)

Larne Area Plan 2010

- 40 Glenoe Nature Conservation Site (NCS)
- 44 Taits Hill/Thorny Hill NCS
- 59 Glenoe Ashwood NCS
- 97 Carneal NCS

Historical and Cultural Influences

The LCA is sparsely populated.

Settlements

There are no settlements in the MEA part of this LCA.

Historic Environment

There are archaeological sites scattered throughout the LCA. There are four Scheduled Monuments located within MEA. The Knockagh County Antrim War Memorial, walling and gate are B2 listed structures and are located on the ridgeline of the Carrickfergus Escarpment in the south-east of this LCA.

Heritage – Defence and Industry

The MEA part of this LCA has no significant historic defence sites and industrial heritage is concentrated in the northern part of this LCA and around Straid. Historic industry sites include various flax mill sites, corn mill sites and disused quarries and limekilns.

Transport Infrastructure

Woodburn Road/Seskin Road and the B58 are the main transport routes within the LCA. The Woodburn Road/Seskin Road leads from Carrickfergus to Straid. The B58 leads from Carrickfergus to Ballynure.

Leisure & Recreation Knockagh Monument on the escarpment above Greenisland attracts visitors to the area. A link section of the Ulster Way runs through this LCA (between Ballynure and Whiteabbey) passing through Woodburn Forest and close to the monument at Knockagh. The Link Sections of the Ulster Way are not waymarked and are mainly on public roads. Walkers are actively encouraged to make use of public transport along these sections. There are opportunities for fishing at North Woodburn and Lough Mourne reservoirs and walking routes are found in Woodburn Forest. Otherwise, there are few formal opportunities for recreation within the MEA part of this LCA, although the area is probably used to some extent for recreation by nearby urban populations.

Visual and Sensory Perception

Tranquillity

The upland areas feel relatively remote in comparison to nearby built-up areas to the south/south-east. The wind-blown profile of small hedgerow trees and shelterbelts, emphasises the exposed feel of this landscape. The transmission lines which extend into this LCA from Ballylumford and Kilroot Power Stations exert a strong presence along the skyline and are an intrusive feature in the landscape. The transmission lines, wind turbines and plantation forests detract from the naturalness of this landscape.

Views

Due to its elevated position, there are limited views into this LCA from surrounding areas. There are views across this landscape from within this LCA, for example, from Paisley Road and Watch Hill Road, however, generally, views within the LCA are often restricted due to the enclosure provided by the undulating topography, hedgerows and areas of woodland. The reservoirs in this LCA are not visually prominent in the landscape due to screening provided by coniferous forests and the topography. There are long range views of the monument at Knockagh from areas outside of the LCA to the east, north-east and south-west.

From within this LCA, there are long range views to surrounding landscapes. For example, from Knockagh monument and Paisleys Road there are extensive views over Belfast Lough, and from Crosshill Road there are long range views to the edge of the Antrim Coast and Glens AONB.

Landscape Condition and Sensitivity

Areas of Scenic Quality

The scenic quality of the landscape is mixed and has been impacted by the presence of intrusive man-made influences e.g. transmission lines and single dwellings in exposed locations. However, the southern edge forms part of the setting for Carrickfergus Escarpment ASQ and the plantation forests within the LCA generally fit well with the landform.

NILCA 2000 Assessment

This relatively remote landscape has not been subjected to the same level of residential development as the low-lying areas towards the coast. However, the few examples of new housing are often sited in exposed locations, detracting from the more traditional settlement pattern of stone buildings sheltered by trees. Plantation forests have been introduced along the ridge tops, but generally conform with the landform. This type of upland pastoral landscape is not rare in Northern Ireland and landscape sensitivity may be described as moderate. Although this is an upland area, views are restricted by landform and tree enclosure.

Wind Energy Development in NI's Landscapes (2010)

This landscape has characteristics that suggest suitability, in parts, for wind energy development, while other parts of the LCA would be highly sensitive and much less suitable.

The north-western and northern parts of the LCA are least sensitive as they lie away from the escarpment edge and Belfast Lough, are partly enclosed by forestry, and are already affected by intrusive influences. The southern and eastern parts of the LCA are much more sensitive, due primarily to their extreme visual prominence. The monument at Knockagh is a particular landmark whose setting is highly sensitive.

Overall sensitivity – high to medium

Assessment of Development Pressure

Wind Energy

The MEA part of this LCA has experienced a mix of pressure for wind energy development. The area of Woodburn Forest has not experienced any pressure, whereas other areas have experienced some pressure and the northern section around Watch Hill Road has experienced high pressure.

Since 2000, there has been applications for wind energy development at 33 sites within the MEA part of this LCA. The applications at 28 of these sites related to proposals for large-scale (over 15 metres) wind turbines and there has been one application to increase the length of turbine blades. There has been no proposals for wind farm development.

Proposals for wind energy development at eight out of 33 sites did not receive planning permission. One of the proposals which did not receive planning permission was in the vicinity of Knockagh Monument which is a prominent landmark whose setting is visually highly sensitive. Other proposals which did not receive planning permission were close to Lough Mourne or prominent hills. The southern and eastern parts of this LCA are highly sensitive to wind energy development due to their extreme visual prominence and their location adjacent to the Carrickfergus Escarpment ASQ and the ridge north/north-west of Carrickfergus.

Within this LCA, Woodburn Forest and associated reservoirs act as key constraints on wind energy development.

Solar Energy

There have been no applications for solar farm development in the MEA part of this LCA. The southern and eastern parts of the MEA part of this LCA are visually prominent in views and would be highly visually sensitive to solar farm development. Areas away from the eastern parts of this LCA may be able to accommodate solar farm development where the topography, woodland, and/or hedgerows can mitigate any adverse visual impacts of such development on the landscape.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) the MEA part of this LCA experienced varying levels of pressure for residential development in the open countryside. For example, central areas to the north/north-west of Carrickfergus experienced relatively high pressure whereas other areas, not including Woodburn forest, generally experienced low to medium pressure.

Since June 2010, residential pressure has generally been low to medium with some areas experiencing no pressure such as around Woodburn Forest and east of Lough Mourne Reservoir. However, there was one pocket of relatively high pressure in the area around the Ballyvally Road/Watch Hill Road junction. In the area around the Ballyvally Road/Watch Hill Road junction, pressure for dwellings was predominantly the result of applications for farm dwellings with one application for a replacement dwelling. A linear pattern of development is becoming more evident along the Ballyvally Road between the junctions where the Ballyvally Road meets the Watch Hill Road and Lough Mourne Road

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- The south-eastern edge of this LCA abuts the Carrickfergus Escarpment ASQ which is valued for its high scenic quality.
- The ridgeline along the eastern part of this LCA is a visually sensitive feature within this landscape.
- There are no international sites of conservation importance. North Woodburn Reservoir ASSI and South Woodburn ASSI are sites of national conservation importance.
- Plantation forests have been introduced along the ridgetops, but these generally conform to the landform.
- This landscape has not been subjected to the same level of residential development experienced by the low-lying areas close to the coast.
- This type of upland pastoral landscape is not rare in NI and the landscape condition is mixed.
- The transmission lines, wind turbines and plantation forests detract from the naturalness of this landscape.

Visual Sensitivity: Key Points

- The south-eastern fringe area of this LCA includes the top of a steep basalt escarpment which is included within the Carrickfergus Escarpment Area of Scenic Quality (ASQ).
- There are long range views of the Carrickfergus Escarpment and the ridgeline along the eastern edge of the LCA from surrounding areas along the coast e.g. the coastal settlements of Carrickfergus and Greenisland.

- The setting of the war memorial at Knockagh is visually highly sensitive due to the prominence of this landmark and its' position at the top of the Carrickfergus escarpment.
- Coniferous forests generally screen the loughs in this LCA reducing their visual influence.
- There are long range views of Belfast Lough and the coast from the eastern edge of this LCA.
- The screening provided by the undulating topography and woodland in this LCA may reduce the visual sensitivity of the north-western part of this LCA.
- Transmission lines which extend into this LCA from Ballylumford and Kilroot Power Stations exert a strong presence along the skyline and are an intrusive feature in the landscape.

Landscape Value: Key Points

- Carrickfergus escarpment is valued for its high scenic quality (ASQ).
- The Carrickfergus escarpment and the ridgeline north of Carrickfergus are important features that contribute to the setting of the settlements of Carrickfergus and Greenisland.
- There are long range views of the monument at Knockagh from surrounding coastal areas to the east, north-east and south-west. The escarpment and ridgeline to the north of Carrickfergus contribute to the setting of this listed war memorial.
- The LCA contains 2 ASSIs (North Woodburn and South Woodburn) and other sites of local nature conservation significance.
- North Woodburn and South Woodburn reservoirs and Lough Mourne reservoir are significant local landscape features. Fishing occurs at North Woodburn reservoir and Lough Mourne reservoir.
- Woodburn Forest has low biodiversity value.
- Glenoe Wood is rich in bird life with breeding buzzard and tree-creeper recorded.
- Woodburn Forest provides opportunities for walking and there is the potential for exploiting the forest for other recreational activities.
- A link section of the Ulster Way runs through this LCA.
- Formal opportunities for recreation are limited in the LCA, although the area is probably used to some extent for recreation by nearby urban populations.

Sensitivities and Forces for Change

Climate Change - Increased frequency of flood and drought events may impact the land cover in the future. For example, increased risk of erosion of upland soils where they may dry out in summer.

Trees, woodland and forestry- sensitivities and forces for change: coniferous forest of low biodiversity value is the dominant type of woodland cover, however, the NI Priority habitat Upland mixed ashwood also occurs at Glenoe.

Planning and Management Guidelines

- enhance the biodiversity value of Upland mixed ashwood at Glenoe woodland, by discouraging any further felling or pollarding; by retention of fallen and veteran trees (particularly for bryophytes, ferns, fungi and fauna) and by retaining hazel scrub.
- existing broadleaved woodland should be retained, with the framework of broadleaved woodland strengthened with new planting where possible.
- encourage control of grazing in broadleaved woodlands to foster herb layer and regeneration and if necessary, encourage appropriate replanting.
- further afforestation may be accommodated with careful siting and design and the abrupt boundaries of conifer plantations may be softened by forming indented edges and planting some broadleaves as forests are progressively felled and replanted.

Agriculture - sensitivities and forces for change: There is evidence of hedgerow removal and field amalgamation in some areas. improved grasslands and limited arable of low biodiversity value, but also including rough grassland with associated records of the NI Priority Species curlew and Irish hare.

Planning and Management Guidelines

- Encourage the retention and enhancement of wooded field boundaries where possible and promote environmental initiatives and the repair and management of hedges, walls and shelterbelts should be encouraged to conserve the landscape structure
- Low intensity farming in more marginal areas would be beneficial.

Development - sensitivities and forces for change: New dwellings of a larger scale would be particularly intrusive, while linear development along the roads running through the LCA would have an adverse effect on landscape character. New dwellings in this landscape are of varying styles and in some areas are prominently positioned in the landscape.

Planning and Management Guidelines

- linear development should be avoided.
- housing development within the area should be sympathetic to the small scale and style of traditional buildings found in this upland landscape.
- native broadleaved planting could assist new dwellings integrate into the landscape.

Tourism and Recreation - sensitivities and forces for change: There are some opportunities for leisure and recreation at Woodburn Forest which could lead to increased pressure for car parking and other tourist related facilities.

Planning and Management Guidelines

- visitor facilities such as parking places and picnic spots should be designed to reflect the rural setting, using natural materials and avoiding unnecessary clutter. This will help to retain the contrast between surrounding lowland urban areas and the countryside.
- car parking for tourism and recreation can be prominent in the landscape and should be sited to integrate within the landscape and utilise vegetative screening where possible
- where there is a requirement for signage or information boards a consistent signage strategy would assist in providing a unified identity to the area.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: This landscape has characteristics that suggest suitability, in parts, for wind energy development, while other parts of the LCA would be highly sensitive and unsuitable. The western and northern parts of the area are less sensitive as they lie away from the escarpment edge and Belfast Lough, and forests can aid integration.

The southern and eastern parts of the LCA are much more sensitive, due primarily to their extreme visual prominence. The monument at Knockagh is a particular landmark whose setting is highly sensitive. Any significant impacts on views from Belfast Lough or from the Bangor and Holywood Hills would be unacceptable. If offshore wind energy development were to occur along the Antrim coast, there could be effects on this landscape, from which there would be high level views.

Planning and Management Guidelines

- the western and northern slopes of the LCA will be better able to accommodate wind energy development than other more prominent areas. Wind energy development should avoid sites on the highest ground which is more open to views from the coast.
- visual conflicts with existing structures, notably electricity transmission lines, should be avoided or minimised.
- wind energy development should be closely associated with buildings and tree groups, avoiding open ridges, skylines and settings.

Wetlands - sensitivities and forces for change: Lough Mourne, at over 50 hectares, is the largest lake in the LCA. It is moderately enriched, as is Lower South Woodburn Reservoir. South Woodburn Reservoir, in contrast, has a low base status. However, all of the reservoirs are of generally low biodiversity interest. Beaked beardless moss is recorded from both Lower South Woodburn and North Woodburn reservoir.

Planning and Management Guidelines

- general actions for UK and NI Priority Habitats and Priority Species are detailed in the Habitat Action Plans and Species Action Plans.
- promote and encourage adoption of Countryside Management guidelines so that rivers and lakes are not polluted by releases from silage effluent, herbicides, pesticides, fertilisers or sheep dip; ensure that eutrophication does not occur as a result of nutrient-rich surface waters from surrounding farmland.

Heaths and Bogs - sensitivities and forces for change: loss of all intact peat bogs to extraction and erosion.

Planning and Management Guidelines

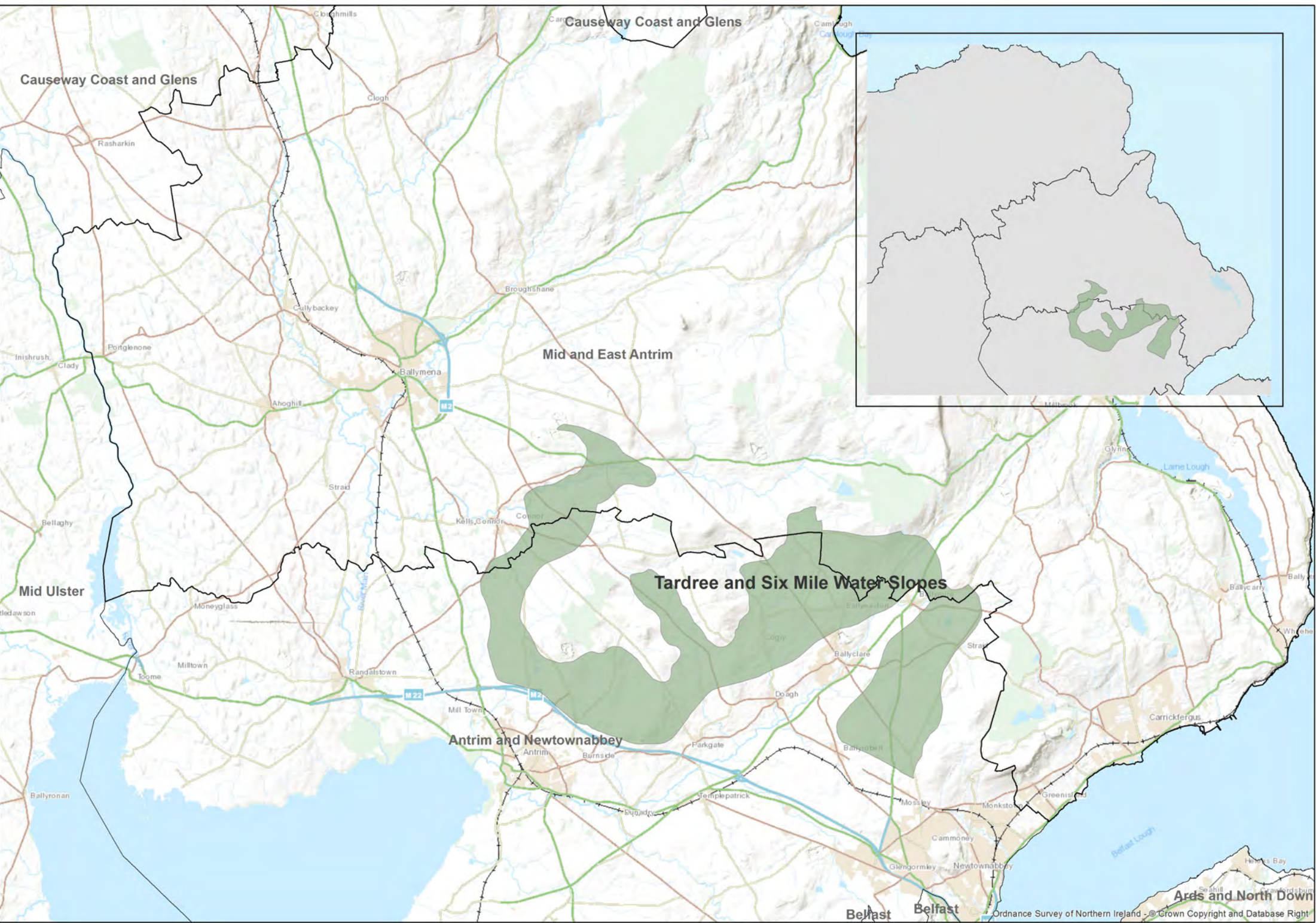
- maintain the integrity of any remaining cut-over bogs which can provide important habitats for birds and invertebrates by, for example, preventing infilling, fly-tipping, fires, new drainage, encroachment by trees and mechanised peat cutting.
- consider restoration of any suitable bog habitats through appropriate water level management, removal of colonising trees and phasing out peat cutting

Tranquillity

The deep rural character and tranquillity of this area could be affected by further residential development, expansion of peat extraction, or upgrades to roads in the area. Consideration should be given to the potential landscape and visual impacts of development, including any cumulative impacts

LCA 115 - TARDEE AND SIX MILE WATER





Causeway Coast and Glens

Causeway Coast and Glens

Mid and East Antrim

Tardree and Six Mile Water Slopes

Mid Ulster

Antrim and Newtownabbey

Ards and North Down

Belfast Belfast

Key Characteristics - LCA115

- Undulating land on the lower slopes of the Six Mile Water valley (outside Mid and East Antrim).
- Within Mid and East Antrim, the Kells Water river valley courses through the western portion of this LCA.
- Mixed patterns of fields and woodlands of different scales, with woodland cover increasing to the east (predominantly outside of Mid and East Antrim).
- Hummocky pastures with hillocks, rock outcrops and rough grazing.
- Leggy hedgerows and degraded field boundaries.
- Scattered farms and small holdings; many with outbuildings.
- Lines of hedgerow trees and some mixed woodland.
- Numerous small villages (outside of Mid and East Antrim)
- Archaeological remains including raths.

Landscape Character Description

This area forms the immediate slopes between the Tardree Uplands and lower-lying river valleys. The LCA wraps around the higher ridges and hills and comprises undulating pastures with small hills and rocky outcrops which add visual interest. The western limb of the LCA is characterised by a series of approximately north-south oriented drumlins.

This LCA has a mixed pattern of fields and woodlands of different scales, however, small-scale landscape patterns and features are a distinctive characteristic of this LCA. This landscape is characterised by an area of relatively degraded undulating farmland with overgrown, leggy hedgerows and rushy pastures. The uneven pasture has led to an uneven field pattern. Hedgerow trees create a wooded appearance in some views.

The Kells Water (small-scale valley) and Moorfields Road run through the western Mid and East Antrim section of the LCA and the Six Mile Water (broad, undulating valley) and Larne Road run through the eastern Mid and East Antrim section. There are farmsteads and single dwellings scattered throughout the area, and electricity pylons are prevalent, for example, in the Lower Ballyboley Road area and south of Carncome Road (within Antrim and Newtownabbey Borough Council area).

Physical Influences

Geodiversity

This LCA lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh Basin. Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape.

The Tardree and Six Mile Water slopes wrap around an area of high basalt moorland that includes the summits of Carn Hill, Big Collin, Wee Collin, Tardree Mountain and Douglas Top (LCA 124). The LCA forms the immediate slopes between the high ground of the Tardree Upland Pastures and the low-lying Three and Six Mile Water Valleys. The western limb of the LCA that runs down to the Kells Water is characterised by a series of approximately north-south orientated drumlins. For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

Altitude ranges between 50m-200m AOD in this transitional landscape.

Topography

The LCA is characterised by an area of undulating farmland and wraps around an area of high basalt moorland that includes the summits of Carn Hill, Big Collin, Wee Collin, Tardree Mountain and Douglas Top. Within Mid and East Antrim, the western section of this LCA includes the small-scale Kells Water valley and the eastern section of the LCA includes slopes of the broader Six Mile Water valley.

Biodiversity and Land Cover - Key Characteristics

- Lower slopes of basalt uplands which lead to surrounding summits.
- Slopes predominantly in improved pasture.
- Some concentrations of rough and neglected grassland.
- Woodland sparse and confined mainly to the Doagh River and Connor Burn (both outside of Mid and East Antrim).

Woodlands

Woodland only accounts for 1% of the LCA. Within Mid and East Antrim there are no significant forests or woods.

Grassland and Arable

Grasslands account for appropriately 80% of the land cover, with a further 9% classified as arable (although some of this is grass reseeding). Of the grassland, the vast majority is in improved pastures, but throughout there is a tendency for them to revert readily to rushes, even at low altitudes.

Heaths and Bogs

There is neither lowland raised bog nor blanket bog in this LCA.

Wetlands and Lakes

Within Mid and East Antrim, there are no significant wetlands in this LCA, however, Kilgad Lake (Riversdale Trout Farm) is located adjacent to the Kells Water and there is a small lake at Mann's

Hill. Many small streams flow through the LCA, most feeding the Six Mile Water. Both the Six Mile Water and the Doagh River have river water crowfoot (*NI Priority Species*).

Field Boundaries

Mixed patterns of fields and woodlands of different scales, with woodland cover increasing to the east, although much of this is beyond the Mid and East Antrim council boundary. The uneven topography results in an irregular field pattern and hedges form the majority of field boundaries, but many are over-grown and gappy with post-mature trees. Hedgerow trees create a wooded appearance in some views, although in other views the uneven form of the hedgerow trees gives the impression of mismanagement and neglect.

Natural Heritage Conservation Sites – No Designations

Historical and Cultural Influences

Settlements

There are no designated settlements within the Mid and East Antrim part of this LCA. This LCA has a dispersed pattern of farmsteads and single dwellings in the countryside. The settlements of Ballyeaston, Ballynure and Kells/Connor (within Mid and East Antrim) are located close to the LCA boundary.

Historic Environment

Within Mid and East Antrim, there are archaeological sites scattered throughout the landscape including numerous raths. Of particular note, the Mid and East Antrim part of this LCA has a scheduled counterscarp rath, souterrain and a scheduled enclosure, and there are two grade B2 listed bridges.

Heritage – Defence and Industry

This LCA is rich in industrial heritage and within Mid and East Antrim there are numerous historic sites associated with the linen industry, for example, sites where beetling mills and flax mills were located. Within Mid and East Antrim, there are also various historically significant bridges and a dismantled narrow gauge railway that connected Ballymena and Larne Harbour. There are no significant historic defence sites within the Mid and East Antrim part of this LCA.

Transport Infrastructure

Within Mid and East Antrim, the Lower Ballyboley Road (connecting Larne and Ballyeaston) and the A8 (connecting Larne and Belfast) pass through the north-eastern part of this LCA. In the extreme north-west of the LCA the A36 Moorfields Road which connects Ballymena and Larne passes through the LCA.

Leisure & Recreation

Only a small portion of this LCA is located within Mid and East Antrim, and in this part, formal opportunities for recreation are limited. However, a quality section of the Ulster Way (Glenarm to Ballynure) passes through the north east of the LCA and there are opportunities for angling at Kilgad Lake (Riversdale Trout Farm) and along the Six Mile Water which is famous for angling, particularly for trout fishing.

Visual and Sensory Perception

Tranquillity

The upper, open slopes of this LCA have an increasingly remote character and some characteristics of relative wildness. However, generally within Mid and East Antrim, this is a rural landscape with some pockets of tranquillity away from the main transport corridors.

The upper part of the Six Mile Water passes through Mid and East Antrim in the north eastern part of this LCA. The presence of pockets of woodland in this river's valley helps give some areas of the valley floor a secluded character.

Views

The slopes of the Antrim Hills provide a setting for lower-lying areas in the Kells Water and Six Mile Water valleys, and the edge of the Antrim Plateau forms an important skyline ridge in some views.

Within the Mid and East Antrim part of this LCA, there are extensive views looking southwards across the lower-lying landscapes of the Kells Water valley (e.g. from Moorfields Road) and the Six Mile Water valley (e.g. from Braepark Road). However, within the Mid and East Antrim part of this LCA, views in some areas are limited due to intervening vegetation and undulations in the topography. There are critical views of the wind farm at Elliots Hill and Big Collin from the north-west section of this LCA, for example, from Moorfields Road and Speerstown Road.

Landscape Condition and Sensitivity

Areas of Scenic Quality

A small portion of the eastern Mid and East Antrim part of this LCA is included within the Antrim Coast and Glens AONB. This designation is indicative of the scenic quality of the landscape within this designation.

NILCA 2000 Assessment

Note: much of this LCA is beyond Mid and East Antrim council boundary.

The landscape appears rather degraded due to neglect of field boundaries and pasture, especially towards the valley bottom. The presence of a multitude of electricity pylons, especially around Hillhead where they converge at a power station, intrudes into the rural setting. The steeper slopes, on the fringes of the upland areas to the north, are particularly sensitive to change.

Elsewhere the landscape's sensitivity to change is increased by views from the surrounding uplands. There is some scope to accommodate a variety of development, provided it is associated with tree planting to provide an appropriate level of screening.

Wind Energy Development in NI's Landscapes (2010)

Note: much of this LCA is beyond Mid and East Antrim council boundary.

This is a visually prominent landscape, the upper slopes of the LCA forming important skyline ridges, particularly when viewed from the adjacent low-lying areas. The outlier hill of Donegore (beyond the Mid and East Antrim council boundary) is especially sensitive. The dispersed settlement pattern, dense lane network, scattering of archaeological sites, varied topography and landscape features e.g. loughs and rocky outcrops increase the sensitivity of this landscape to wind energy development.

This LCA forms a narrow band of land flanking higher hills. It is not broad in scale and could be overwhelmed by inappropriate wind energy development. Land away from ridgelines and key views might be somewhat less sensitive.

Overall sensitivity – high

Assessment of Development Pressure

Wind Energy

The eastern section of the MEA part of this LCA has only had one application for a single wind turbine which was withdrawn. The western section of the MEA part of this LCA has experienced low pressure for wind energy development. It is noted that between these eastern and western sections, there has been higher development pressure for wind farms (Elliot's Hill and Big Collin) and single turbines within MEA (LCA 125).

Since 2000, all of the applications within the MEA part of this LCA related to large-scale (over 15 metres) single wind turbines and none of the applications proposed to increase the height of an 'approved' wind turbine.

In the western section, the Kells Water valley can be open to expansive views from Moorfields Road and there are critical views from the Doagh Road and Kilgad Road. The character of the river valley in these areas could be adversely impacted by inappropriate wind energy development.

The eastern section is overlooked by higher ground to the north and these critical open views and the setting of the Six Mile Water valley increase the sensitivity of this area to wind energy development.

Solar Energy

There have been no applications for solar farm development within the MEA part of this LCA. The upper slopes in the eastern and western sections form an important setting for lower lying areas and are widely visible and therefore, it would be difficult to accommodate solar farm development on these upper slopes. In the western section, the Kells Water valley is small in scale and open to views from Moorfields Road and Doagh Road and would be vulnerable to the impacts of solar farm development.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21), the western section of the MEA part of this LCA generally experienced relatively high pressure for residential development in the open countryside, whereas in the eastern section of the MEA part of this LCA this pressure was generally low with higher pressure restricted to some areas along the Braepark Road.

Since June 2010, residential pressure in the western section has decreased to a low to medium level with only one area located close to the Kilgad Road/Moorfields junction having experienced relatively high pressure. Since June 2010, the eastern section has experienced no or low development pressure with some pockets of medium pressure, although two areas have experienced relatively high pressure – an area to the south of the Braepark Road/Sawmill Road junction and an area around the Lower Ballyboley Road/Lismenary Road.

In the area close to the Kilgad Road/Moorfields Road junction, pressure for dwellings was the predominantly the result of applications for infill dwellings and the linear pattern of development that has evolved in this area has had an adverse impact on rural character.

In the area to the south of the Braepark Road/Sawmill Road junction, pressure for dwellings has been the result of applications for farm dwellings and replacement dwellings, and in the area around the Lower Ballyboley Road/Lismenary Road the relatively high pressure has been mainly due to replacement dwellings.

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- A small area of the eastern Mid and East Antrim part of this LCA is within the Antrim Coast and Glens AONB.
- The upper, open slopes of this LCA have an increasingly remote character and are sensitive to change.

- Generally within Mid and East Antrim, this is a rural landscape with pockets of tranquillity away from the main transport corridors.
- There are no formally designated nature conservation sites within the Mid and East Antrim part of this LCA, however, the Kells Water and Six Mile Water are important natural heritage features.
- The landscape can appear rather degraded due to the neglect of field boundaries and pasture.
- This landscape has been impacted by the cumulative impacts of main roads running across the landscape, infrastructure such as electricity pylons and residential development along roads in the countryside.

Visual Sensitivity: Key Points

- This is a visually prominent landscape with the upper slopes of the LCA providing a setting for the lower-lying Kells Water and Six Mile Water valleys, and the Antrim Plateau forms an important skyline ridge in some views.
- This landscape is not large-scale and could be overwhelmed by prominent development, however, land away from ridgelines and key views may be less visually sensitive to such development.
- From the upper slopes, there are extensive views over the Kells Water and Six Mile Water valleys. In some areas, these views are impeded by intervening vegetation and undulating topography.
- A small area of the eastern Mid and East Antrim part of this LCA is within the Antrim Coast and Glens AONB.
- In many areas, hedgerows are neglected reducing the visual quality of the landscape.
- This landscape has been visually impacted by the cumulative impacts of main roads running across the landscape, infrastructure such as electricity pylons and residential development along countryside roads.

Landscape Value: Key Points

- The upper slopes are important for the setting of the Kells Water and Six Mile Water valleys.
- A very limited part of the eastern section of the Mid and East Antrim part of this LCA is within the Antrim Coast and Glens AONB which is valued for its high scenic quality.
- Generally, the scenic quality of this landscape is not high, however, there are pockets of local scenic quality along the river corridors.
- The Six Mile Water and Kells Water are important sites for biodiversity and amenity value. For example woodland along these rivers provides areas of scenic quality and tranquillity and these rivers are important rivers for angling.
- A quality section of the Ulster Way (Glenarm to Ballynure) passes through the north east of the LCA and the scenery on this route is of value.

- Within Mid and East Antrim, there are archaeological sites scattered throughout the landscape including a scheduled rath and the area has a rich industrial heritage with numerous historic sites associated with the linen industry.
- The amenity and character of this landscape has been impacted by the transport corridors and electricity pylons passing through this LCA.

Sensitivities and forces for change

Climate Change - Increased frequency of flood events may impact on farmland and infrastructure in this LCA. If greater instances of drought occur, associated lower water flows in the Six Mile Water and Kells Water will increase the potential for eutrophication and algal blooms, with adverse impacts for downstream sections of these rivers.

Trees, woodlands and forestry – sensitivities and forces for change: Broadleaved woodland is a relatively minor feature in the landscape but could play an important role in improving the landscape structure and screening and of variable biodiversity value.

Planning and Management Guidelines

- the landscape structure could be improved by the planting of small woodlands or copses within the landscape.
- enhance the biodiversity value of broadleaved woodlands by discouraging any further felling or pollarding; by retention of fallen and veteran trees.
- encourage control of grazing to foster herb layer and regeneration and if necessary, encourage replanting of canopy species.

Agriculture - sensitivities and forces for change: extensive improved pastures and some arable of relatively low biodiversity value; hedgerows require management.

Planning and Management Guidelines

- encourage adoption/continuance of less intensive management of pastures to allow reversion to/continuance of more species-rich grassland
- manage grazing levels to ensure that important grassland areas are not encroached by scrub vegetation or experience a fall in species richness due to overgrazing
- maintain and enhance rough grassland by where, possible, restricting field or arterial drainage
- maintain and improve field boundaries, especially hedgerows where they occur through adoption of correct cutting cycles; hedge laying and replanting where necessary

Development - sensitivities and forces for change: Rural dwellings occur frequently in the landscape, with a build-up of development around the Kilgad Road/Moorfields Road junction. New dwellings of a large scale would be particularly intrusive, while linear patterns of housing along roads would have an adverse effect on landscape character. Linear housing development has occurred along Braepark Road and Lower Ballyboley Road. There is likely to be further pressure for single dwellings in the countryside in this LCA.

Planning and Management Guidelines

- ribbon development along rural roads should be avoided; and
- native woodland planting would assist integration of new development in the landscape.
- larger scale development could be screened using woodland planting; this would provide opportunities to extend and improve the wooded network, linking new planting to existing hedgerows and shelterbelts.
- Farm outbuildings could be painted to make them features rather than eye sores within the landscape; a dark red colour creates an attractive contrast with the landscape and responds to the traditional colours found within the rural setting.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: Electricity lines and pylons are prevalent in some areas of this landscape and any changes to the network of electricity infrastructure could impact the landscape. Much of this landscape is visible from public roads and the upper slopes of the LCA forming important skyline ridges, particularly when viewed from lower-lying areas.

This LCA forms a narrow band of land flanking higher slopes and summits. It is not broad in scale and could be overwhelmed by inappropriate wind energy development. Land away from ridgelines and key views may be somewhat less sensitive.

Planning and Management Guidelines

- particular care should be taken to avoid creating visual clutter in conjunction with transmission lines.

- significant impacts on skylines and long distance views, particularly from nearby settlements and from the Ulster Way, should be avoided, and care should be taken to ensure wind energy development relates well to field and lane patterns and does not adversely affect the setting of archaeological sites.
- Domestic turbines may also be accommodated and should show a close relationship with existing farmsteads, settlement and tree group.
- Cumulative impacts of wind energy development should be a key consideration, particularly given the presence of a wind farm at Big Colin (LCA125)

Infrastructure

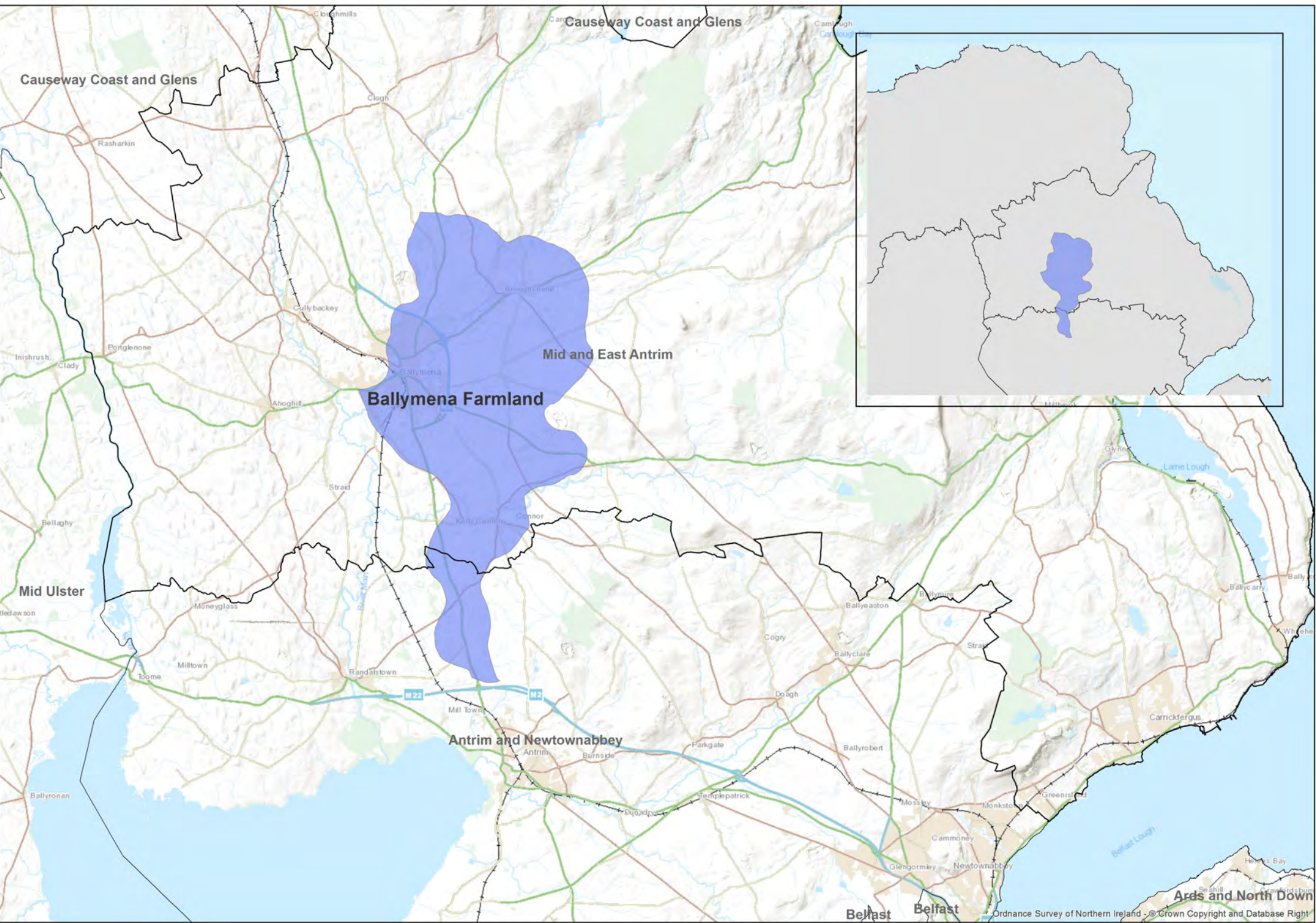
The A8 Larne-Belfast Road has had a major upgrade which has had an impact on the landscape. Any future upgrade of Moorfields Road has the potential to impact on the landscape.

Planning and Management Guidelines

- ensure new roads or changes to road alignment respect the local terrain and grain of the landscape.
- maintain the small scale rural character of the existing road network through limiting urbanising features such as kerbing, lighting and excessive signage.

LCA 116 - BALLYMENA FARMLAND





Causeway Coast and Glens

Causeway Coast and Glens

Ballymena Farmland

Mid and East Antrim

Mid Ulster

Antrim and Newtownabbey

Ards and North Down

Belfast Belfast

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Key Characteristics - LCA116

- Rolling farmland within a wide, gently undulating Braid River valley.
- Medium to large fields.
- Good network of hedgerows with scattered hedgerow trees and some deciduous woodland.
- Large houses and farms of a variety of styles scattered across agricultural land.
- Nucleated settlements.
- Shelterbelts stands of mature trees and beech avenues are distinctive local features and draw attention to traditional farmsteads.

Landscape Character Description

The landscape is an area of rolling undulating farmland which rises towards the fringes of the Larne basalt moorland to the east. This LCA includes the wide, open valley of the Braid River and the narrower valley of Kells Water. Both of these distinctive valleys extend from the hills to the east and are tributaries of the River Maine which is located to the west of the LCA. Drumlins north of Ballymena, and close to the River Maine, are particularly striking, however, they become gradually less pronounced to the east where gentle undulations predominate.

Tree cover is fairly sparse, consisting mainly of hedgerow trees and some deciduous woodland. Mature avenues of beech trees, shelterbelts and the groups of trees associated with farmsteads are important local landscape features. The extensive network of hedgerows provides a well-defined pattern in the landscape and moderate enclosure, however, the landscape becomes more exposed on the upper slopes to the east.

The clustered form of small settlements is characteristic of the settlement pattern in the area. Single dwellings and farmsteads have a dispersed pattern throughout the LCA.

The town of Ballymena is located within the flat floodplain of the Braid River, and a network of rivers and roads radiate out from this town, which functions as a central focus. The M2 transport corridor and industrial sites in the eastern part of Ballymena are notable man-made influences in the central-northern part of the LCA.

Physical Influences - Geodiversity

This LCA lies within the region described as the Central Lowlands. This region owes its large-scale morphology to the early Tertiary subsidence of the Lough Neagh basin into the magma chamber from which the basalts that underlie much of the landscape originated. This has produced a centripetal drainage system from the rim of the basin into Lough Neagh that ultimately drains northwards via the Lower Bann River. There are no strong topographical features in the region and boundaries between LCAs tend to be subtle.

The Ballymena Farmland LCA is an extensive area of undulating farmland which includes the wide, open valley of the Braid River and the narrower valley of the Kells Water. The area is underlain by rocks of the Lower Basalt formation and is bordered to the east by the open basalt ridges of the Larne Basalt Moorland. The town of Ballymena is sited within the flat floodplain of the Braid River. A large ice mass that was centred on the Lough Neagh Basin had ice which moved approximately north-westwards from an ice divide running along the crest line of the Belfast Hills. This ice has left a legacy of numerous drumlins covering the lowland areas of the LCA. These drumlins are particularly striking to the north of Ballymena, however they become gradually less pronounced to the east. Many inter-drumlin hollows have been infilled by sediment washing off the surrounding drumlins.

For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

Altitude ranges between 50m-200m AOD in this transitional landscape.

Topography

This landscape has undulating farmland set within the Braid River and Kells Water valleys, and the land in this LCA rises towards the upland areas to the east. There are drumlins to the north of Ballymena, which become less pronounced to the east where gentle undulations predominate.

Biodiversity and Land Cover - Key Characteristics

- Woodlands account for less than 2% of land cover which is a low percentage (woodland cover for NI is c.8%).
- Most woodland is small remnants of former more extensive parklands or is alongside rivers or on other steep slopes.
- Some estate woodlands remain west of Broughshane.
- Grasslands are c.74% of the land cover and arable land around 6%; both are similar to the averages for Northern Ireland.
- Improved pastures of generally low biodiversity account for more than four-fifths of the grassland.
- Extensive damp grasslands, especially on flat land near Ballymena, which is important for breeding waders.
- Rivers of importance for Priority Species and salmonid fish.

Woodlands

Woodlands account for less than 2% of the land cover (NI average: c.8%). Most woodland is in small patches as remnants of former more extensive parklands or is alongside rivers or on other steep slopes. For example, lowland woodland is found at Knockan Hill west of Broughshane and several small parklands are found along a stretch from Knockboy to Rabbit Hill. Wooded areas are found along the Kells Water river corridor, and downstream of Kells and Connor there is some wet woodland located on flatter ground.

Grassland and Arable

Grasslands are c. 74% of the land cover and arable land accounts for around 6% (both percentages are similar to NI land cover averages). Improved pastures account for more than 80% of the grassland – these have generally low biodiversity as a result of intensive management. Hedgerows may be the most significant wildlife habitat over much of lowland Northern Ireland, especially in this LCA, where there are few semi-natural habitats. In this LCA hedgerows are generally well-managed and dense with some trees. Rough grassland is generally found in damp areas of the LCA. The most extensive area of wet grassland is on flat land near the motorway east of Ballymena (an area associated with the Ecos Centre), and there is also wet grassland on the slopes east of Deerfin. In these areas of wet grassland, breeding waders have been recorded such as snipe and the *NI Priority Species* curlew, lapwing and redshank.

Heaths and Bogs

There are no significant heaths in this LCA and only a few small pockets of cut-over bog.

Wetlands and Lakes

No lakes have been classified as a priority for biodiversity. The Braid River and Kells Water have had river water-crowfoot and otter (*both NI Priority Species*) recorded in both rivers. The River Braid which flows through Broughshane and Ballymena to join the River Maine and hence to Lough Neagh. The river supports a large head of wild brown trout with runs of salmon from July or August and also Dollaghan; a migratory trout of the Lough Neagh system.

The Kells Water is a small river which flows through Moorfields and Kells and is a tributary to the River Main. The river rises above Glenwherry. It is a continuation of the Glenwhirry River and eventually joins the Main, which in turn flows into Lough Neagh. An old stone bridge crosses the Kells Water, separating Kells from the adjacent village of Connor.

Field Boundaries

There is a strong hedgerow network within the LCA which provides moderate enclosure. There is a varied field pattern with larger fields on the valley floor becoming smaller moving towards the current limits of improved farmland on higher ground.

Natural Heritage Conservation Sites – No Designations

Historical and Cultural Influences

Settlements

Ballymena: this settlement was designated as a town in the Ballymena Area Plan 1986-2001.

The recorded history of the Ballymena area dates to the Early Christian period from the 5th to the 7th centuries, and ringforts and souterrains have been found in this settlement. On 10 May 1607, King James I granted the native Irish chief, Ruairí Óg MacQuillan the Ballymena Estate and its possession pass through several owners. In 1576, Queen Elizabeth I granted land, including the town of Ballymena, to Sir Thomas Smith. Smith brought English settlers to the area, among the first pioneers in planting English and Scots settlers in Ireland. By 1581, Smith's settlement failed, and the lands reverted to the crown. The original castle of Ballymena was built in the early 17th century, situated to take advantage of an ancient ford at the River Braid.

In 1626 Charles I confirmed the grant of the Ballymena Estate to William Adair on the basis that the town holds two annual fairs and a free Saturday market in perpetuity. The Saturday market still runs and the town is a popular shopping hub within Northern Ireland.

People's Park is a registered Historic Park, Garden and Demesne located within Ballymena settlement development limits. This site is open owned by the Council and open to the public. The land for the park was donated in 1870 by Sir Shafto Adair who financed and planned the landscaping. The park is a good example of a public park of that era, which includes maximum variety of areas, through the device of using twisting paths on the undulating ground and strategic planting. There are stout stone walls (with modern realignment in places), a shelter belt of Scots pine, and a lake called the 'Park Dam' was made from an artificially dammed mill pond. There is a statue, known as the 'Big Woman in the Park' (listed HB 07/18/10) of 1872 and a notable cast iron drinking fountain of 1909 (listed HB 07/18/09). The park keepers lodge was designed and built by Sir Shafto in 1870 (listed HB 07/18/08). Many changes have taken place over the years, such as the introduction of tennis courts, a children's playground and a bowling green. The individual additions have so far not imposed on the original concept of the park.

Broughshane: this settlement was designated as a village in the Ballymena Area Plan 1986-2001. Broughshane is known as the 'Garden Village of Ulster' and is a historic market town that is situated on the Braid River.

Kells and Connor: this settlement was designated as a village in the Ballymena Area Plan 1986-2001. Connor was a sizeable, complex settlement in the Early Christian period, probably with monastic and secular elements coexisting. St MacNissi, a disciple of St Patrick is considered to have founded a monastery at Kells. During the Middle Ages, an Augustinian community was established at Kells and an Augustinian Abbey survived into the early seventeenth century but was burnt in 1641. Kells and Connor was the location where the 1859 Ulster revival started.²¹

²¹ https://en.wikipedia.org/wiki/Kells,_County_Antrim

In the late 18th and early 19th centuries numerous woollen and linen mills grew up along the Kellswater River. In 1780 Francis Dinsmore came from Donegal and in 1796 set up what was to become the Old Green Woollen Mill, which would thrive until the mid-1980s. Dinsmore Textile Solutions, with a headquarters and a dyeing and finishing plant in Kells, and factories and offices in England and Russia, is now an internationally successful company in finishing and trading fabrics.

Historic Environment

Outside of settlement development limits, this LCA has many archaeological sites scattered throughout the area including numerous scheduled monuments reflecting the rich heritage in the area. Examples of scheduled monuments include raths, mottes, a megalithic tomb, and there is the site of an early Christian monastery (St. Saviour's Church) abutting the settlement of Kells and Connor.

In the early 19th Century, St. Saviour's Church (Kells and Connor) replaced the cathedral of the medieval Diocese of Connor and Kells which was destroyed in the Confederate wars of the mid seventeenth century. St. Saviour's Church foundation stone was laid in 1811 and the building was consecrated in 1813.

In the countryside there are numerous listed buildings. There is a concentration of listed buildings on the Ballygarvey Road area close to Rabbit Hill and west of Broughshane, and also in the Shankbridge Road/Grove Road area to the north-west of Kells and Connor. These areas are associated with woodland along a river corridor and display localised scenic quality.

To the east of Ballymena, Random Cottage on Doctor's Road is a supplementary Historic Park, Garden and Demesne which was established in 1954. This site is in private ownership. There are compartments with mixed planting of interesting plants set out amongst eye catching artefacts. An arboretum was established in 1988. Trees came from the Slieve Donard Nursery, latterly from Mid-Ulster Nursery, Seaforde and Mallet Court, Taunton.

Heritage – Defence and Industry

Outside of settlement development limits there are no significant historic defence sites located in this LCA. The LCA is rich in industrial heritage with many historic mill sites associated with the Braid River, Devenagh Burn and Kells Water river corridors. The area has numerous historic bridges dispersed throughout the landscape.

Transport Infrastructure

A number of important transport routes radiate out from Ballymena connecting the town with settlements in the eastern hinterland and on the east coast such as Larne. The A26 Lisnevenagh Road runs south connecting Ballymena with Antrim, and the M2 passes along the eastern edge of Ballymena connecting the A2 Lisnevenagh Road with northern-bound routes.

Leisure & Recreation

A number of outdoor trails and walks are located within the LCA, particularly around the Ballymena area e.g. riverside walks along the Braid River and within the Ecos Park. Brown trout, Dollaghan and Salmon fishing occurs on the Braid River and Kells Water.

Visual and Sensory Perception

Tranquillity

The LCA can be deeply rural and tranquil away from Ballymena and the main transport routes but does not have a sense of remoteness or wilderness, apart on the upper slopes where a sense of relative wildness can be experienced. Away from transport corridors, the river valleys have some intimacy and tranquillity.

In some parts of the LCA, the rurality and tranquillity is affected by the numerous transport corridors radiating out from Ballymena and by pylons that traverse the LCA.

Views

The rising hills of the Larne basalt moorland and Slemish Mountain to the east form an attractive setting to this LCA and its settlements. The Braid River corridor contributes to the setting of Ballymena and Broughshane, and the Kells Water corridor contributes to the setting of Kells and Connor.

Within this LCA, views within the Braid River valley are often impeded by the network of hedgerows and trees. There are more expansive, longer views from the upper slopes, however views from the upper slopes can be impeded by the topography and intervening vegetation. There are long distance views across the Braid Valley from the Crebilly Road area and from the area around Slemish.

From this LCA, there are long range views of prominent hills in adjacent LCAs, for example, Carncoagh and Elginny Hill are highly visible from Ballymena. However, throughout this LCA, particularly in the southern part of the LCA, views change due to the undulating topography and changes in land cover, with the result, that views within the LCA can be intermittent or restricted. Consequently, views of Slemish from within this LCA are often intermittent or restricted, although there are long range views of Slemish from some public roads, for example, Ballygarvey Road and Carnlough Road (A42).

Landscape Condition and Sensitivity

Areas of Scenic Quality

A small area to the east of Broughshane (Carnlough Road area) is located within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB). This designation is indicative of the scenic quality of the landscape. Generally, the landscape in this LCA is well-maintained productive farmland and the hedgerow network is intact and creates a strong landscape pattern.

NILCA 2000 Assessment

Ballymena Farmland is a well maintained and productive landscape. Farms are large and there is a diverse range of housing styles. The presence of a good hedgerow network and of beech avenues is important to the character of the landscape. The landscape is sensitive to sporadic housing development, which could change its rural character. The small, clustered settlements are sensitive to sprawling ribbon development. However, undulations in landform, a good hedgerow network and the presence of hedgerow trees reduce views and may help to integrate some forms of development into the landscape. The backdrop of Larne's basalt moorland to the east provides an attractive setting for settlements and farmsteads but the upper slopes are particularly sensitive to landscape change.

Wind Energy Development in NI's Landscapes (2010)

The moderately enclosed character of this landscape with its hedgerow trees and shelterbelts helps to reduce its sensitivity to wind energy development. However the upper slopes of this LCA are visually prominent from lower-lying areas in this LCA and land further west. These slopes are also important in forming a setting to the settlements, and any development here could affect much of the LCA. To the south, the river valley of the Kells Water is especially sensitive due to its small intimate character and landscape features. Areas away from settlements and key ridgelines might be less sensitive, as might the principal transport corridors and industrial areas on the edge of Ballymena.

Overall sensitivity – high to medium

Assessment of Development Pressure

Wind Energy

Generally, the MEA part of this LCA has experienced low pressure for wind energy development with areas of medium pressure south/south-west of Broughshane and on the eastern edge of Ballymena. Pressure for wind energy development within the MEA part of this LCA relates largely to single wind turbines. There has been one application related to an 'increase in height' application. There has been no applications for wind farm development.

The most sensitive areas in the MEA part of this LCA are the visually prominent upper slopes which are important for the setting of Ballymena and Broughshane and the small-scale Kells

Water valley which has an intimate character. Other areas may be less sensitive to wind energy development, for example where hedgerow trees and shelterbelts may be able to mitigate the visual impact of such development or at sites which are closely associated with industrial areas east of Ballymena.

Solar Energy

There has been two applications for solar energy development in this LCA, both of which received planning permission. Although there may be potential to accommodate solar farm development in this LCA, constraints could include a distinctive small-medium scale field pattern and areas which are particularly sensitive to change such as river corridors and prominent upper slopes.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) the MEA part of this LCA generally experienced medium to high pressure for residential development in the open countryside, although some areas did not experience any pressure or only low pressure during this period.

Since June 2010, residential pressure in the open countryside has generally been low to medium with some pockets of relatively high pressure, particularly in the following general areas: an area between Kells/Connor and Lisnevenagh Road, an area around the Liminary Road and Moorfields Road to the south-east of Ballymena, an area off the Lisnahilt Road to the east of Ballymena and along the Clonetrace Road to the north-east of Broughshane.

In the area between Kells/Connor and the Lisnevenagh Road (Kildrum Road/Woodgreen Road/Ballymacvear Road area), pressure for dwellings has been predominantly the result of applications for infill dwellings and replacement dwellings with some applications for 'a new dwelling in an existing cluster'. Ribbon development along Woodgreen Road has had an adverse impact on the rural character of this area.

The pressure for residential development in the open countryside in the areas around the Liminary Road and Moorfields Road has been predominantly the result of applications for farm dwellings, infill dwellings and replacement dwellings, with some applications for 'conversion and reuse of existing buildings as dwellings' in the Liminary Road area. Linear development is becoming more pronounced along the Liminary Road. In the Lisnahilt Road area, residential pressure has been concentrated in an area north of Lisnahilt Road and is due largely due to applications for replacement dwellings with two other applications for farm dwellings and one for 'conversion and reuse of an existing building as a dwelling'. Clonetrace Road has experienced relatively high pressure from residential development due to a mix of applications for infill, replacement and farm dwellings.

Cloughwater Road has been adversely impacted by ribbon development, largely as a result of 'pre-PPS21 approved' single dwellings.

Landscape Sensitivity: Key Points

- The area of this LCA within the AONB is valued for its high scenic quality (relatively small area east of Broughshane).
- The backdrop of Larne's basalt moorland provides an attractive setting for settlements and lower-lying areas of the countryside.
- The upper slopes can have a sense of relative wildness and are particularly sensitive to change.
- The LCA can be deeply rural and tranquil away from Ballymena and the main transport routes.
- The river valley of the Kells Water is especially sensitive due to its small-scale intimate character, wooded river corridor and significant landscape features.
- This landscape is generally well-maintained productive farmland with a strong hedgerow network which helps create a strong landscape pattern.
- Stone wall boundaries along the Braid River valley add to the time-depth apparent in the landscape and are potentially vulnerable to changes in farming practices or new development.
- Principal transport corridors and industrial areas on the edge of Ballymena are less tranquil due to the intrusive forms of development and are consequently less sensitive to development.

Visual Sensitivity: Key Points

- The upper slopes to the east are relatively exposed and sensitive to change. There are key views over the Braid River corridor from these slopes and the Crebilly Road area.
- Carncoagh Hill and Elginny Hill (both LCA 117) are exposed to views from Ballymena and the Braid Valley. Rathsherry wind farm is located on these prominent summits creating a cluttered skyline.
- The Braid River corridor contributes to the setting of Ballymena and Broughshane, and the Kells Water corridor contributes to the setting of Kells and Connor. These areas are visually sensitive to change due to the important landscape and heritage features associated with these river corridors.
- The extensive network of hedgerows provides moderate enclosure, for example, views within the Braid River valley are often contained by the hedgerow network and trees.
- Undulations in landform, a strong hedgerow network and the presence of hedgerow trees reduce the visual sensitivity of this landscape in some areas.

Landscape Value: Key Points

- A small portion of this LCA lies within the AONB which is valued for its high scenic quality (ASQ) and the Carnlough Road is a gateway to this important area. The distinctive Braid River valley, well-maintained stone walls and strong hedgerow network contribute to the scenic quality of this gateway landscape.

- The Braid River and Kells Water corridors are distinctive landscape features with associated woodland, a rich industrial heritage and listed buildings. These rivers are popular with anglers and are important habitat for priority species and salmonid fish.
- The Braid River corridor contributes to the setting of Ballymena and Broughshane, and the Kells Water corridor contributes to the setting of Kells and Connor.
- Outside of settlement development limits, this LCA has many archaeological sites including numerous scheduled monuments, reflecting the rich heritage in the area. Examples of scheduled monuments include raths, mottes, a megalithic tomb, and there is the site of an early Christian monastery (St. Saviour's Church) abutting the settlement of Kells and Connor.
- A number of outdoor trails and walks associated with the Braid River and Ecos Park provide valuable amenity and recreation areas.

Sensitivities and forces for change

Climate Change - Increased frequency of flood events may impact on farmland and infrastructure in this LCA. If there are greater instances of drought, lower river flows will occur in the Braid River and Kells Water and this will increase the potential for eutrophication and algal blooms, with impacts downstream.

Trees, woodland and forestry- sensitivities and forces for change: Broadleaved woodland is a relatively minor feature in the landscape but could play an important role in improving the landscape structure and screening views of development. Much of the parkland (Lowland woodland pastures and parkland) to the east of Broughshane has been lost to recent housing or clearance leaving only the former fringing trees or small patches, what remains is of variable biodiversity value.

Planning and Management Guidelines

- enhance the biodiversity value of demesne/parkland woodland through control of grazing and felling.
- the landscape structure could be improved by tree planting on the hillslopes, using woodlands to unify the landscape.
- the LCA has some capacity for coniferous forestry. Forestry plantations should be integrated into the landscape by the avoidance of strong geometrical forms, respecting terrain, and integration with broadleaved woodland planting.
- new avenues and shelterbelt planting may help to integrate development into the landscape.

Wetlands - sensitivities and forces for change: The Braid River corridor contributes to the setting of Ballymena and Broughshane, and the Kells Water corridor contributes to the setting of

Kells and Connor. These areas are visually sensitive to change due to the important landscape and heritage features. Potential increasing pressure for tourism and leisure development potentially affecting the undeveloped and tranquil character of these important rivers.

Agriculture - sensitivities and forces for change: Ballymena Farmland is a well maintained and productive landscape. Farms are large and there is a diverse range of housing styles. The presence of a good hedgerow network and of beech avenues is important to the character of the landscape. Low biodiversity across LCA. Stone wall boundaries along the Braid River valley are potentially vulnerable to changes in farming practices or insertion of post and wire fencing. There may be a trend for the amalgamation of small fields into larger units, and change in land use, with the loss of characteristic small-scale pastures

Planning and Management Guidelines

- encourage the retention and enhancement of wooded field boundaries where possible.
- encourage adoption of less intensive management of pastures to allow reversion to more species-rich grassland and protect unsown areas of damp grassland.
- maintain and enhance floodplain grassland by restricting field or arterial drainage.
- environmental initiatives able to support low intensity farming in more marginal areas, such as the retention of small herb rich meadows, would be beneficial.

Development - sensitivities and forces for change: Ballymena is likely to be the focus for larger scale residential and commercial development. Ribbon development has had an adverse impact in some countryside areas. There is likely to be further pressure for single dwellings in the countryside in this LCA. The landscape is sensitive to the introduction of larger suburban style housing or linear housing developments beyond settlement limits with the traditional pattern of single development has overwhelmed by ribbon development. Large suburban style single dwellings have become prominent features in some parts of the landscape with limited screening and design integration into the local landscape.

Planning and Management Guidelines

- New housing developments in the countryside should to adopt traditional building styles and materials and be of an appropriate scale.
- Native woodland planting would assist integration of new development in the landscape.
- New rural development should be encouraged into existing building clusters rather than extending ribbons,
- White-washed finishes are characteristic of some areas of this landscape. Rural housing should follow simpler architectural designs and patterns to help avoid proliferation of varied and more urban housing styles.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: The moderately enclosed character of this landscape with its hedgerow trees and shelterbelts helps to reduce its sensitivity to wind energy development. However the upper slopes of this LCA are visually prominent from lower-lying areas in this LCA and land further west. These slopes are also important in forming a setting to the settlements, and any development here could affect much of the LCA. To the south, the river valley of the Kells Water is especially sensitive due to its small intimate character and landscape features. Areas away from settlements and key ridgelines might be less sensitive, as might the principal transport corridors and industrial areas on the edge of Ballymena. Areas away from settlements, key ridgelines and existing pylons may be less sensitive, as may the principal transport corridors and industrial areas on the edge of Ballymena.

Planning and Management Guidelines

- some areas away from settlements and their settings may have some capacity for single wind turbines.
- there may be opportunities for wind energy development on brownfield or industrial land near to the M2 transport corridor east of Ballymena, if carefully sited relative to existing man-made structures.
- wind energy development of any scale should avoid prominent ridgelines and not adversely affect the setting of settlements or heritage sites.
- domestic turbines may be accommodated if sited near and show a close relationship with existing buildings.

Minerals - sensitivities and forces for change: the area has historically been subjected to quarrying to the east of this LCA north of Moorefield Road, expansion of existing quarrying activity or new quarry sites could affect the strong rural character in some parts.

Planning and Management Guidelines

- Quarries should be sited to take advantage of natural variations in topography in the to reduce landscape and visual impacts, utilising sympathetic bunding and tree planting.
- Quarrying and processing operations within the LCA should maintain its current relatively concentrated pattern of development so that extraction industries are not seen to proliferate throughout the LCA with undesirable cumulative effects on the quality of the landscape.

LCA 117 - CENTRAL BALLYMENA AND GLENS



Key Characteristics – LCA 117

- Broad, undulating glens, overshadowed by imposing moorland summits.
- Volcanic plug of Slemish is a distinctive landmark visible from glens.
- Regular field structure and pattern, with well-maintained stone walls or hedgerows dividing pastures on the valley floor and post-and-wire fencing on the upper slopes.
- Mounds and knolls on the glen floor.
- Tree groups and mature trees, together with mature hedgerow trees, create a sense of enclosure in some areas.
- Traditional farmsteads and small villages such as Cargan stand out as attractive elements.
- Archaeological remains including raths, chambered graves and standing stones.

Landscape Character Description

A pair of scenic glens lead from the open fertile farmland around Ballymena up into the isolated Garron Plateau. These glens extend north eastwards from Ballymena, narrow towards the uplands, and each contains a major transport route (the A43 and A42 respectively). These transport routes lead to the spectacular coastal Antrim glens which are within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB). Gently undulating ridges, which extend towards the Garron Plateau, frame these glens and give the landform interest, and there are mounds and knolls on the glen floor.

Hills such as Carncoagh Hill, Elginny Hill, Knockcochan, Skerry Rock and Caignamaddy (outside LCA) are distinctive features within this landscape. Slemish Mountain (within LCA 124) is a volcanic plug and distinctive landmark which abuts the southern edge of this LCA and is famed for its association with St. Patrick. The glen landscape associated with the Braid River forms an important setting for Slemish.

Wooded areas, hedgerow trees and mature trees give some areas of the glens a sense of enclosure, and this LCA has a strong landscape structure which is reinforced by well-maintained stone walls and hedgerow network. Rocky burns (watercourses) and woodland become more pronounced landscape features towards the uplands. The landscape is more open and exposed on upper slopes, hills and ridges.

Isolated traditional farmsteads tend to be located at the base of slopes, and settlements such as Cargan and Clough stand out as attractive features in the landscape. The modern church at Carrowcowan Bridge is a distinctive landmark. The A43 to Glenariff Forest Park and Waterfoot is a popular tourist route and the settlements of Cargan and Newtowncrommelin have developed alongside this route at the head of the northernmost glen.

Physical Influences

Geodiversity

The LCA lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh basin. The plateaux are separated from each other and their frequently dramatic margins are fretted by often fault-guided, steep-sided glens. Slemish is a distinctive volcanic plug (within LCA 124). The scenic glens have been carved out by glacial action and their landform in the south is dictated by the Carnlough fault. In the floors of the glens, the late Midlandian till is marked by drumlin development.

Although most drumlins are composed of glacial till or tills, a small number of “drumlinoid features” are rock-cored and some are composed of sand and gravel. It is generally accepted that the drumlins of Northern Ireland were formed by deposition beneath fast flowing ice. The inter-drumlin hollows would have held open water from local runoff at the end of the Pleistocene. Whilst some continue to exist as isolated small loughs, many have now been infilled by sediment washing off the surrounding drumlins. This has created typically flat-bottomed, marshy areas between the drumlins that are subject to seasonal inundation.

Some upland areas have cut-over peat or peaty soils. There are two belts of brown earth soils – i) in the west of this LCA and ii) between the Artoges River and the eastern side of the Braid River south of Cleggan Lodge. In these areas arable fields are common.

Altitude range

Altitude in this LCA ranges between 50m-200m AOD in transitional areas and rises to over 200m in upland areas.

Topography

The Central Ballymena Glens are a pair of broad, expansive valleys that extend north eastwards from the open fertile farmland around Ballymena up towards the isolated Garron Plateau. The highest point is Slieve Rush (LCA 118) at 349m AOD which abuts the northern edge of this LCA. The glens contain subtle mounds and knolls and are framed by gently undulating ridges. Slemish (LCA 124) is a volcanic plug which abuts the southern edge of the LCA and rises to 437m, the highest point in the region. There are significant hills within the LCA e.g. Carncoagh Hill and Elginny Hill.

Biodiversity and Land Cover - Key Characteristics

- Woodlands occupy less than 1% of the LCA, significantly below the Northern Ireland (NI) average of c. 8% .
- No extensive conifer forests and only one large estate with woodlands (Cleggan Lodge Estate)

- Small woodlands beside watercourses, principally of hazel but with some oak and ash
- Grassland accounts for around 85% of the land cover, appreciably higher than the NI average (c71%); almost three-quarters of this grassland is improved pastures
- Very little intact blanket bog but extensive areas of cut-over bog, much now in upland heath; together with acid grassland developed on cut-over peat; these are important for waders and other priority animal species
- No significant wetlands
- Important rivers for priority plant species and salmonid fish

Woodlands

Woodlands occupy less than 1% of the LCA. This is because there are no State Forests on the uplands and the lowlands are generally in intensive farmland. The most extensive woodlands are in and around the Cleggan Lodge estate where there are parkland trees, planted broadleaved and mixed woodlands, conifer plantations and woods that may precede the estate. To the east of Longmore Wood, woodland extends along the Cleggan River.

The estate woodland at Glenravel (Cargan) is small but the planted area is similar to that of the 1830s, which contrasts with Cleggan Lodge where less than half the woodland shown on the 1830s maps remains. Outside of the estates the most frequent woodlands are dominated by hazel and the majority are located alongside streams e.g. at Glen Burn ASSI. Mature beeches and stands of Scots pine are features throughout the area. In the upper glens deciduous woodland becomes more pronounced.

Grassland and Arable

Grassland accounts for approx. 85% of land cover, higher than NI average (c. 71%). The remainder is largely rough grazing and acid grassland in the uplands and upland margins where it is often on cut-over peat or peaty soils. There are two belts where brown earth soils are widespread: i) in the west of the LCA and ii) between the Artoges River and the eastern side of the Braid River south of Cleggan Lodge. Improved pastures generally have low biodiversity value as a result of relatively intensive management. Biodiversity in areas of improved pastures and arable land is often concentrated in hedgerows.

Heaths and Bogs

There are areas of eroded peat and some small patches of intact blanket bog such as at the headwaters of the Skerry Water and the Glen Burn. Two lower upland areas: i) Carncoagh Hill – Elginny Hill area and ii) Lisles Hill – Kanes Hill – Slievenamona area - have diverse land cover with wet heath (*NI Priority Habitat: Upland Heathland*) dominated by common heather, acid grassland with purple moor grass, and eroded peat. Cut-over peat is extensive although there are few sites of active cutting. Munie South is an example of an extensively cut-over upland raised bog. The

eastern upland is significant for breeding waders – curlew, lapwing (*both NI Priority Species*) and snipe.

Wetlands and Lakes

There are no significant sites of open water within the LCA. However, there are numerous headwater streams flowing from the plateau into the Clogh River and the Braid River, both of which course through the northern and southern glens respectively.

Field Boundaries

This LCA has a strong landscape structure which is reinforced by well-maintained stone walls and hedgerow network. Historic field patterns are remarkably intact within the Braid valley and are marked by stone walls which contrasts with hedgerow boundaries found in other places. Stands of trees, together with mature hedgerow trees create a strong sense of enclosure in some areas of this LCA.

Natural Heritage Conservation Sites – Designations

International Sites

- Antrim Hills Special Protection Area (SPA) – there are only small areas on the edge of this designation located within the LCA.
- Garron Plateau Special Area of Conservation (SAC) - there are only small areas on the edge of this designation located within the LCA.
- Garron Plateau Ramsar - there are only small areas on the edge of this designation located within the LCA.

National Sites

- Garron Plateau Area of Special Scientific Interest (ASSI)
- Rathsherry ASSI
- Glen Burn ASSI
- Cleggan Valley ASSI

Local Sites

- Larne Area Plan 2010
- Bannaghan Nature Conservation Site

Historical and Cultural Influences

Settlements

Cargan (from Irish: an Carraigín, meaning "the small rock")²² was designated as a village in the Ballymena Area Plan 1986-2001 and lies at the foot of Slievenanee. In the late 1800s, the village of Cargan was known as Fisherstown after the man who, in 1866, opened the first iron ore mines

²² <https://en.wikipedia.org/wiki/Cargan>

near the village. The ore was shipped to Barrow-in-Furness, at first by horse and cart to the pier at Waterfoot where he had his own ships, then from 1875 by railway to Ballymena and onwards. The railway closed in 1937.

Carnalbanagh (from Irish Carn Albanach, meaning 'cairn of the Scotsmen') was designated as a small settlement in the Larne Area Plan 2010 and is located approximately 8 miles east/north-east of Ballymena.²³ Carnalbanagh was first referred to, with the present spelling, in 1780 and a cairn with battle traditions was shown on the 1859 OS map. The cairn is said to mark the site of a battle fought in 1315 between the McQuillans and Scottish forces under Edward Bruce.²⁴

Clough was designated as a village in the Ballymena Area Plan 1986-2001. Clough Fair was an important trading post from the 18th to mid-20th century. As well as being a place for dealing in animals the fair had an important social aspect. It was most likely that the Fair in February was a hiring fair. In the early 1800s the local population had increased considerably. The Fairs in Clough ended in the early 1950s. About a mile west of the village of Clough stands the present church or "meeting house" of one of the oldest Presbyterian congregations in Ireland. The origins of this congregation go back to the early days of the Scottish Plantation when the first Presbyterians came and settled in the lands of the Parish of Dunaghy, surrounding Clough or Oldstone Castle. This territory was reputed to have been owned originally by the McQuillans but was said to have come into the possession of the McDonnells after the battle of Orra in 1559.²⁵

Martinstown was identified as a hamlet in the Ballymena Area Plan 1986-2001. Development limits were not demarcated for hamlets in the Ballymena Area Plan 1986-2001.

Historic Environment

This LCA contains important listed buildings, for example, Cleggan Lodge and the post office, post box and telephone kiosk at Newtowncrommelin. There are many archaeological sites scattered throughout the LCA including numerous scheduled monuments reflecting the rich heritage in the area. Examples of scheduled monuments include burial sites, fortifications and religious sites.

Cleggan Lodge is a supplementary Historic Park, Garden and Demesne located between the A42 Carnlough Road and Cleggan Forest (LCA 122) and was in existence in 1777. The site is privately owned and was originally a shooting lodge for Shane's Castle. Extensive landscaping and tree planting was carried out, presumably as shelter and cover. The present house (listed HB 07/05/06) was built in 1830 and renovated in the 1920s in a fine elevated site with views of Slemish. There are good mature trees in the parkland and in woodland. A considerable area was once ornamentally planted. A pond called Fisher's Pond was added sometime before 1857 and a rockery made in the glen by the present owners grandfather post-1927. A cultivated and productive garden is kept at the house in immaculate order, including herbaceous borders, a hot

²³ <https://en.wikipedia.org/wiki/Carnalbanagh>

²⁴ <http://www.placenamesni.org/resultdetails.php?entry=17064>

house and frames. This present garden is post-1927. One of two gate lodges survive. Archaeological sites include mounds, enclosures and a souterrain.

Heritage – Defence and Industry

This LCA is rich in industrial heritage, particularly in relation to the linen industry and mining. The area around Cargan was historically important for mining iron ore and bauxite (high aluminium content) and a narrow-gauge railway and numerous bridges were developed to facilitate mining activity in the late 19th Century and early 20th Century. The Braid Valley has numerous historic flax and corn mill sites and numerous bridges.

Transport Infrastructure

The main transport routes within this LCA are the A42 to Carnlough and the A43 to Glenariff Forest Park and Waterfoot which function as gateways to the Antrim Glens and the coast.

Leisure & Recreation

The A43 to Glenariff Forest Park and Waterfoot and the A42 to Carnlough are popular tourist routes and are gateways to the Antrim coast and glens.

The upland ridges and more sheltered glens are valued for hill walking, horse riding and cycling, and the Braid River is popular for angling. Slemish (LCA 124) is a popular destination for walking and for cyclists and is part of the Antrim Hills Way.

Visual and Sensory Perception

Tranquillity

On exposed upper slopes and prominent ridges there is a high degree of relative wildness and the glens themselves are deeply rural, remote and tranquil. The area north of Slemish has characteristics of "wildness" or remoteness.

Views

From the upper slopes and prominent hills within this LCA there are views to the edges of the Garron Plateau and into parts of the AONB within adjacent LCAs, for example, from Lisles Hill Road. Hill slopes and ridges within this LCA frame views of the A42 and A43 which are major tourist routes and gateways to the Antrim Glens and the Coast.

From Clough, Newtowncrommelin and the A43 located in the northern part of the LCA there are strong critical views of the ridgeline that runs in a north-easterly direction from the Carncoagh Hill area into the Garron Plateau. This ridgeline defines the edge of this upland area. There are views down into the northernmost glen of this LCA from Clough, Newtowncrommelin, Knockan Road and Glens Brae Road. From these areas there are also critical views of ridgelines and prominent hills in the northern most part of this LCA and of LCA 118. From Knockan Road there

²⁵ <http://antrimhistory.net/a-church-at-clough>

are also long-range critical views of Grug's wind farm within Causeway Coast and Glens Borough Council area.

From the southernmost glen in this LCA, Slemish is a visually prominent feature which is exposed to critical long-range views. The northern foreground to Slemish, and the ridges to the east and west, are open to long range views from the A42 and other public roads in the area, such as Lisles Hill Road and Longmore Road. Within this southern glen area there are also long range critical views of Carncoagh Hill, Elginny Hill, Knockcochran Hill, Longmore Top and ridges to the east of Longmore Top.

Landscape Condition and Sensitivity

Areas of Scenic Quality

A significant portion of this LCA is within the AONB (south-eastern part of LCA and north-eastern fringes). The AONB is highly valued for its scenic and perceptual qualities. Visual amenity is enhanced by distinctive landforms such as Slemish (LCA 124), Skerry Rock and the undeveloped ridgelines of the glens.

NILCA 2000 Assessment

Landscape condition is extremely good, with neat, intact field boundaries, preserved traditional farmsteads and a good tree age structure. The Cleggan Valley ASSI and the Glen Burn ASSI are important nature conservation sites within the Braid Valley. The glens are extremely sensitive to change due to their distinctive character, scenic quality and views from surrounding ridges and major tourist routes. Visual amenity is enhanced by distinctive landforms such as Skerry Rock or Craignamaddy (abuts NE edge of LCA) and the undulating landform within the glens serves to shelter and accommodate limited development.

Wind Energy Development in NI's Landscapes (2010)

These glens are extremely sensitive to wind energy development due to their distinctive character, relative wildness and tranquillity, high scenic quality and key role in views from surrounding ridges and major tourist routes. Within the LCA the Braid Valley forms part of the AONB and is an important setting to Slemish. Elsewhere the distinctive knolls and outliers on the valley sides are sensitive in both character and visual terms and are valued for their scenic and perceptual qualities. In the lower-lying valley landscapes there are many small scale features. Development [wind energy development] here could be out of scale with the landscape and might appear to "flatten" the landform and reduce the sense of contrast with surrounding upland areas.

The prominent upper slopes on the western edges of the LCA are most sensitive because of their very wide visibility. There might be some localised areas of lower sensitivity on the less prominent middle slopes.

Overall sensitivity – high

Assessment of Development Pressure

Wind Energy

The southern glen has experienced low pressure for wind energy development with some pockets of medium pressure relatively close to the Carnlough Road. In comparison with the southern glen, the northern glen has experienced higher pressure for wind energy development with pockets of high pressure relatively close to Glenleslie Road and Skerry East Road and pockets of medium pressure in the north-western section and in areas relatively close to the Knockan Road / Cushendall Road junction. High pressure has also been experienced at Carncoagh Hill and Elginny Hill where Rathsherry wind farm has been erected and, in this area, there has been also pressure for single wind turbines. There has also been pressure for wind farm development to the north east of Slemish which is a highly sensitive area of the AONB. Generally, this LCA has experienced the highest pressure for wind energy development in areas with the highest altitude.

Within this LCA, most applications for wind energy development relate to proposals for large-scale (over 15 metres) wind turbines and there has been applications to increase the height of single wind turbines at five sites.

These glens are extremely sensitive to wind energy development due to their distinctive character, areas of relative wildness and tranquillity, high scenic quality and key role in framing views from surrounding ridges and major tourist routes. The southern glen and north-eastern part of the northern glen are within the AONB. Gently undulating ridges which extend towards the Garron Plateau frame these glens and the glen landscape associated with the Braid River is an important setting for Slemish. Therefore, this LCA is visually highly sensitive to wind energy development.

Solar Energy

There has been one application for solar energy development in this LCA. This proposal was for a relatively small-scale solar energy scheme and received planning permission. The distinctive character and high scenic quality of the glens and associated ridges, and views across the glens from surrounding ridges and tourist routes make many areas of this LCA visually highly sensitive to solar farm development.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) this LCA generally experienced medium to high pressure for residential development in the open countryside, with the exception of areas furthest to the east which did not experience any pressure or only low pressure during this period.

Since June 2010, residential pressure in the open countryside has generally been low to medium with some pockets of relatively high pressure. In the northern glen, relatively high pressure has been experienced around Newtowncrommelin, the Killygore Road/Islandstown Road area and the area around the Knockan Road/Carncoagh Road junction. In the southern glen relatively high pressure was experienced at points along the Lisnamurrikin Road and Munie Road and close to

the Carnlough Road/Killycarn Road junction and Lisleshill Road/Carlough Road junction. There is also a pocket of relatively high pressure along the Clonetrace Road.

On the northern edge of Newtowncrommelin and to the north of Newtowncrommelin, the relatively high pressure has been the result of applications for farm dwellings. To the south of Newtowncrommelin, the relatively high pressure is due to a mix of applications types including infill dwellings and replacement dwellings. The rural character of this area has been impacted by the cumulative build-up of residential properties in this area. In the area of the Killygore Road/Islandstown Road junction, the relatively high residential pressure has been mainly the result of farm dwelling and infill dwelling applications, whilst high pressure around the Knockan Road/Carncoagh Road junction has been due to applications for infill dwellings and replacement dwellings. In the northern glen, the build-up of dwellings has, in some parts, resulted in a 'visually cluttered' appearance when viewed from the upper valley slopes.

In the southern glen, the relatively high residential development pressure experienced at Munie Road and at the Carnlough Road/Killycarn Road and Lisleshill Road/Carlough Road junctions was predominantly due to applications for farm dwellings and replacement dwellings. Along the Lisnamurrikin Road, the relatively high pressure has been mainly due to farm dwelling applications. Lisnamurrikin Road is close to Slemish and further encroachment of development onto the slopes of this landmark feature would adversely impact on its' setting.

Landscape Sensitivity: Key Points

- The areas of this LCA within the AONB are particularly valued for their high scenic quality and important natural and historic heritage features (south-eastern part of LCA and north-eastern fringes).
- The glens are deeply rural, remote and tranquil.
- The prominent ridges framing the glens are particularly sensitive to change and there is a high degree of relative wildness on these ridges and associated upper slopes.
- Slemish is a volcanic plug and a distinctive landmark (within LCA 124). The area around Slemish has characteristics of wildness and remoteness.
- The prominent upper slopes and hills in the central-western part of this LCA are distinctive features in the landscape, although Carncoagh Hill and Elginny Hill have been impacted by wind farm development.
- A strong landscape structure is reinforced by well-maintained stone walls and hedgerow network. Wooded areas, hedgerow trees and mature trees give some areas of the glens a sense of enclosure.
- The Cleggan Valley ASSI and the Glen Burn ASSI are important nature conservation sites within the Braid Valley.
- Rathsherry ASSI is an important nature conservation site to the north-west of Elginny Hill.

Visual Sensitivity: Key Points

- The glens are extremely sensitive to wind energy development due to their distinctive character, relative wildness and tranquillity, high scenic quality and key role in framing views from surrounding ridges and major tourist routes.
- Visual amenity is enhanced by distinctive landforms such as Skerry Rock, Craignamaddy and Slemish (both Craignamaddy and Slemish are outside, and about the boundary of, the LCA).
- The surrounding slopes and ridges to the east and west of Slemish are important landscape features which contribute to the setting of this landmark volcanic plug. These landscape features are open to long range views from the A42 and other public roads in the area.
- The prominent upper slopes and hills in the central-western area of the LCA are highly sensitive because of their wide visibility. However, wind farm development on Carncoagh Hill and Elginny Hill has impacted the remote and tranquil character of these prominent hills.
- The ridgeline running north-east from Carncoagh Hill is exposed to long range critical views from Cargan, Clough, Newtowncrommelin and the A43 in the northern part of the LCA.
- Longmore Top, Knockcochran Hill and associated ridges are exposed to long range views from the A42 and other public roads in this area.
- The undulating topography, trees and woodland within the glens provides a sense of enclosure in some areas and may help mitigate the visual impact of some types of development.

Landscape Value: Key Points

- Areas of this LCA within the AONB are valued for their high scenic quality (ASQ) which is reinforced by distinctive hills and ridges, well-maintained stone walls and a strong hedgerow network.
- The A43 to Glenariff Forest Park and Waterfoot and the A42 to Carnlough are popular tourist routes. Both of these roads are gateways to the Antrim glens and the coast and the setting of, and views from, these roads are, therefore, of significant value.
- The upland ridges and more sheltered glens are valued for hill walking, horse riding and cycling, and the Braid River is popular for angling.
- Slemish is a distinctive landmark in the wider area and is a popular destination for walking, for example, Slemish is part of the Antrim Hills Way.
- There are many archaeological sites scattered throughout the LCA including numerous scheduled monuments, reflecting the rich heritage in the area. Examples of scheduled monuments include burial sites, fortifications and religious sites.

Sensitivities and forces for change

Climate Change - Increased likelihood of flood events will impact on pasture land and settlements, with potential erosion of river banks. If summer droughts increase this will impact on the remaining active raised bogs in this area, leading to increases in fen and dry heath

habitats, and stress on other wetland habitats. Broadleaf woodland, which is such a characteristic of the Antrim Glens, may come under pressure with the drier summer conditions.

Trees, woodland and forestry- sensitivities and forces for change: Native woodland cover is limited, but with some estate and valley woodlands adding some significance to biodiversity.

Planning and Management Guidelines

- the landscape structure could be greatly improved by tree planting on the hillslopes, using woodlands to unify the landscape,
- the LCA has some limited capacity for coniferous forestry. Forestry plantations should be integrated into the landscape by the avoidance of strong geometrical forms, respecting terrain, and integration with broadleaved woodland planting.
- encourage owners to continue to enhance the biodiversity value of demesne/parkland woodland by planting saplings of the standard trees; by preventing further loss of parkland by retention of fallen and veteran trees.
- encourage control of grazing in broadleaved woodlands, especially of hazel woodlands along streams, to foster regeneration and if necessary, encourage replanting of canopy species.

Agriculture - sensitivities and forces for change: a decline in traditional farming practices may result in the loss of elements and features which contribute to landscape character, for example wooded field boundaries, small scale farm buildings and stone walls. The post-medieval field systems and stone wall boundaries along the Braid valley and in the northern most glen is potentially vulnerable to changes in farming practices, insertion of new houses or other new development – their loss would reduce the time-depth apparent in the landscape.

Planning and Management Guidelines

- retain and enhance wooded field boundaries.
- restore and maintain traditional earth hedge banks in favour of post and wire fencing where possible.
- environmental initiatives able to support low intensity farming in more marginal areas, such as the retention of small herb rich meadows, would be beneficial.
- provision of wildlife strips and conservation headlands around fields.

Heaths and Bogs - sensitivities and forces for change: loss of upland heathland and decline in its biodiversity, blanket bogs are of national and international importance.

Planning and Management Guidelines

- maintain the integrity of the few patches of intact blanket bogs by for example, preventing infilling, fly-tipping, fires, new drainage and new peat cutting.

- consider restoration of blanket bog habitats, particularly in the east of the LCA, through appropriate water level management and phasing out peat cutting.
- prevent new forest planting on blanket bog

Development - sensitivities and forces for change: The cumulative impacts of development has led to a visually cluttered landscape on the lower slopes of the northern most glen in this LCA. The cumulative impacts of single dwellings in the countryside has the potential to further impact on the rural character of this LCA. A42 and A43 penetrate along the glens. Isolated dispersed traditional farmsteads on lower slopes and small nucleated settlements Buckna and Martinstown.

Planning and Management Guidelines

- the use of standard colours on farm outbuildings, such as reds which contrast with the landscape and whitewashed dwellings, will provide some continuity in the landscape.
- the promotion of growth within existing settlements will reduce scattered rural dwellings or ribbon development along roads which may lead to the degradation of rural landscape character.
- vernacular building styles and finishes are most appropriate - simple dwellings finished in white predominate.
- native woodland planting would assist integration of new development in the landscape.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: The glens are extremely sensitive to change due to their distinctive character, scenic quality and views from surrounding ridges and major tourist routes. Visual amenity is enhanced by distinctive landforms such as Skerry Rock or Craignamaddy and the undulating landform within the glens can aid integration. The prominent upper slopes on the western edges are most sensitive because of their very wide visibility.

Wind farms are present on Carncoagh Hill and Elginny Hill within the LCA, and there are single turbines dispersed throughout the glens. There is likely to be pressure for further wind energy development and for increasing the height of existing turbines. Solar farms can be highly visible features in the landscape, particularly when viewed from higher ground, and pressure for this type of development may occur in the future.

Planning and Management Guidelines

- limited capacity to accommodate commercial wind energy development due to its high visual prominence and many small-scale landscape features.

- care should be taken to avoid sites on or near prominent, distinctive rocky knolls and outliers, particularly on the eastern edges of the LCA where development would tend to dominate adjacent valley landscapes.
- adverse impacts on the settings of cultural heritage sites or settlements should also be avoided. Special care should also be taken to avoid locations where turbines would have a significant impact on perceptual landscape qualities such as wildness and tranquillity or on the setting or special qualities of the AONB.
- the setting of Slemish, in the south, is particularly sensitive.
- wind turbines should avoid open, prominent sites and show a close relationship with existing buildings and tree groups.

Tranquillity

The rural tranquillity of this area could be affected by development. Consideration should be given to the potential landscape and visual impacts of development, including any cumulative impacts of development.

LCA 118 - MOYLE MOORLANDS AND FORESTS



Moyle Moorlands and Forest

Causeway Coast and Glens

Mid and East Antrim



Key Characteristics - LCA118

- Open upland reaching 550m at Trostan (adjacent to Mid and East Antrim Council area). Large scale, smooth moorland landscape dissected by small rocky burns.
- Rough grazing of unimproved grassland and heather; areas of blanket bog.
- Extensive and prominent conifer plantations on lower hillslopes (outside of Mid and East Antrim).
- Exposed landscape with few roads and no settlements (within Mid and East Antrim); small farmsteads along upland roads.
- Within Mid and East Antrim there are extensive views across open moorland.

Landscape Character Description

This LCA is part of an open exposed upland area which rises to approximately 550m AOD at Trostan (outside and adjacent to Mid and East Antrim boundary). The landform is a smooth, sweeping, open, and expansive rounded upland. Within Mid and East Antrim, Binvore, Skerry Hill, Slieverush, Slievenamaddy and Slievenanee are distinctive peaks, and Slievenanee is the highest peak at 540m. The area is dissected by small rocky burns.

Within the Mid and East Antrim part of this LCA, rough grassland and heathland comprise the dominant land cover and narrow public roads provide access to this upland area. There are sites of disused historical mines, and single dwellings and small farmsteads are located along Skerry West Road and Old Cushendun Road. In the whole LCA there are large areas of blanket bog, some of which have been cut over for peat, and some of this blanket bog is located within Mid and East Antrim. The Antrim Hills Special Protection Area (SPA) covers much of the central and eastern areas of the Mid and East Antrim part of this LCA.

Outside of, and adjacent to, the Mid and East Antrim part of this LCA are large coniferous state forests (Glenariff and Slieveanorra) which provide some localised enclosure. These extensive conifer plantations contrast with the surrounding areas of open moorland and rough grassland.

Physical Influences

Geodiversity

The LCA lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh basin. Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape. This LCA comprises an open exposed upland area of metamorphic schists and Lower Basalt, which reaches 550m at Trostan. There are 5 distinctive peaks within the Mid and East Antrim part of this LCA.

An iron ore and bauxite bed are found in the Interbasaltic Formation, which formed as the result of a prolonged period of weathering between the eruption of the Lower Basalt and Upper Basalt formations. Bauxite (which has a high aluminium content) was mined at Salmon's Drift (ESCR Site 73 – see NILCA 2000).

For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

The land in the Mid and East Antrim part of the LCA is an upland area with the altitude ranging between approximately 300m AOD and 540m AOD.

Topography

The LCA is an upland area reaching 550m At Trostan (outside and adjacent to Mid and East Antrim boundary). Within Mid and East Antrim, Binvore, Skerry Hill, Slieverush, Slievenamaddy and Slievenanee are distinctive peaks with Slievenanee the highest peak reaching approximately 540m AOD.

Biodiversity and Land Cover - Key Characteristics

- Woodlands (predominantly outside of Mid and East Antrim) account for c.21% of the land cover, about four times the average for Northern Ireland. Almost all of this is coniferous State Forest and planted mainly on former blanket bog. Within the Mid and East Antrim part of this LCA there are only small pockets of woodland.
- Grassland is dominated by rough grassland on upland margins.
- Improved pastures limited to lowland in the west and north (outside of Mid and East Antrim).
- Extensive blanket bog, including large tracts of internationally important intact bog with diversity of microtopography, habitats and species (outside Mid and East Antrim).
- Some upland heathland, a declining habitat in Northern Ireland.

Woodlands

Woodlands account for c.21% of the land cover within the whole LCA. Within the Mid and East Antrim part of the LCA, there are small pockets of planted coniferous woodland. Glenariff Forest and Slieveanorra Forest are major coniferous state forests (both managed by Forest Service NI) which are outside of, and adjacent to, the Mid and East Antrim council area.

Grassland and Arable

Grassland accounts for 36% of the land cover in the whole LCA – the low percentage explained by the upland character of the LCA. Rough grassland dominates the upland margins, merging with peatland.

Heaths and Bogs

Blanket bog is extensive throughout the whole LCA and there are some areas of blanket bog within the Mid and East Antrim part of this LCA. Upland heathland is found throughout the LCA.

Wetlands and Lakes

There are no rivers or lakes in the Mid and East Antrim part of this LCA.

Field Boundaries

The area within Mid and East Antrim is rough unimproved grassland and heather. Generally, field boundaries are not well defined in this area and any boundaries tend to be gappy hedgerows or post-and-wire fencing. On occasion trees or dilapidated stone walls are present along some boundaries.

Natural Heritage Conservation Sites – Designations

International Sites

- Antrim Hills Special Protection Area (SPA)

National Sites

- No designations

Local Sites

- No formal designations

Historical and Cultural Influences

Settlements

There are no designated settlements located within the Mid and East Antrim part of this LCA.

Historic Environment

Within the Mid and East Antrim part of this LCA there are two archaeological sites and there are no listed buildings or historic parks, gardens or demesnes.

Heritage – Defence and Industry

Within the Mid and East Antrim part of this LCA there are no defence heritage sites. Historic industrial sites relate to bridges, bauxite and ironstone mines and a disused narrow-gauge railway associated with historic mining activity.

In 1866 opencast mining at a place known as the Gulleets started on the slopes of Slievenanee, and in the first six months was able to ship 18,000 tons of ore to England worth about £1 per ton. To facilitate this a tramway which ran from the Gulleets to Parkmore, a distance of two miles was

built. There was, as yet, no narrow-gauge railway from Ballymena. Most of the miners were labourers and small farmers.

With the establishment of James Fisher's mining company, and several others, there was an influx of people to the area from other parts of Ireland and Scotland. The ore had to be transported to the coast for shipment to England and this transport requirement resulted in the building of a wire tramway. This ran from just outside Cargan to the top of Parkmore and worked on a pulley system.

The original mines closed in 1913 because the best quality ore had been worked out and the second quality was considered uneconomical to work. Adits 3 and 4 of the Evisnacrow Mines were last worked in 1923 and closed because of the company's inability to work them at a profit. The British Portland Cement Manufacturing Co. took over the bauxite mine here in 1925 but the bauxite proved unsuitable for their purpose and the mine was abandoned in 1926.

Transport Infrastructure

The Old Cushendun Road, Skerry East Road and Skerry West Road are the main routes that pass through the Mid and East Antrim part of this LCA.

Leisure & Recreation

There are no formal recreational opportunities within the Mid and East Antrim part of this LCA. The Moyle Way is a quality section of the Ulster Way which passes through an area of this LCA located adjacent to, and north of, the Mid and East Antrim council boundary.

Visual and Sensory Perception

Tranquillity

The Mid and East Antrim part of this LCA has a high degree of relative wildness as a result of the open windswept upland character, extensive semi-natural vegetation and dearth of overt man-made features. This part of the LCA is very tranquil.

Views

This area is important for the setting of the surrounding lower lying areas. The 5 peaks within the Mid and East Antrim part of the LCA are important skyline features. These prominent peaks are highly visible from vantage points to the south and west, for example, Glens Brae Road, Glenleslie Road and Tullykittagh Road. From Old Cushendun Road there are long distance, open views to the south and across the Mid and East Antrim part of this LCA.

There are also long-distance views to the south from Skerry East Road. There are no views to areas to the north which are outside of this LCA due to the topography. Glenariff Forest to the east and Slieveanorra Forest to the north (both outside of Mid and East Antrim) provide some screening and enclosure.

Landscape Condition and Sensitivity

This LCA has excellent landscape quality.

Areas of Scenic Quality

The central and eastern parts of the Mid and East Antrim part of this LCA are within the Antrim Coast and Glens AONB. This designation reflects the scenic quality of the area.

NILCA 2000 Assessment

The scenic quality of the landscape is reflected by its designation as part of the Antrim Coast and Glen AONB. The landscape is highly sensitive to change due to its open exposed character and the fragile upland ecosystem which prevails. Commercial forestry and peat cutting have eroded the otherwise pristine landscape. Further drainage of peat bogs for forestry and changes in grazing pressure would cause notable damage to moorland vegetation. Construction of reservoirs in these uplands would have a major impact. The open skylines are extremely visible and very sensitive to change, as illustrated by an existing radio-mast and windfarms (both outside of Mid and East Antrim).

Wind Energy Development in NI's Landscapes (2010)

The scale and landform of at least parts of this LCA are in theory well-suited to wind energy development in landscape and visual terms. The principal tops and summits often have a distinctive form, wide visibility and a strong wild character; they are highly sensitive to wind energy development. However, the plateau landscapes of the central part of the LCA [outside of Mid and East Antrim] are less sensitive due to their simple, often convex landform (which lends to some topographic screening) and the uniformity of their land cover.

These areas might have lower landscape and visual sensitivity to wind energy development, provided other natural and cultural heritage constraints can be satisfactorily addressed. Locations within or close to forestry plantations might be least sensitive. In these areas the landscape and wildlife habitats have already been modified by forestry, and existing access tracks might provide wind farm access without the significant landscape and habitat damage that could occur elsewhere. In addition, a forest or woodland setting might help integrate and reduce the visibility of turbines and associated infrastructure.

Overall sensitivity – MEDIUM to HIGH

Detracting Features

Some loss of quality has occurred where there has been coniferous planting (mostly outside of Mid and East Antrim), peat-cutting and historic mining.

Forces for Change

Climate Change

Blanket bogs on the Antrim Plateau may begin to dry with summer droughts, leading to loss of bogland and increases in dry heath habitats. Drier conditions will make heath and bog more susceptible to fire which will damage biodiversity and scar the landscape.

Assessment of Development Pressure

Wind Energy

There have not been any applications for wind energy development within the MEA part of this LCA. However, it is notable that there has been concentrated pressure for wind energy development in an area to the south-west (relatively close to Glenleslie Road and Skerry East Road) and Gruig Wind Farm is located to the north-west, indicating that there is pressure for wind energy development in the surrounding area.

Generally, the summits in this area are widely visible, have a wild character and provide an important setting for settlements in lower-lying areas. Therefore, this area is considered to be highly visually sensitive to wind energy development. Further, the Antrim Hills SPA includes much of the eastern and central areas of the MEA part of this LCA and this designated area supports nationally important populations of hen harrier (*NI Priority Species*) and merlin.

Solar Energy

Within the MEA part of this LCA, there has been no applications for solar energy development. There is very little scope to accommodate solar energy development in the MEA part of this LCA as the landscape is highly sensitive to change due to its exposed and wild character, distinctive summits and the inclusion of the eastern and central areas within the Antrim Hills SPA.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) there were two applications for residential development within the MEA part of this LCA and **since June 2010** there has been no pressure for residential development.

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- Open exposed upland area with distinctive peaks - a landscape that is relatively undeveloped and highly sensitive to change.
- The central and eastern part of this area is within the Antrim Coast and Glens AONB. This designation reflects the high scenic quality of the area.

- The Antrim Hills SPA includes much of the eastern and central areas of the Mid and East Antrim part of this LCA. This SPA was designated as areas within it support nationally important populations of hen harrier and merlin.
- The Mid and East Antrim part of this LCA has a high degree of relative wildness as a result of the open, windswept upland character, extensive semi-natural vegetation and dearth of overt man-made features.
- Overall, this landscape is highly sensitive due to its excellent landscape and scenic quality.

Visual Sensitivity: Key Points

- Open exposed upland area with distinctive peaks which are highly visible in views from the settlements of Cargan and Newtown-Crommelin and southern areas outside of the LCA.
- This area provides an important setting for areas to the south and the settlements of Cargan and Newtown-Crommelin.
- The Mid and East Antrim part of this LCA is very tranquil and has an undeveloped appearance.
- The topography can restrict views into some parts of the Mid and East Antrim part of this LCA from adjacent areas to the north and south.
- This area has excellent landscape and scenic quality which increases the visual sensitivity of this area.

Landscape Value: Key Points

- The central and eastern part of this area is within the Antrim Coast and Glens AONB. This designation reflects the high scenic quality of the area.
- This area is relatively undeveloped and has an unspoilt character. Within the Mid and East Antrim part of this LCA, the distinctive summits are key landscape features in long-range views and these summits have not been impacted by development.
- This scenic area provides an important setting for areas to the south and the settlements of Cargan and Newtown-Crommelin.
- The Antrim Hills SPA includes much of the central and eastern areas of the Mid and East Antrim part of this LCA and the habitat within this designation supports nationally important populations of hen harrier and merlin.
- This area has few archaeological sites, however, there are some historic sites associated with the mining of iron ore and bauxite.
- A quality section of the Ulster Way passes the north-eastern edge of this area and is a significant recreational/tourist route.

Sensitivities and forces for change

Climate Change - blanket bogs on the Antrim Plateau may begin to dry with summer droughts, leading to loss of bogland and increases in dry heath habitats. Drier conditions will make heath and bog more susceptible to fire which will damage biodiversity and scar the landscape.

Dark Skies - Development of all types would bring the potential for artificial lighting into this landscape which is valued as a potential dark sky area that currently experiences little impact from light pollution.

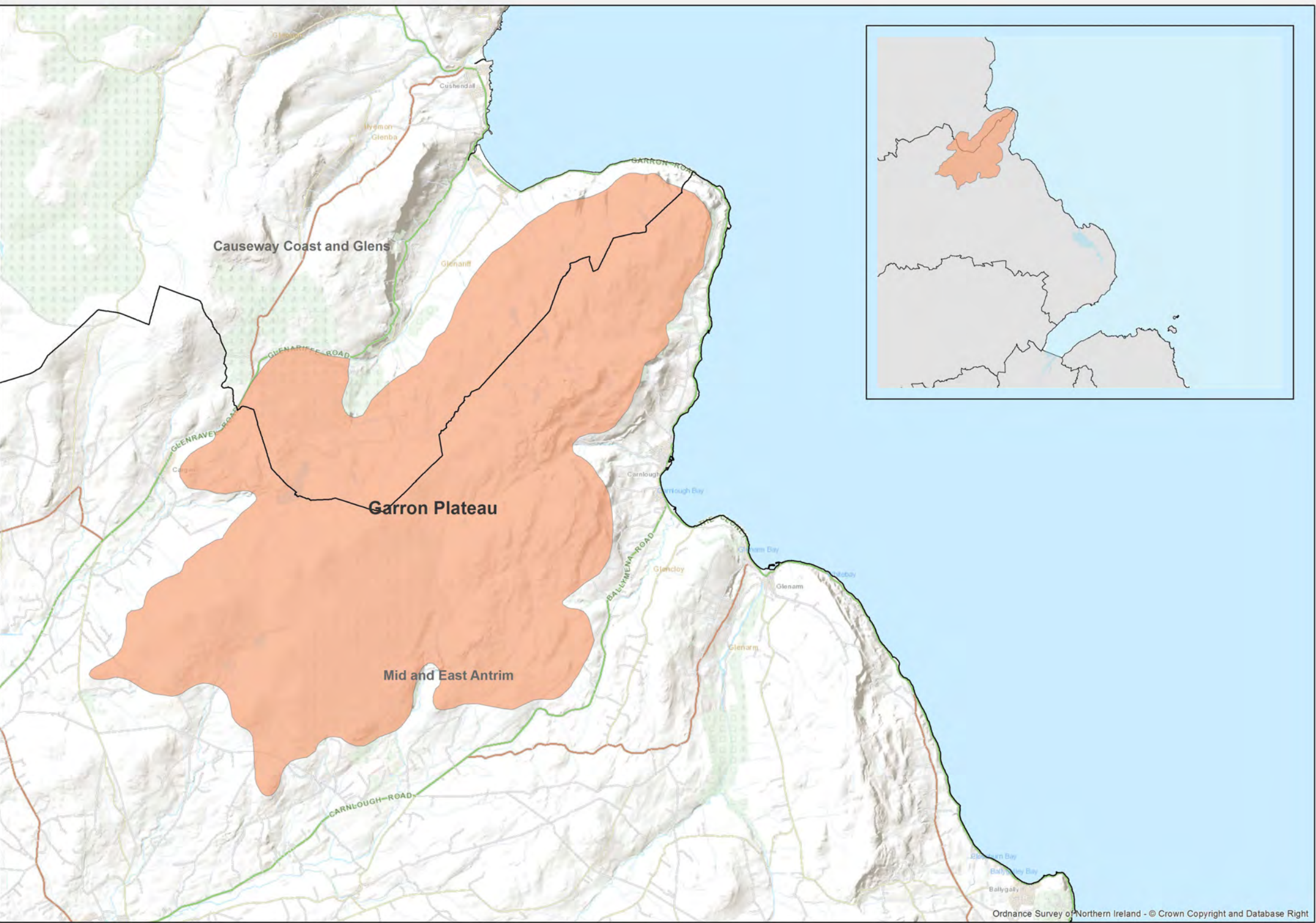
Tall Structures and Energy Infrastructure –sensitivities and forces for change: the tops and summits north of Cargan have a distinctive form, wide visibility and a strong wild character and are sensitive to wind energy development.

Planning and Management Guidelines

- Within MEA any wind development would have a significant adverse impact on this landscape.

LCA 122 - GARRON PLATEAU





Causeway Coast and Glens

Garron Plateau

Mid and East Antrim

Glenam

Cushendall

Hyemore
Glenba

Glenariff

GLENARIFF ROAD

GLENRAVEY ROAD

Carnlough

GARRON ROAD

Carnlough

Portlough Bay

BALENAVA ROAD

Glendoy

Glenam Bay

Portlough Bay

Glenam

Glenam

CARNLOUGH ROAD

Portlough Bay

Ballygally Bay

Ballygally

Key Characteristics – LCA 122

- Open, uneven moorland plateau reaching 438m at Mid Hill.
- Distinctive stepped slope profile with upland loughs, rocky outcrops, steep descents and deeply incised streams.
- Moorland grasses predominate with sheep grazing as the major land use.
- Wind-blown beech trees and stone walls stand silhouetted against the moorland backdrop.
- Heather cover occurs on the summits covering extensive tracts of peat bog.
- Derelict stone cottages.

Landscape Character Description

The Garron Plateau is part of a 'table' of Upper Basalt which stretches from the Central Ballymena Glens (LCA 117) to the coast at Garron Point, where dramatic cliffs with a distinctive stepped profile plunge into the sea. A distinctive landmark is Lurigethan and its Promontory Fort. The area is similar to the Larne Basalt Moorland (LCA 124) in geology, land use and settlement, but its relief is more uneven, with rocky outcrops, deeply incised water courses and steep cliffs. The elevation is higher with summits reaching over 400 m in many places. Carncormick, Mid Hill and Soarns Hill are the highest mountains in the area.

The uneven landform harbours many upland loughs and reservoirs. Extensive sheep grazing predominates on lower slopes, where stone walls divide fields in some places and there are occasional beech trees.

Peat bogs on the more elevated summits support bog communities of heathers, moorland grasses and rushes and small-scale peat cutting is evident here. Glenariff Forest Park is a large area of conifer forest at the head of the famous Glenariff Glen.

There are only a few isolated cottages and barns on the uplands and roads do not penetrate beyond the edge of the plateau. Many of the buildings lie derelict and scattered archaeological features are associated with the plateau fringes. This wild upland area remains largely undisturbed by human intervention, and there are long views from its edges over the surrounding landscapes and the sea.

Seascape Character Description

Southern Glens Coast

The eastern edge of this landscape (LCA 122) has some influence on the seascape character of the Antrim coast. The Southern Glens seascape character area includes the dramatic coastline of

the Larne Glens from Garron Point to the northern edge of Larne and the inshore waters (to the outer extent of the circalittoral zone) of the North Channel. This seascape character area is centred on the sweeping Carnlough Bay backed by the Larne Glens, and key characteristics include the dramatic basalt cliffs and scarp slopes, the prominent Ballygalley Head, coastal settlements with open and exposed headlands and the Coast Road.

There are panoramic views across the extensive North Channel towards Kintyre, Ailsa Craig, Arran and the Rhins of Galloway. Views to adjacent coastal seascape character areas are curtailed by rocky headlands, although there are views to the northern tip of Islandmagee (Gobbins Coast) which is visible to the south of Ballygalley Head and of Larne Lough (Larne Lough Coast) which is visible from Larne town. The Coast Road provides a dramatic experience with views of the exposed headlands, scarp slopes and the North Channel.

Northern Glens Coast (abuts Mid and East Antrim council boundary)

The seascape character area is characterised by a series of dramatic large sweeping bays backed by a series of distinctive glens and surrounding open moorland with panoramic views across the open expanse of the North Channel that, when travelling along the open coastal road, provide a constantly changing visual experience. The sweeping bays, enclosed by broad rocky headlands of varying geology, landform and vegetation, have a prevailing exposed and undeveloped nature.

This seascape character area has a dramatic and complex geology forming large-scale, steep, east facing slopes that culminate in sea cliffs and vegetated slopes with a considerable degree of slumping. Within the sheltered bays, the shoreline is typically lined with pebbles, boulders and sands.

The coastal settlements of Cushendall, Cushendun and Waterfoot are located within sheltered bays and are popular visitor attractions. There are concentrations of cultural sites around Cushendall and Cushendun including several Medieval coastal churches and graveyards.

Physical Influences

Geodiversity

This LCA lies within the region described as the Antrim Plateau and Glens. This upland area dominated by a series of structural plateaux that dip gently in towards the Lough Neagh Basin. Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape. The plateaux are separated from each other and their frequently dramatic margins are fretted by often fault-guided, steep side glens. The plateaux margins are typically characterised slope failures that range from large rotational landslides to individual blockfalls.

Garron Plateau is part of a 'table' of Upper Basalt which stretches from the Central Ballymena Glens (LCA 117) to the coast at Garron Point, where dramatic cliffs with a distinctive stepped profile plunge into the sea. Varied topography reflects an upland landscape of drift free bedrock,

blanketed in part by a cover of peat. The relief is impacted by rocky outcrops, deeply incised water courses and steep cliffs and summits which reach over 400m in places. The uneven landform harbours many upland loughs and reservoirs.

Black Burn ASSI (overlaps into LCA 123) is the only known extensive, active cave system developed in the Cretaceous age Ulster White Limestones in NI, and this site provides evidence of active dissolution of the Ulster White Limestone underlying the plateau basalts.

Garron Plateau ASSI is the largest area of intact blanket bog in NI. The geological interest of Garron Plateau ASSI centres around a successional sequence of olivine basalts and the presence of a picrate-dolerite plug formation at Trosk which is unique in Ireland.

For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

Upland plateau rising to around 438m AOD at Mid Hill. Carncormick, Mid Hill and Soarns Hill are the highest mountains in the area.

Topography

The plateau is a large scale, sweeping rolling landform without field boundaries. This upland plateau has uneven relief due to rocky outcrops, steep descents and deeply incised stream valleys. The edges of the plateau have a distinctive stepped profile or form rounded knolls and end in dramatic cliffs at the coast.

Biodiversity and Land Cover - Key Characteristics

- Woodlands cover 12% of the LCA, more than the Northern Ireland average of c.8% .
- Almost all the woodland is in coniferous forest planted on former peatland
- Grassland accounts for c. 45% of the land cover, almost all in upland and acid grassland - but percentage of the land cover difficult to ascertain because it grades into peatland.
- One of the most extensive areas in Northern Ireland of blanket peatland generally unaffected by human activity; of national and international significance.

Woodlands

Woodlands cover more than 12% of the LCA, more than the average for Northern Ireland of c.8%. However, except for a few broadleaves in the upper part of Glenariff Glen (outside of Mid and East Antrim), small portions of Longmore Wood (see LCA 117) and of Drummasole woods (see LCA 123), and scattered clumps of mixed hardwoods in the Breckagh headwaters of Cleggan Forest, all the woodland on the plateau is coniferous and State Forest. In Cleggan Forest, Sitka spruce is overwhelmingly dominant. The biodiversity of this forest is low - much lower than the peatland it has replaced.

Grassland and Arable

Grassland accounts for around 45% of the land cover for the whole LCA; however, this percentage is uncertain because marginal and upland acid grassland grades into peatland. The marginal upland grassland is generally of low biodiversity, but at Gortnagory ASSI there is a colony of the nationally rare orchid Irish lady's tresses (*NI Priority Species*) - its only high altitude (upland grassland) site in Northern Ireland. About 5% of the land cover is classed as improved grassland; this occurs principally along the southern and eastern edges of the LCA, but this too is difficult to classify because it overlaps with productive semi-natural grassland on base-rich soils.

Heaths and Bogs

The Garron Plateau SAC (also Garron Plateau ASSI and Ramsar site) is the most extensive area of intact upland blanket bog in Northern Ireland. Blanket bog (*NI Priority Habitat*) is confined in Europe to its north-western margins so that Northern Ireland examples, and particularly those that are relatively undisturbed, are of international importance. The peat bog provides numerous ecosystem services including carbon sequestration and water filtration.

The plateau is a mosaic of raised bogs, between which there are flushed areas, drier and thinner blanket peat, and wet heath and acid grassland. On the steeper slopes of hills within the plateau, peat becomes thinner, dominated by common heather and merges into wet heath (*NI Priority Habitat: upland heathland*); examples include the Mid Hill - Collin Top ridge. There are also examples on the steeper slopes and summits of peat erosion e.g. as on Mid Hill. Peat cutting is not presently a problem in this LCA, largely due to its inaccessibility. In the past, however, there was extensive cutting of peat near the Cranny Water, above Carnlough, for chemical extraction. This has healed, but has left a large area dominated by heather.

There are also oligotrophic lakes in this LCA. Garron Plateau is the only locality for yellow marsh saxifrage (*NI Priority Species*) and bog orchid in Northern Ireland. Bird species associated with the blanket bog include breeding red grouse, golden plover, dunlin, hen harrier (*all NI Priority Species*) and merlin. The site also supports a diversity of scarce insect species.

Wetlands and Lakes

Several types of upland and base poor lakes occur on the plateau. Loughnabrick and Natullig Lough have been classified as type 3 (*NI Priority Habitat: Mesotrophic lakes*) in the Northern Ireland Lake Survey, which are natural lakes, unenriched and rare in Northern Ireland. Loughnatrosk is a mid-altitude lake which contains the rare opposite-leaved pondweed. The marginal lake vegetation around most of the lakes tends to be sparse.

Although there are many rivers rising in the plateau, there are no records of Priority Species; nevertheless, several form the headwaters of salmonid rivers. Dungonnell Reservoir is partially located within the Mid and East Antrim part of this LCA and is supplied by water from the blanket bog on the Garron Plateau.

Nappan Turlough is split between this LCA and LCA 123. This small lake fills and empties in response to ground water levels, is underlain by the Ulster White Limestone Formation. It has no visible inlet or outlet and is commonly dry in summer.

Field Boundaries

There are few or no formal field boundaries or structure within this LCA. Small pockets of rough grazing ground with intermittent stonewalls and post and wire fences can be found on southern fringes of the LCA.

Natural Heritage Conservation Sites – Designations

International Sites

- Antrim Hills Special Protection Area (SPA)
- Garron Plateau RAMSAR
- Garron Plateau Special Area of Conservation (SAC)

National Sites

- Black Burn Area of Special Scientific Interest (ASSI)
- Cleggan Valley ASSI
- Galboly ASSI
- Garron Plateau ASSI
- Gortnagory ASSI

Local Sites

Larne Area Plan 2010

- 47 Craighfad Lough Nature Conservation Site (NCS)
- 50 Drumnasole NCS
- 88 Garron Headland NCS
- 3 Garron Plateau NCS
- 4 Loughan/Binabanan NCS
- 46 Loughnabrick NCS
- 45 Loughnatrosk NCS

Historical and Cultural Influences

Settlements.

There are no settlements within this LCA and any farmsteads and single dwellings in the countryside are limited to the edges of plateau.

Historic Environment

This LCA is largely undeveloped and the visual influence of built elements of the historic environment is limited. However, there is evidence of human intervention, for example, reservoirs,

dwellings and farmsteads located at the edges of the plateau. There is a scheduled monument (circular structure and ancillary features) in the south-western part of the LCA.

Heritage – Defence and Industry

There is a total of 12 industrial heritage sites dispersed across this LCA with a clustering of 3 historic iron ore mining sites positioned on the headland at Garron Point. There are no historic defence sites located within the Mid and East Antrim part of this LCA.

Transport Infrastructure

There are no main transport routes running through this LCA. Dungonnell Road allows access to Dungonnell Reservoir.

Leisure & Recreation

There are many opportunities for hill walking within this LCA and some recreational use of Cleggan Forest occurs, for example, walking or the hosting of special sporting events or educational visits.

Glenariff Forest Park (located within Causeway Coast and Glens Council area) has a unique Waterfall Walkway, other forest trails, a visitor centre with an exhibition hall, shop, and caravan/camping site.

Visual and Sensory Perception

Tranquillity

This upland area is located away from any centres of population and main transport routes and has a strong sense of remoteness and wilderness. Past peat cutting, commercial forest plantations and electricity pylons have adversely impacted tranquillity in some areas, however, the LCA has remained largely undisturbed by human activity.

Views

There are long range views to the north-western and southern edges of this LCA from LCA 117, for example, from the A42 and A43 main transport/tourist routes. There are spectacular views from the A2 Coast Road and Carnlough, of the eastern edge of this LCA where visual interest is created by the varied geology (black basalt contrasting with the white limestone beneath) and exceptional geological features such as the headland at Garron Point and scarp slopes above Carnlough. However, views across the internal part of this LCA (within Mid and East Antrim) tend to be limited to internal access roads due to the elevated position of this LCA compared to surrounding areas.

Landscape Condition and Sensitivity

This LCA has excellent landscape condition overall.

Areas of Scenic Quality

This LCA is located within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB). The AONB is highly valued for its scenic and perceptual qualities. In some areas, however, scenic quality has been affected by blanket afforestation.

NILCA 2000 Assessment

The condition of this landscape, which falls within the Antrim Coast and Glens Area of Outstanding Natural Beauty, contributes to its scenic value. Open moorland is grazed to sustain a diverse vegetation structure, and the presence of peatbog is a valuable asset to habitat of this area. Post and wire fencing on the open moorland is in good condition. The variety of upland habitats (grassland, moorland and moss) is sensitive to large-scale changes in land use, such as the development of commercial forestry.

The open and elevated nature of the landform, which allows long views and exposed skylines, renders it sensitive to vertical elements, such as transmission masts, which would be highly visible. The most sensitive areas occur in the wildest and highest summits where valuable peatland habitats have been designated as the Garron Plateau ASSI in recognition of their scientific value. Two other areas on the eastern side of the plateau have ASSI designations (Blackburn ASSI and Gortnagory ASSI).

Wind Energy Development in NI's Landscapes (2010)

This LCA has a large scale, simple expansive landform and landcover that in theory make at least parts of the area suitable for small scale wind energy development. However, the stepped landforms and rounded knolls around the plateau edges form prominent open skylines that are highly visually sensitive and are the setting for the coastal glens of Glenariff and Glencloy to the east. Parts of the LCA are overlooked from slopes and summits to the north around Glenariff Forest Park, and this too heightens sensitivity.

The areas around Glenariff Forest Park is highly valued for recreation, while the northern reaches of the LCA, as it extends towards the coast, becomes increasingly complex with distinctive upland loughs and rocky outcrops. These factors, together with area's scenic quality and outstanding intact peatland habitats result in high sensitivity over most of the LCA.

Areas of lesser sensitivity occur in the south-west, for example in areas of simple terrain within or close to the extensive coniferous plantation of Cleggan Forest, where recreational access is limited. Here the forestry might help contain visibility and use of existing forestry access tracks could reduce infrastructure impacts on fragile moorland landscapes and habitats.

Overall Sensitivity - HIGH to MEDIUM

Assessment of Development Pressure

Wind Energy

Much of the MEA part of this LCA has experienced no significant pressure for wind energy development. However, there has been some low pressure in the peripheral areas, predominantly along the southern edge. Proposals at all application sites related to the erection of a large-scale (over 15 metres) single wind turbine and there were no applications to increase the height of 'approved' turbines.

Much of the MEA part of this LCA is visually highly sensitive to wind energy development due to the areas' high scenic quality and the high visual exposure of the plateau ridgelines which contribute significantly to the setting of the coastal glens of Glenariff and Glencloy, the Braid River valley and the northern glen of LCA 117. This area is also environmentally highly sensitive due to its exceptional intact peatland habitats. In the south-west of this LCA some areas may have lesser sensitivity to wind energy development, where Cleggan Forest might mitigate the visual impact of wind energy development. However, any impact on the visually exposed plateau edge would be considered inappropriate.

Solar Energy

There have not been any applications for solar energy development in the Mid and East Antrim part of this LCA. This area is environmentally highly sensitive due to the intact peatland habitats and is visually highly sensitive due to the area's high scenic quality and undeveloped character. These factors make much of the Mid and East Antrim part of this LCA highly sensitive to solar farm development.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) the MEA part of this LCA did not experience any significant pressure for residential development apart from a few applications for dwellings at the southern and eastern edge of the LCA.

Since June 2010, there has been limited residential pressure in the MEA part of this LCA apart from a few applications for dwellings at the southern edge of the LCA.

The lack of pressure for residential development in the MEA part of this LCA is indicative of the remote and wild character of this area, where upland moorland and plantation forest predominate and accessibility is limited as public roads do not penetrate beyond the edge of the plateau.

Landscape Sensitivity: Key Points

- This LCA is within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB) which was designated to protect its interesting geological formation, high scenic quality, and rich cultural, natural and built heritage.
- A large part of the western and central areas of this LCA are within the internationally protected Antrim Hills Special Protection Area (SPA) which supports nationally important populations of hen harrier and merlin.
- A large section of this LCA, running south-west to north-east, is within the internationally protected Garron Plateau RAMSAR and Special Area of Conservation (SAC) sites which are designated to protect the blanket bog in this area, which is the largest intact bog in Northern Ireland.
- A large section of this LCA, running south-west to north-east, is within the nationally protected Garron Plateau Area of Special Scientific Interest (ASSI) which is coincident with the RAMSAR and SAC sites and designated to protect the blanket bog and other scientific interests in this area.
- Numerous ASSIs located on the periphery of this LCA are nationally important nature conservation sites and there is a concentration of these sites on the north-eastern edge of the plateau.
- The blanket bog habitat supports numerous NI Priority Habitats and NI Priority Species.
- This landscape has excellent landscape condition overall.
- There has been limited human intervention in this landscape apart from the significant area of plantation forest (Cleggan Forest) and reservoirs and associated infrastructure.
- Damage to the Garron Plateau habitat has reduced capacity for carbon storage, and caused the decline of priority bird species, such as hen harrier and golden plover, and rare plants such as marsh saxifrage. Degradation of this habitat has also impacted upon the quality of drinking water, leading to discolouration and higher treatment costs.

Visual Sensitivity: Key Points

- This LCA is within the Antrim Coast and Glens AONB which was designated, in part, to protect its high scenic quality and natural heritage features. This LCA is an area of upland moorland on a plateau which is exposed and desolate with a wild beauty appreciated by those seeking solitude and tranquillity.
- The distinctive upland loughs, rocky outcrops and outstanding intact peatland habitats contribute to the high scenic quality in this LCA.
- The plateau edges are visually highly sensitive as they form prominent open skylines and contribute significantly to the setting of the coastal glens of Glenariff (within Causeway Coast and Glens Borough Council area) and Glencloy (LCA 123).
- The stepped landform and rounded knolls around the edges of the plateau are key topographical features of this LCA and are visually highly sensitive.

- There are spectacular views from coastal areas and the North Channel of the eastern edge of this LCA where visual interest is created by the ridgelines and varied geology and landform.
- There are long range views to the edge of this LCA from LCA 117, for example from the A42 and A43 which are routes used by tourists and visitors. The edge of the Garron plateau contributes significantly to the setting of the Braid River valley and the northern glen within LCA 117.
- There are open views across this landscape from within this LCA, although such views from public receptors, such as public roads, are limited.
- Areas within, or close to, Cleggan Forest may be less visually sensitive as the plantation forest dominates the landscape in this area and may provide screening which could aid visual integration of certain types of development.

Landscape Value: Key Points

- This LCA is within the Antrim Coast and Glens AONB which was designated to protect its interesting geological formation, high scenic quality, and rich cultural, natural and built heritage. This LCA exposed and desolate character and wild beauty of this landscape is appreciated by those seeking solitude and tranquillity.
- A significant area of the Mid and East Antrim part of this LCA is included within internationally and nationally significant nature conservation sites, for example, Garron Plateau ASSI, Ramsar and SAC.
- The blanket bog in this area is the largest intact bog in Northern Ireland.
- A significant area of the Mid and East Antrim part of this LCA is within the Antrim Hills SPA which supports nationally important populations of hen harrier and merlin and numerous NI Priority habitats and species.
- The Garron Plateau supports carbon sequestration and the supply of drinking water.
- The edges of the plateau contribute significantly to the setting of the Antrim coast and Coast Road, the Glens of Glenariff and Glencloy, the Braid River valley and the northern glen in LCA 117 (which includes the settlements of Cargan, Clough, Martinstown and Newtowncrommelin).
- There are many opportunities for hill walking within this LCA and some recreational use of Cleggan Forest occurs, for example, walking or the hosting of special sporting events.

Sensitivities and Forces for Change

Climate Change – Drier summers and increased incidence of extreme weather events such as drought and adverse winter weather, predicted as a consequence of global climate change, may have a profound impact on blanket bogs through a lowering of the water table, drying of peat, and loss of peat forming plant species such as Sphagnum.

Development - sensitivities and forces for change: Pressure for development in the area appears limited. Some buildings have become derelict and there has been some development of single residential properties on the edges of the plateau. The wild character of the landscape would be sensitive to intrusion by larger more suburban styles of housing.

Planning and Management Guidelines

- much of this exposed and wild landscape is unsuitable for new built development. The restoration of existing small stone dwellings would help conserve these as built features of the landscape.
- new housing development should be avoided in the open upland plateau, be directed towards the edges and should be sympathetic to the scale and style of traditional buildings found in this upland landscape.
- native broadleaved planting and traditional stone walls around new built development would assist in its integration into the landscape.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: Any potential future energy or infrastructure development such as communication masts, wind farms, reservoirs, hydroelectric schemes and roads may result in a direct or indirect loss of blanket bog habitat and have an impact on the open and wild nature of this landscape. As an upland plateau this LCA may come under pressure for larger scales of wind energy development. There is a risk that non-domestic turbines and/ or large numbers of turbines would come to dominate and overwhelm the landscape. Key landscape features are sensitive to the siting of masts or other tall structures.

Planning and Management Guidelines

- wind energy development should be set back from the plateau edges to avoid significant adverse impacts on their undeveloped ridgelines.
- any significant impacts on key views, particularly views from the glens and the coast to the east would be unacceptable.
- this LCA is unlikely to be able to accommodate wind farm development of a significant scale.
- skylining of electricity transmission lines as seen from the surrounding lowlands, should be avoided.
- telecommunications or radio transmission mast should be sited away from prominent topographic features.

Heath and Bogs - sensitivities and forces for change: Potential damage to upland heathland and the decline in its biodiversity.

Planning and Management Guidelines

- Promote membership of environmental schemes through consultation with farmers.
- control grazing intensity on existing heathland to encourage development of heathland and of heather of different ages.
- discourage afforestation.

Wetlands - sensitivities and forces for change: maintain river water quality.

Planning and Management Guidelines

- present farming practices (extensive sheep grazing) should continue as these should not affect water quality.
- forestry operations could lead to damage of water quality, particularly of sediment loads; operations, including planting and felling, need to be aware of their potential threat to water quality and wildlife.

Drainage - sensitivities and forces for change: Drains intercept and divert overland flow to remove water rapidly from the peatland system. All drains affect the water table, causing changes in vegetation. Drainage ditches have caused damage by drying out and eroding the peat. Erosion leads to peat particles in the water, causing discolouration and deterioration in the quality of water supplied to Dungonnell Reservoir. This results in increased reliance on energy and chemicals at Dungonnell Water Treatment Works to produce clean, wholesome drinking water.²⁶

Planning and Management Guidelines

- ensure that wetlands are retained and not lost by drainage, landfill or clearance. Block drainage channels with dams created from peat, timber and plastic to raise the water table and rewet the bog.

Peat Extraction – sensitivities and forces for change: Both domestic peat cutting, and commercial extraction of peat can have significant adverse impacts upon peat bogs and can damage archaeological sites.

Planning and Management Guidelines

- distinctive moorland vegetation cover may be maintained by heather management and avoidance of excessive peat cutting.
- agri environment schemes and sustainable catchment management programmes could potentially support farmers and land managers to retain blanket bogs as carbon and water stores within the landscape.

Burning – sensitivities and forces for change: Inappropriate burning can result in the loss of key plant species, the breakdown of the peat structure, or increased erosion. In the worst cases, re-vegetation of bare peat is prevented by grazing and frequent burning can make the vegetation less diverse.

Planning and Management Guidelines

- no fires should be lit on or close to areas of deep peat, or typical blanket bog vegetation.

Grazing levels – sensitivities and forces for change: Overgrazing is the biggest issue facing blanket bog on the Garron Plateau and most other upland peatland sites in Northern Ireland. A 2010 ASSI condition assessment of Garron Plateau ASSI found it to be in unfavourable condition, primarily as a result of years of overgrazing. Overgrazing and trampling by livestock have resulted in depletion of vegetation and exposure of bare peat which is then susceptible to erosion.

Planning and Management Guidelines

- the maintenance of existing carefully controlled grazing will conserve the extensive moorland vegetation, which is of ecological and landscape value.

Trees, woodlands and forestry – sensitivities and forces for change: Conifer plantations have been a major cause of direct loss of blanket bog and wet heath habitat in Northern Ireland. There may be future pressures to plant large areas of commercial forestry which are subject to clear-felling and replanting regimes. The present plantations retain many straight edges, though other areas have been restructured along more sympathetic lines. Commercial forestry exerts a pressure for change; plantations should be carefully sited to ensure they do not block views or alter the experience of an open and exposed landscape.

Planning and Management Guidelines

- commercial forestry exerts a pressure for change; plantations should be carefully sited to ensure they do not block views or alter the experience of an open and exposed landscape.
- removal of non-native species.
- any new conifer plantations or replanting of conifers should contain a native broadleaf buffer zone to protect areas of blanket bog from encroachment by non-native species.

Recreation – sensitivities and forces for change: Walkers on popular walking routes or people using all-terrain vehicles can result in localised habitat loss through trampling and erosion.

Planning and Management Guidelines

- ensure walking routes maintained and are clearly signposted and where there is a requirement for signage or information boards a consistent signage strategy would assist in providing a unified identity to the area.
- develop and promote 'a no trace' programme which strives to build awareness, appreciation and respect for the natural and cultural heritage.

Tranquillity

The deep wild and unspoilt character and tranquillity of this area could be affected by development, consideration should be given to the potential landscape and visual impacts of any form of development, including any cumulative impacts.

²⁶ <http://www.iucn-uk-peatlandprogramme.org>

LCA 123 - LARNE GLENS



Key Characteristics - LCA123

- Incised glens with woodland and smooth ridges rising to stepped moorland summits and opening out towards the Larne coast.
- A backdrop of dramatic basalt cliffs and scarp slopes, often wooded.
- Sweeping sheltered bays with intertidal sand, pebble and boulder beaches, contained by exposed rocky headlands.
- Sheltered traditional coastal settlements with harbours located within flat valley bottoms.
- An open coast road along a raised beach at the foot of the cliffs, marked by a distinctive white limestone and dark basalt sea wall, where headlands and cliffs form a sequence of striking 'gateways'.
- Views of the expansive open sea, with distant views of Scotland.
- Historic gardens and demesnes at Drumnasole House, Garron Point and Glenarm Castle.
- The 'Maidens' light towers, set amongst rocky outcrops in the North Channel, are distinctive features within an otherwise open, expanse of sea.
- Small to medium scale pastures divided by hedgerows or intact stone walls contribute to a strong and robust field pattern.
- Old quarry workings.

Landscape Character Description

The Larne Glens are the deeply incised valleys of the Glencloy and Glenarm Rivers, which extend inland from the coast rising to stepped moorland summits reaching approximately 190m. The settlements of Carnlough and Glenarm are situated on the coast at the mouths of the glens. There are dramatic contrasts in colour and landscape character between the lush, diverse glen landscapes and the exposed uplands of the Larne Basalt Moorland. To the north east of the glens, a narrow coastal strip is backed by the dramatic moorland summits and scarp slopes of the Garron Plateau. In this landscape, the undulating topography shelters numerous farmsteads and fields tend to have a structured pattern and are bounded by stone walls or hedgerows that 'fit' with the landform.

The presence of hedgerow trees as well as deciduous woodland creates a well wooded appearance from within the glens. However, conifer plantations in Glenarm obscure the distinctive field patterns. Old quarry workings produce dramatic features along the steep slopes above Carnlough where the old quarry scars are a distinctive landmark. The scenic character of the glens is reinforced by well managed landscape elements which contribute to a high quality landscape worthy of conservation. It is part of the designated Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB).

Seascape Character Description

Southern Glens

The Southern Glens seascape character area includes the dramatic coastline of the Larne Glens from Garron Point to the northern edge of Larne and the inshore waters (to the outer extent of the circalittoral zone) of the North Channel. This seascape character area is centred on the sweeping Carnlough Bay backed by the Larne Glens, and key characteristics include the dramatic basalt cliffs and scarp slopes, the prominent Ballygalley Head, coastal settlements with open and exposed headlands and the Coast Road.

There are panoramic views across the extensive North Channel towards Kintyre, Ailsa Craig, Arran and the Rhins of Galloway. Views to adjacent coastal seascape character areas are curtailed by rocky headlands, although there are views to the northern tip of Islandmagee (Gobbins Coast) which is visible to the south of Ballygalley Head and of Larne Lough (Larne Lough Coast) which is visible from Larne town. The Coast Road provides a dramatic experience with views of the exposed headlands, scarp slopes and the North Channel.

Northern Glens Coast (abuts MEA council boundary)

This seascape character area is characterised by a series of dramatic large sweeping bays backed by a series of distinctive glens and surrounding open moorland with panoramic views across the open expanse of the North Channel that, when travelling along the open coastal road, provide a constantly changing visual experience. The sweeping bays, enclosed by broad rocky headlands of varying geology, landform and vegetation, have a prevailing exposed and undeveloped nature.

This seascape character area has a dramatic and complex geology forming large-scale, steep, east facing slopes that culminate in sea cliffs and vegetated slopes with a considerable degree of slumping. Within the sheltered bays, the shoreline is typically lined with pebbles, boulders and sand.

The coastal settlements of Cushendall, Cushendun and Waterfoot are located within sheltered bays and are popular visitor attractions. There are concentrations of cultural sites around Cushendall and Cushendun including several medieval coastal churches and graveyards.

Physical Influences

Geodiversity

The LCA lies within the Antrim Plateau and Glens which is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh Basin. The plateaux are separated from each other by fault-guided, steep-sided glens. In general, Cretaceous greensands and limestones or Tertiary basalts rest uncomfortably and in faulted contact with, and on, a range of older Mesozoic rock units.

Coastal slopes below the Garron Plateau comprise large rotational landslides that form a major feature of the Antrim Coast, with many large blocks more than 100m across. Present-day modification is not restricted to slope failure but also includes weathering of the basalt and chalk. An excellent example of modification through weathering can be seen on the seaward side of the Coast Road at Garron Point. In this area, chalk is directly exposed to marine action with the result that several weathering zones can be identified related to their proximity to the sea and weathering forms that are typical of so-called marine karst.

Shoreline sediments are predominantly basalt and chalk boulders with a matrix of sand and clay from debris flows that are moved longshore and offshore. The coast road runs along a series of raised beach platforms and is protected along much of its length by a reflective sea wall. Quarry scars are a distinctive landmark along the steep slopes above Carnlough. There is a working quarry at Glenarm which has adversely impacted on the setting of this settlement.

Altitude range

A transitional landscape with deeply incised glens that rise from the coast to stepped moorland summits reaching approximately 190m AOD.

Topography

Incised glens with smooth ridges rising to stepped moorland summits which provide topographic enclosure. The steep-sided and incised glen valleys open out towards the coast where the slopes below the Garron Plateau are undulating.

Hydrology

The Glencloy River is a narrow river and its estuary is located at Carnlough. The Glenarm River is a wider river (up to 17m in some parts) and passes through Glenarm Forest/Great Deer Park and its estuary is located in Glenarm Bay. Glenarm River has two main tributaries - Linford Water and Owencloghy Water.

Biodiversity and Land Cover Key Characteristics

- Woodlands occupy around 12% of the land cover, more than the NI average of c. 8% .
- Woodland is almost equally divided between coniferous forest and broadleaved/mixed woodland so that the LCA has a relatively high cover of broadleaved/mixed woodland.
- Significant areas of demesne woodland (NI Priority Habitat: Parkland), but also good examples of oakwoods and mixed ashwoods (both NI Priority Habitats).
- Extensive hillside hazel woodlands on basic soils – some of the best examples in NI
- .
- Examples of species-rich grasslands on basic soils – rare in eastern NI.
- Contains a substantial part of the inter-tidal and sub-tidal chalk (*NI Priority Habitat*) that is confined to the north-east coast of NI.

Woodland

Woodlands account for around 12% of the land cover within this LCA which is more than the average for Northern Ireland of c.8%. Coniferous forest is about half of the woodland, most are located within the Glenarm State Forest and take on the form of linear plantations on the slopes above Glenarm demesne.

In Glenarm State Forest, the planting is principally of larch - Japanese, European and hybrid - with some small interspersed compartments of Sitka spruce and others with an intimate broadleaved mixture that includes oak, beech, sycamore and ash. There are several small conifer plantations located within Glenarm Castle historic demesne, principally comprised of larch, Sitka spruce and Norway spruce. Broadleaved and mixed woodland is concentrated in Glenarm, much of it in the demesne (*NI Priority Habitat: Parkland*).

The park woodland is located in the northern part of the glen around the castle, boundary walls and along the main estate roads. Alongside the Glenarm River, between the Forest Service plantations at the southern end of the glen and the castle, there is approx. 5 km of riverine woodland. **Glenarm Woods ASSI** one of the largest semi-natural woodlands remaining in County Antrim. The ASSI consists of several distinct woodland blocks that are connected along the Glenarm River valley and two of its main tributaries (Linford Water and Owencloghy Water).

The woodland is very variable, ranging from acidic, to flushed and base-rich. As a result, it supports a diversity of habitat types and is one of the richest woods for plants in Northern Ireland with a large number of rare species that includes, for example, wood crane's-bill and intermediate wintergreen (*both NI Priority Species*). Along the Owencloghy Water, between Mill Bridge and the State Forest, woodland is dominated by mixed ashwood and there are local areas of wet woodland (*both NI Priority Species*). There are also locally concentrated groupings of oak alongside the main streams (*NI Priority Habitat: Oakwoods*). The woodland in Glenarm glen also is important habitat for important bird and other species, some of which are protected species or NI Priority species.

Outside of Glenarm, the most common woodlands are of hazel. A larger plantation at Straidkilly is divided into four adjoining bands on the hillside - at the lower edge a mixed deciduous/conifer band with sycamore, hazel, elder and larch, followed by bands of larch, Lawson cypress, and lodgepole pine on the upper edge. Despite the planted history, the site has a diverse herb flora. **Straidkilly ASSI** is one of the largest and least disturbed base-rich woodlands in north-east Antrim. It is comprised of a low hazel canopy with occasional rowan and hawthorn and a few standards of ash, goat willow and downy birch scattered throughout. Rare species recorded for the site include juniper (*NI Priority Species*).

Hazel woodlands are extensive in the north of the LCA, particularly on the slopes above Garron Tower (St. Killian's College). The hazel woodlands continue northward around Garron Point, but

as smaller patches, and southward into Drumnasole woods where the hazel canopy gradually merges into the estate woodland (*NI Priority Species: Parkland*). On the slopes of the estate, this woodland is of ash, beech, oak and larch, but with a range of other tree species present. Towards the bottom of the estate, elm, Scots pine, sycamore and beech are dominant. The grounds of St. Killian's College comprise the only other significant parkland (*NI Priority Species*) in the LCA; here fringing woodland is of beech, elm, oak, Scots pine and Corsican pine and some more recent Sitka spruce.

Grassland

Grassland covers c.74% of the LCA, and although nearly four-fifths has been classed as improved grassland, included within that are pastures along the coast on base rich soils derived from basalt-mica schist and basalt-chalk mixed tills. Although quite heavily grazed, these pastures are relatively species rich, especially on the steeper slopes. Areas of rough grazing are relatively rare in the LCA and most are where the border clips marginal hill land at the edge of the plateau. Where these are damp they can be important sites for waders; for example, at the head of the Linford Water curlew (*NI Priority Species*) have been recorded.

At Feystown (*Local Nature Reserve*), careful grazing and cutting regimes have ensured the preservation of a rare remnant of unimproved, herb rich, meadow. During the summer months the abundance of wildflowers attracts many butterflies and key plant species, for example, wood crane's-bill (*NI Priority Species*).

Heaths and Bogs

Apart from small patches of gorse (whin) around old quarries and on short steep slopes, there is no significant heath in the LCA; nor is there any peat bog.

Wetlands and Lakes

There are no significant wetlands in the LCA. Of the rivers draining from the plateau, only the Glenarm River has records of *NI Priority Species* - the otter and the river jelly lichen. However, sections of the Glenarm River and the Linford Water are of particular interest, representing good examples of fast-flowing, oligo-mesotrophic (low in plant nutrients) rivers (*NI Priority Habitat*).

Coastal

Most of the shoreline has boulders, predominantly chalk (*NI Priority Habitat: sub-tidal and intertidal chalk*). Littoral (intertidal zone, but can extend beyond this zone) chalk characteristically lacks species common on hard rocky shores but can support distinct successive zones of algae and animals. Where there are patches of moving shingle, as at Whitebay Point, faunal diversity is poor. Carnlough Bay is the only significant area of sandy shore where the faunal community consists largely of burrowing amphipods (small crustaceans) and polychaetes (marine worms).

Field Boundaries

Small to medium scale patterns of robust stone walls and well-maintained hedges with hedgerow trees which provide enclosure and a distinctive strong landscape structure.

Hedges often provide a reservoir of biodiversity in areas of farmland, which are often of low biodiversity. However, in Glenarm glen fields are generally surrounded by stone walls or post and wire, hedges are limited and there are few hedgerow trees. The mid-valley section of Glencloy with its small fields, does have hedges or boundaries that combine fence and hedge; hawthorn is the most common shrub although gorse and holly are also frequent.

Natural Heritage Conservation Sites – Designations

International Sites

- Proposed East Coast (Northern Ireland) Marine SPA
- Antrim Hills Special Protection Area (SPA) (a small portion of this site is located within this LCA)

National Sites

- Straidkilly Statutory Nature Reserve
- Black Burn ASSI
- Cranny Falls ASSI
- Galboly ASSI
- Glenarm Woods ASSI
- Glenarm Woods (Part 2) ASSI
- Straidkilly Wood ASSI

Local Sites

- Cranny Falls Local Nature Reserve, Carnlough
- Feystown Local Nature Reserve
- Glenarm Local Nature Reserve

Larne Area Plan 2010

List of Nature Conservation Sites (Local):

- 1: Garron Point – Geological
- 2: Garron Escarpment – Birds Plants
- 4: Loughan/Binabanan – Wooded Scarp
- 6: Campbelltown Quarry- plants
- 7: Glencloy Quarry – Plants
- 8: Straidkilly Point – Plants/butterflies
- 9: Straidkilly Nature Reserve - woodland
- 11: Glenarm Demesne - parkland
- 14: Glenarm Forest
- 17: Owencloghy Valley - woodland

- 18: Linford Water – plants
- 49: Doonan Leap – Ground flora typical of Antrim basalts. Species rich with 2 notable species. Amenity value
- 50: Drumnasole – Largest semi-natural wood in Co. Antrim. Hazelwood on a steep basalt escarpment
- 51: Deer Park Woods (Glenarm/Mill Bridge/Linford Water) – Good range of woodland types. Several rare plant species. High landscape value
- 62: Ringfad – Potentially high species diversity. Unusual shore type for East Antrim. Low peninsula of boulders on gravel and stones
- 85: Straidkilly – Shore. Fossiliferous Lias clay
- 86: Glencloy – Beach/fields. Raised beach deposits
- 87: Carnlough – Shore. Late glacial sequence
- 88: Garron Headland – Headland. Landslip feature and block fields
- 89: Garron Point – Shore. Glenarm chalk member – type locality
- 90: Garron Point – Shore. Galboly – Cloghstucan chalk member – type locality
- 91: Garron Point – Shore. Richly fossiliferous Lias clay

Historical and Cultural Influences

Settlements

Glenarm (from Irish Gleann Arma, meaning 'valley of the army') was designated as a village in the Larne Area Plan 2010. Glenarm claims to be the oldest town in Ulster, having been granted a charter in the 12th century, and is located at the mouth of Glenarm glen which is the southernmost glen of the nine Glens of Antrim. The village has a designated Conservation Area and Almore Street leads directly to Glenarm Forest. Glenarm Castle dates from 1750 and had early alterations in the 19th century. The imposing entrance to Glenarm Castle, the Barbican Gate, is at the heart of the village.

Carnlough (from Irish Carnlach, meaning 'place of cairns') was designated as a village in the Larne Area Plan 2010. Carnlough is located at the foot of Glencloy Glen and it has a harbour and a designated Conservation Area.

Historic Environment

Drumnasole House (Registered), Garron Tower (Supplementary) and Glenarm Castle (Registered) are historic parks, gardens and demesnes and associated listed structures are located within this LCA (see below). Other areas have important historic environment features, for example, there are listed (Grade B2) former coastguard cottages and a station at Garron Point, and there is an inscribed stone commemorating the Irish Famine in this area. There is a scheduled Norman motte within the Glencloy Glen (Doonan Fort) and a scheduled mound adjacent Tower Road.

Archaeological excavations at Bay Farm (at Carnlough) have uncovered evidence of Neolithic occupation (around 4000 B.C.) and a Bronze Age settlement dated between 2000 and 1500 B.C. Neolithic people had megalithic tombs in the uplands, while they lived in settlements near the coast. The beaches were sources of flint, as evidenced by stone tool (lithic) production sites in the glens. At Madman's Window (near Glenarm), Neolithic chipping floors and stone axe rough outs were found along with Neolithic pottery, scrapers, flakes, and leaf-shaped arrowheads. At Bay Farm archaeologists found occupation debris, charcoal, postholes, flint cores, axes and Neolithic pottery.

Drumnasole House is a registered Historic Park, Garden and Demesne located adjacent to the A2 Coast Road. Drumnasole House is an early-19th-century house on a heavily wooded site which has planting that is contemporary with the house. Francis Shaw sold the estate to Francis Turnly in 1808. Turnly had amassed a considerable amount of money while in China in the 1790s, and following his return to Ulster in 1801, he bought two estates, one at Drumnasole and another at Cushendall. Drumnasole House is built of basalt from the area. Within the Drumnasole site, Turnly built a schoolhouse in circa 1820 and a descendant built a gate lodge about 1860²⁷.

Garron Tower is a supplementary Historic Park, Garden and Demesne located adjacent to the A2 Coast Road. Garron Tower was built between 1848 and 1850 (listed HB 06/01/27) as a summer residence for the Londonderry family. The position is spectacular, on a plateau above the Co Antrim coast. There is some natural shelter on the west side from steeply rising ground which has been planted with trees. Trees cover the area below the plateau, which drops sharply to the sea. The grounds are adapted for school use and cultivated areas have disappeared. There are notable specimens of Eucalyptus globulus, planted in 1857. Dunmaul scheduled Promontory Fort is within this site and was adapted as a motte, although the site pre-dates the Normans.²⁸

Glenarm Castle is a registered Historic Park, Garden and Demesne located within the Glenarm glen and abutting the village of Glenarm. A remarkable demesne, noted for its great beauty and large extent, occupies much of the lower reaches of the picturesque valley of the Glenarm River, extending some five miles from the sea and about half a mile wide. The original castle, built by the Bysets in the 13th century, was broken down in 1597 and a new castle (HB 06/02/01 A) was begun by Sir Randal 'Arranach' MacDonnell, later 1st Earl of Antrim, from c.1603 on the opposite bank of the river, away from the village.

Since 1993 the property has been in ownership of Randal McDonnell, Viscount Dunluce, son of the 14th earl of Antrim; he has embarked on improvements to the house and parkland, including the walled garden, which is now open to the public in the summer months and boasts a tea room. The Barbican gate lodge has recently been restored by Landmark Trust and is used as a holiday

²⁷ <http://lordbelmontinnorthernireland.blogspot.com/2014/07/drumnasole-house.html>

²⁸ <http://antrimhistory.net/clachan-project/glencloy>

house. Archaeological sites include a medieval church site, a motte or raised rath, McDonnell's private burial ground (not an antiquity), an enclosure and a fort.

Heritage – Defence and Industry

Within this LCA, there are historic flax and corn mill sites and there are 20th Century defensive sites including observation posts at Galboly Lower and Minnis North, and a radar station at Slievebane. There are historic quarrying sites above Carnlough and a working quarry at Glenarm, and at Glenarm there are salmon farm cages close to the shore.

Transport Infrastructure

The A2 Coast Road is a popular tourist route that follows the coastal shoreline. Other main routes rise from the coast up along the sides of the glens. The Feystown Road and Munie Road run through the Glenarm glen, and the A42 Ballymena Road and Ballyvaddy Road run through the Glencloy glen.

Leisure & Recreation

This landscape is valued for its recreation opportunities and is a major tourist destination. The Causeway Coastal Route, which is a major tourist attraction, and a link section of the Ulster Way long distance walking route both follow the coast through this LCA. There are also a number of other walking routes associated with this area.

Examples of leisure/recreation areas:

- A number of car parks and picnic sites are dotted along the open coast road.
- Carnlough and Glenarm Conservation Areas are interesting places to visit and explore along the scenic Causeway Coastal Route.
- This coastal area is popular for sailing. There is a marina at Glenarm and Carnlough has a small harbour.
- Glenarm is a good location for sea fishing where plaice, coalfish, codling, dogfish and conger eels can be caught.
- Glenarm Castle and walled garden are open to the public and is a popular tourist destination.
- This coastal area is on the East Coast Canoe Trail
- Kayaking is possible on the Glenarm River
- Straidkilly Statutory Nature Reserve has informal walking trails and a picnic area with panoramic views across the Irish Sea.

Visual and Sensory Perception

Tranquillity

This is a landscape of contrasts – the remote upper moorland slopes of the glens and the exposed rocky coastline both express a high degree of relative wildness, whereas the glen landscapes are more sheltered and deeply tranquil.

Views

This landscape is highly visible from surrounding slopes and from within this LCA there are elevated and spectacular views of the glens and down their length to the sea. For example, there are views across and down into the Glencloy glen from the Ballymena Road and Galdanagh Road, and there are views across the Glenarm glen from Munie Road and Feystown Road. There are open expansive views across the upland area and of the undeveloped ridges of the glens from Drumcrow Road and Feystown Road, and in some long-distance views Slemish is visible.

From open coastal areas and along the Coast Road, there are memorable long views along the coastline and of the slopes and headlands which contribute significantly to the setting of this landscape. The coastal slopes and cliffs can limit views inland from the Coast Road, however, generally when travelling along the Coast Road, long range views are permitted of the headlands and upper slopes. There are critical views of the quarry at Glenarm from the Coast Road and Feystown Road.

Landscape Condition and Sensitivity

This landscape is in extremely good condition. It has well managed landscape elements, robust stone walls, well maintained hedgerows and a strong landscape structure.

NILCA 2000 Assessment

The landscape of the glens is in extremely good condition with robust stone walls and well-maintained hedgerows, which give the landscape a strong structure. This contributes to its designation as an AONB. The geometric field pattern is softened by a strong network of deciduous woodland, much of which is classified as 'ancient woodland'. The character area holds at least three sites of earth science interest. Sensitivity to change is high due to the existing condition of the landscape and the large number of visitors who come to visit the glens for their scenic beauty and their high visibility, especially where the valley landscapes open out to the coast at Carnlough and Glenarm.

Wind Energy Development in NI's Landscapes (2010)

This landscape is highly sensitive overall. The more open areas nearer the coast offer long coastal views, and although the lower lying areas are relatively well treed they are also overlooked from surrounding higher ground and form a central visual focus within the LCA. Similarly the upper slopes of the glens are of high visual sensitivity, providing an outstanding backdrop and skyline to the valleys. Both these areas are inherently sensitive to wind energy development. The outstanding scenic quality of this landscape and its popularity for visitors and for outdoor recreation increase its sensitivity still further. The very high sensitivity across the whole area indicates that there is limited scope for wind energy development in this LCA.

Overall sensitivity – high

Assessment of Development Pressure

Renewable Energy

Within this LCA, the upper slopes of the glens (south-western areas) have experienced low pressure for wind energy development and many areas have not experienced any pressure, for example Glenarm Forest and areas north and west of Carnlough. All but one of the applications relate to a proposal for a large-scale (over 15 metres) single wind turbine and there have been no applications to increase the height of any 'approved' wind turbine.

The majority of the wind energy applications within this LCA did not receive planning permission which is indicative of the high sensitivity of this landscape. This LCA has a distinctive landscape setting which has high amenity value, provides a setting to the coast and Coast Road and is visually highly sensitive. Within this LCA, features which are extremely vulnerable to adverse impacts from inappropriate development include the glens, open and exposed slopes, undeveloped ridgelines, the coastal shoreline, prominent headlands, important nature conservation sites and the setting of settlements and cultural heritage assets. Overall, this LCA exhibits exceptional scenic quality, has high landscape and visual sensitivity and as a result, there are significant constraints to wind energy development within this LCA.

Solar Energy

There have been no applications for solar energy development in this LCA. The distinctive character and exceptional scenic quality of this LCA, the numerous nature conservation sites, and the importance of this landscape as a draw for tourists and visitors make much of this LCA visually highly sensitive to solar farm development.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) the northern section of this LCA experienced a mix of pressure levels for residential development in the open countryside, with pockets of high pressure around the edges of Carnlough and along the Largy Road and a pocket of medium pressure in the Glenclay glen. In the southern section of this LCA, pressure for residential development in the open countryside was generally lower, with no pressure in the central part of Glenarm glen where Glenarm Forest is located. However, there was a pocket of high pressure on Munie Road and between Carnalbanagh Road and Deerpark Road.

Since June 2010, the northern section of this LCA has generally experienced low pressure for residential development in the open countryside. However, there was a pocket of high pressure between Largy Road and Black Burn and pockets of medium pressure along the Coast Road to the south-east of Carnlough, west of Carnlough and along Ballyvaddy Road to the south of Carnlough. High residential pressure between Largy Road and Black Burn has been the result of applications for farm dwellings with the exception of one application which was for a replacement dwelling.

Since June 2010, the southern section of this LCA has generally experienced low pressure or no pressure for residential development in the open countryside, although there has been medium pressure in areas close to the Dickeytown Road and Feystown Road and in the southern part of Glenarm glen (wider Deerpark Road/Drumcrow Road junction area).

The visual impact of single dwellings in the countryside needs careful consideration in this LCA as the cumulative impact of such dwellings is starting to create a visually cluttered appearance in some localised areas, for example the Largy Road. The cumulative impact of single dwellings and/or the erection poorly sited or badly designed dwellings in this highly sensitive landscape could have significant adverse impacts on the high scenic quality and landscape character of this LCA.

Landscape Sensitivity: Key Points

- This LCA is within the Antrim Coast and Glens area of outstanding natural beauty (AONB) which was designated to protect its interesting geological formation, high scenic quality, and rich cultural, natural and built heritage.
- This LCA is a distinctive coastal landscape with many important landscape features such as deeply incised glens, prominent headlands, undeveloped ridgelines, open and exposed slopes, a coastal shoreline, woodland and cultural heritage assets.
- This LCA has nationally protected Areas of Special Scientific Interest (ASSI) which are sites designated to protect significant nature conservation interests, for example, sites around Garron Point and at Glenarm Woods.
- There is a Statutory Nature Reserve and ASSI designated at Straidkilly Wood.
- The proposed East Coast (Northern Ireland) Marine SPA includes the sea around Carnlough and Glenarm and has been proposed to ensure the water and seafloor habitats are managed to meet the needs of foraging Terns and other seabirds.
- A key characteristic of this LCA is the undeveloped character of headlands, upper slopes, ridgelines and stretches of the Coast Road outside settlements.
- Historic demesnes at Drumnasole House, Garron Tower and Glenarm Castle (extending into Glenarm glen) are important landscape features within this LCA.
- Woodland or tree groups located on the undulating slopes and in the glens are an important characteristic of this LCA.
- Hedgerows or intact stone walls contribute to a strong and robust field pattern.
- The quarry abutting the settlement of Glenarm has adversely impacted on the landscape condition in that area and on the setting of Glenarm. There are scars of past quarrying activity on the slopes above Carnlough and abutting the south-eastern edge of Glenarm.
- Large parts of the Coast Road is protected by 'hard' sea defence infrastructure in the form of revetments.

Visual Sensitivity: Key Points

- This landscape is highly visible from surrounding slopes and from within this LCA there are elevated and spectacular views of the glens and down to the sea.
- From the Coast Road, there are memorable long views along the coastline and of the slopes, ridgelines and headlands.
- There are long range views of undeveloped ridgelines, upper slopes and headlands from the settlements of Carnlough and Glenarm.
- Although some lower-lying areas have significant tree cover which can restrict views inland from the Coast Road, these lower-lying areas can still be readily viewed from public roads on the upper slopes and from some areas within the settlements of Carnlough and Glenarm.
- The glens, undeveloped ridgelines, upper slopes and headlands provide a distinctive and highly scenic setting for the settlements of Carnlough and Glenarm and the Coast Road.
- The undeveloped coastal shoreline and the sheltered bays associated with settlements are highly visible in views along the coast and are key landscape features in this LCA.
- The settings of Carnlough and Glenarm Conservation Areas are visually highly sensitive.
- The settings of Garron Tower (location of a scheduled monument and historic demesne) and the historic demesnes at Drumnasole House and Glenarm Castle (extending into Glenarm glen) are visually highly sensitive.
- The quarry abutting the settlement of Glenarm has had an adverse visual impact on the setting of this settlement. However, the visual impact of this quarry on the LCA, and on views from the Coast Road, is mitigated to an extent by the headlands and woodland in the area.

Landscape Value: Key Points

- This LCA is within the Antrim Coast and Glens AONB which was designated to protect its interesting geological formation, high scenic quality, and rich cultural, natural and built heritage.
- The glens, undeveloped ridgelines, upper slopes and headlands provide a distinctive and highly scenic setting for the settlements of Carnlough and Glenarm and the Coast Road.
- The exceptional scenic quality of this LCA is highly valued by the local community, tourists and visitors.
- The scenic Coast Road is an attraction that draws tourists and visitors to the area. There are a number of car parks and picnic sites dotted along this tourist route.
- Glenarm Castle and Historic Demesne represents an important tourist attraction where visitors can enjoy exploring the castle, walks through the historic walled garden and castle trail and beautiful scenery. Glenarm glen provides an important setting for this key tourist attraction.
- There are numerous important historic environment sites in this LCA, for example, Dunmaul is a scheduled Promontory Fort, there are numerous listed buildings throughout

the LCA, and there are historic demesnes at Drumnasole House, Garron Tower and Glenarm Castle (extending into Glenarm glen).

- This coastal area is popular for sailing and is part of the East Coast Canoe Trail. There are beaches at Carnlough and Glenarm, and there is a marina at Glenarm and a small harbour at Carnlough. Therefore, the coastline and sea in this area are important visual receptors and sites of recreation.
- Glenarm is a good location for sea fishing where plaice, coalfish, codling, dogfish and conger eels can be caught. There are several salmon farm cages close to the shore at Glenarm.
- The internationally protected proposed East Coast (Northern Ireland) Marine SPA includes the sea around Carnlough and Glenarm which is designated to protect the water and seafloor habitats which support foraging Terns and other seabirds.
- There is a Statutory Nature Reserve and ASSI designated at Straidkilly Wood, where visitors can enjoy walks and views across the Irish Sea.
- Numerous ASSIs in this LCA are nationally important nature conservation sites, for example, sites around Garron Point and at Glenarm Woods.

Sensitivities and Forces for Change

Climate Change - Increasing incidence of extreme weather events could lead to more frequent flooding events in this coastal area. Increasing incidence of drier summer conditions may put broadleaf woodland which is characteristic of the glens under increasing pressure. Drier summers could also lead to increasing tourist numbers with an associated potential increase in demand for facilities and accommodation

Development - sensitivities and forces for change: The expansion of settlements such as Carnlough and Glenarm should be carefully controlled to avoid inappropriate urban sprawl into the glens. Linear coastal development should also be avoided. Such patterns of development would adversely impact on the landscape character of this LCA. There is likely to be future pressure for 'second homes' in this popular tourist area.

Planning and Management Guidelines

- new housing, which is designed to reflect the traditional form and finished in white, will enhance existing patterns.
- the expansion of settlements such as Carnlough should be carefully controlled to avoid sprawl up into the valley.
- distinctive villages which are clustered around a harbour are typical of this landscape. Any linear coastal development would have a significant adverse impact on this landscape.

Tourism - sensitivities and forces for change:

Pressure for tourism and recreation development in the area appears limited. However, this may increase with the promotion of the area for leisure and tourism, with increased pressure for holiday accommodation, car parking, and other tourist facilities. This type of development is likely to be best located within existing settlements. The popularity of this area with visitors will bring continued pressure for development and there may be scope to exploit tourism opportunities around Carnlough Harbour, Glenarm Castle and Glenarm marina.

Planning and Management Guidelines

- Car parking for tourism and recreation has the potential to be prominent in the landscape and should be sited to integrate well with the landscape. Existing vegetation can be used to aid integration.
- The siting and design of tourist facilities requires careful consideration in this sensitive landscape; the use of limestone in buildings and surfacing is recommended.
- Where there is a requirement for signage or information boards a consistent signage strategy would assist in providing a unified identity to the area.

Minerals - sensitivities and forces for change:

The area has historically been subjected to quarrying primarily located adjacent to the villages Glenarm and Carnlough. There are scars of past quarrying activity on the slopes above Carnlough and abutting the south-eastern edge of Glenarm. There is a working limestone quarry at Glenarm which has permission for an extension to the site of mineral extraction. Pressure for further expansion of the extraction site is likely to continue beyond the plan period. This has the potential to further impact visually on the area around Glenarm and lead to a post-restoration 'local landscape' which is uncharacteristic of this exceptional landscape and seascape character area.

This landscape would be highly sensitive to intrusion from additional new minerals operations, which would have the potential to disturb the geological features which characterise the area, and appear intrusive from adjacent enclosed landscapes

Planning and Management Guidelines

- Due to the forested and undulating nature of the landscape, a further limited extension of existing quarrying activity could be accommodated if sensitively sited and managed, however such operations may risk disruption to the tranquil upland character of the landscape or important geological/ topographic features.
- Quarrying/ processing operations within the LCA should maintain its current relatively concentrated pattern of development so that extraction industries are not seen to proliferate throughout the LCA with undesirable cumulative effects.
- Strong woodland frameworks around quarrying and processing sites should be implemented to assist with their integration into the landscape.

Trees, woodlands and forestry – sensitivities and forces for change: The middle and upper glen slopes are particularly sensitive to the impact of afforestation; the strong field pattern and transition to open moorland in these areas contributes to the character of the glens.

Planning and Management Guidelines

- further enhance the biodiversity value of demesne/parkland woodland through control of grazing and felling; by encouraging planting of saplings of the standard trees by preventing further loss of parkland; by retention of fallen and veteran trees (particularly for bryophytes, ferns, fungi and fauna)
- encourage control of grazing in broadleaved woodlands, particularly in hillside hazel woodlands, to foster regeneration and if necessary, encourage replanting of 'emergent/standard' species.
- monitor invasive species such as sycamore to ensure that species composition is not damaged, if necessary, consider methods of removal.
- review the effects of hazel coppicing in glenarm and consider adoption in other hazel woodlands
- encourage planting of native broadleaves through appropriate grant schemes, particularly when replacing small coniferous plantations.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: There have been applications for wind energy in this LCA. There is expected to be some low-level future pressure for renewable energy schemes, however, there are many constraints to this type of development within this LCA.

Planning and Management Guidelines

- this LCA has no capacity to accommodate commercial wind energy development due to its very high landscape and visual sensitivity throughout, even community scale wind energy development may be unacceptable in this highly distinctive and valued landscape setting. Single domestic turbines may be acceptable.
- domestic turbines should be closely associated with farmsteads and sheltering woodland and should avoid open, exposed slopes, shorelines, prominent knolls and cultural heritage sites and their settings.
- if offshore wind energy development were to occur along the Antrim coast, there could be effects on this LCA.

Grassland and Arable – sensitivities and forces for change:

There is some evidence of dereliction of pastures, with fields turning to rush and traditional field boundaries of stone and wooded banks in decline. Poor biodiversity of farmland, especially of improved pastures.

Planning and Management Guidelines

- maintain and improve field boundaries especially hedgerows (where they are traditional in the landscape). this may be achieved through adoption of correct cutting cycles; hedge laying and replanting where necessary; leaving saplings uncut to develop into hedgerow trees; avoidance of spraying with fertilizers, slurry, herbicides; provision of wildlife strips and conservation headlands around fields; and limitation of field amalgamation.
- encourage adoption of less intensive management of pastures to allow reversion to more species-rich grassland and protect unsown areas of species-rich grassland; applies particularly to chalk and base-rich grasslands.

Wetlands sensitivities and forces for change: rivers of importance to plant and animal life, including fish and some NI Priority Species.

Planning and Management Guidelines

- protect water quality of rivers through nutrient management and by ensuring low suspended sediment loads.
- promote and encourage existing good farming practices so that streams are not polluted by run-off from agricultural land or seepage from silage pits.
- ensure that forestry operations do not affect nutrient status or sediment loads continued monitoring of streams below quarries monitor streams in relation to expansion of rural/urban housing and associated septic tanks/sewage treatment plants.

Coastal Processes - sensitivities and forces for change: The Antrim Coast is a dynamic environment and the natural coastal processes of erosion and accretion are integral to the sustainability of the sand and gravel beaches along this coastline. The natural functioning of these processes should be safeguarded as generally this will have benefits for biodiversity and ecosystem services. The increasing frequency of flood events in this coastal area could lead to increasing costs associated with maintenance of existing 'hard' coastal defences and pressure for new coastal defence infrastructure.

Planning and Management Guidelines

- strategic approach to shoreline management to address the challenges of marine flooding and erosion: current shoreline management is reactive and poorly structured, and continuation of current practice will lead to coastal degradation and loss of amenity value.

Field Boundaries - sensitivities and forces for change:

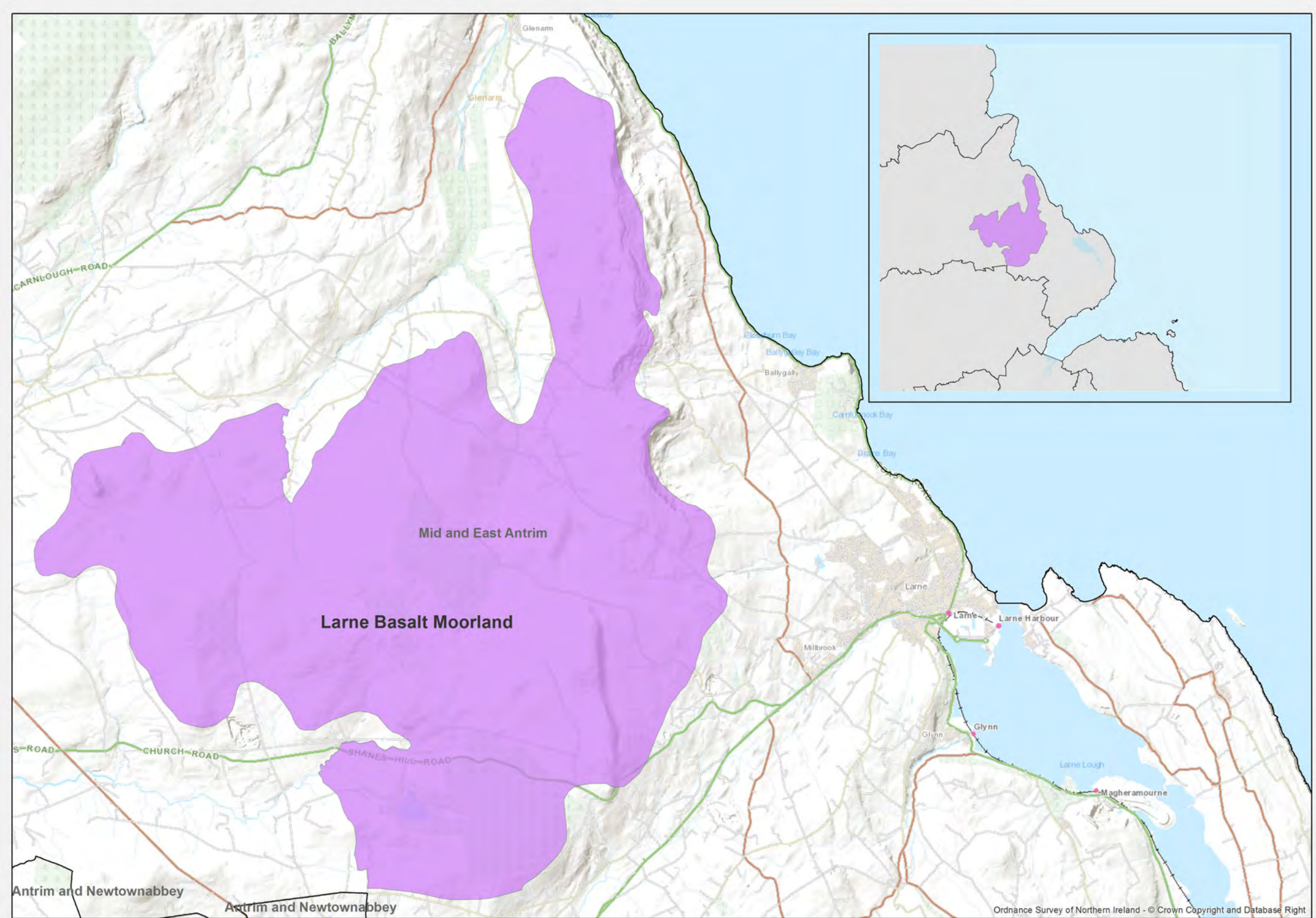
The post-medieval field system in the Antrim Glens is potentially vulnerable to changes in farming practices or insertion of new houses in the countryside. This may erode the tangible time-depth apparent in the glens.

Planning and Management Guidelines

- encourage the retention and maintenance of wooded field boundaries/ hedgerows.
- restore and maintain traditional earth hedge banks in favour of post and wire fencing where possible.
- the reinstatement/inclusion of native woodland planting with new development would assist in reducing its prominence in the landscape.
- environmental initiatives able to support low intensity farming, such as the retention of herb rich meadows and wet meadows would be beneficial.

LCA 124 - LARNE BASALT MOORLAND





Key Characteristics - LCA 124

- Exposed broad, rounded summits reaching between 300 and 400m.
- Bare of vegetation except a covering of tussocky moorland grasses and some scrub.
- Windswept gorse in field boundaries and roadside verges.
- Derelict pastures on the edge of the moor invaded by rushes and gorse and many derelict stone walls reinforced by post and wire fencing.
- Small, isolated stone dwellings.
- Small scale peat cutting.
- Wind turbines and radio masts are prominent vertical elements in some areas.
- Plantation forests (commercial forestry).

Landscape Character Description

This landscape is an exposed broad upland area with distinctive rounded summits. The area extends into a narrower ridge in the north which contributes to the setting of the coastal area to the east. This open and windswept landscape includes the upland summits of Slemish, Douglas Top, Agnew's Hill, as well as Black Hill and Robin Youngs Hill which overlook the rocky coastline to the north-west of Larne. The exposed rounded summits reach a height of between 300 and 400m and the simplicity of the landform draws the eye to the smooth summits. The dramatic rounded cliff of Sallagh Braes to the north west of Larne is the product of a massive landslip and is a notable landscape feature and viewpoint and Knockdhu and Scawt Hill are also significant landscape features in this area.

The hills form prominent landmarks in views from the lowlands and valleys surrounding Ballymena and Larne, particularly in views from the Glenwhirry Valley. Especially prominent is the volcanic plug known as Slemish. This is a large dome of lava which, at a height of 437m, is the highest point in the region and forms a distinctive landmark which is famous for its association with St. Patrick.

The exposed summits are covered by tussocky moorland grasses and, in places, bracken. The highest summits support peat bog with heather cover and there are rough and waterlogged marginal pastures divided by stone walls on the lower slopes. Sheep grazing dominates as the major land use with small scale peat cutting and forestry on the higher ground. Plantation forests (commercial forestry) include Capanagh Forest, Capanagh Forest-Shillanavogy Wood and Ballyboley. Narrow roads cross the moorland and wind around the edges of the summits, allowing good views into the surrounding low-lying farmland. The presence of radio masts on some summits serves to increase their prominence as landmarks in the landscape.

Physical Influences

Geodiversity

This LCA lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh Basin. Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape. The plateaux are separated from each other and their frequently dramatic margins are fretted by often fault-guided, steep-sided glens. The plateaux margins are typically characterised slope failures that range from large rotational landslides to individual blockfalls. The varied topography of this LCA reflects an upland landscape of drift free bedrock, blanketed in part by a cover of peat.

The simplicity of the landform draws the eye to the smooth summits and the hills form prominent landmarks. This upland area includes the summits of Slemish, Douglas Top, Agnew's Hill, Black Hill, Robin Youngs Hill and Scawt Hill. Slemish is a large prominent dome of lava that is located within the Antrim Coast and Glens AONB and, at a height of 437m, is the highest point in the region and forms a distinctive landmark. The dramatic rounded cliff of Sallagh Braes to the north west of Larne is the product of a massive landslip and is included within Knock Dhu Sallagh Braes ASSI.

For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

This upland area ranges between approximately 230m and 437m AOD.

Topography

Slemish at 437m is the highest point in the region. This upland plateau area also includes the exposed smooth rounded summits of Douglas Top, Agnew's Hill, Black Hill, Robin Youngs Hill and Scawt Hill which reach a height of between 300 and 400m.

Biodiversity and Land Cover - Key Characteristics

- Woodlands occupy circa 9% of the LCA (NI average: circa 8%)
- Broadleaved woodland restricted to few small sites on steep slopes
- Improved pasture occupies only around 14% of the land cover (NI average circa 50%) because of the upland nature of the LCA
- Most grassland is rough grazing developed from peatland that has been extensively drained
- Although much peatland has been drained, afforested, cut over or eroded, there are large intact blanket bogs in the LCA.
- Thinner peat grades into upland heath which is a declining NI Priority Habitat
- Headwaters of rivers which are important for Priority Species and salmonid fish

Woodland

Woodlands occupy approx. 9% of LCA (NI average: circa 8%), however, almost all is coniferous State Forest and is dominated by Sitka spruce. Small private coniferous plantations, also of Sitka spruce, are scattered through the LCA. The biodiversity of these forests and plantations is low. The only broadleaved woodlands present within this LCA are confined to stream sides or steep slopes, for example at Sugar Loaf Hill.

Grassland

Improved pasture occupies only around 14% of the land cover (NI average is circa 50%) because of the upland nature of the LCA, and is confined to the lowland edges and stream headwaters. Much of the improved pasture has been 'reclaimed' from peatland – they are sown pastures that are fairly intensively managed and with few hedges, and as a result, the biodiversity of these pastures is low. The vast majority of the grassland has been classed as rough grazing and has been produced through extensive draining of the blanket peat that underlies it. Although modified, these generally species-poor rough grazings, together with patches of bog that are often intermixed, provide habitats for breeding waders such as curlew, lapwing (*both NI Priority Species*) and snipe as well as the Irish Hare (*NI Priority Species*).

Heaths and Bogs

Blanket bog (*NI Priority Habitat*) is extensive across almost the whole of the LCA, however, much of it has been drained to improve the hill grazing and in addition there has been extensive forestry and past cutting. There is a considerable amount of peat erosion on the higher summits, nevertheless, there are some large areas of intact bog e.g. west of Capanagh Wood and between this area and Douglas Top.

South-east of Capanagh Wood, much of Star bog has been cut-over, but there is also intact blanket bog. Generally, the blanket peat is 1-2m deep typically with deer sedge and bog mosses. Over significant parts the peat is thinner and dominated by common heather, bell heather with cotton sedges, heath rush and deer sedge (*Upland Heathland: NI Priority Habitat*). There are no significant features of microtopography within the blanket bogs of this LCA i.e. pool and hummock complexes. The diversity of peatland habitats, including the abundance of heather, provides environments for the red grouse (*NI Priority Species*), which is relatively rare in Northern Ireland uplands. Hand cutting of peat has been common in some locations and machine cutting (compact harvester) has been recorded in the past to the north of Douglas Top.

Past overgrazing has led to the loss of heather and its replacement by coarser grasses and the biodiversity in these areas is relatively low.

Wetlands and Lakes

Killylane Reservoir is mesotrophic (*NI Priority Habitat: Mesotrophic Lakes*) and has been classified as of the Isoetes-Lobellia type (clear water, usually natural lakes, relatively low nutrient status and

low in bases) which is rare in Northern Ireland. Several major rivers have their headwaters in the LCA, including the Kells Water and Glenarm River.

Field Boundaries

This is a windswept, open landscape with little enclosure due to lack of trees and hedgerows and the landscape's high elevation and expansive topography. Where field boundaries are present, they tend to be post-and-wire fences or stone walls.

Natural Heritage Conservation Sites – Designations

International Sites

- Antrim Hills Special Protection Area (SPA)
- National Sites
- Feystown Area of Special Scientific Interest (ASSI)
- Knock Dhu Sallagh Braes ASSI
- Linford ASSI
- Scawt Hill ASSI

Local Sites

Local Nature Reserve

- Feystown (Ulster Wildlife Trust) – Ulster Wildlife Trust's smallest nature reserve described as a pleasant meadow in the Glens of Antrim that is a prime site for wood cranesbill.

Larne Area Plan 2010

Nature Conservation Site (local):

- 13: Sugarloaf Escarpment – Wooded Scarp (also site 58: Woodland – Sugar Loaf)
- 16: Feystown Nature Reserve (Ulster Wildlife) – rare plants
- 19: Scawt Hill Escarpments – plants (also site 92: Geology – Cliff/Hill. Dolerite plug. Chalk contact produced many rare and new skarn type minerals)
- 20: Ballycoos Heath – bog
- 21: Robin Youngs Hill – plants
- 22: Knockdhu Escarpment – plants
- 23: Sallagh Braes Escarpment – plants/birds (also site 93: Cliff. Natural basalt amphitheatre)
- 24: Sallagh Braes Heath – bog
- 26: Owencloghy Bog
- 27: Capanagh Wood - rare birds
- 28: Star Bog – bog
- 29: Agnew's Hill Escarpment – plants (also site 94: Cliff/Hill. Unusual basalt types)
- 41: Ballyboley Forest – forestry/rare birds

Historical and Cultural Influences

Settlements

Feystown: this settlement is designated as a small settlement in the Larne Area Plan 2010 and is located on the north-eastern edge of this LCA.

Historic Environment

There are concentrations of scheduled archaeological sites to the west of Ballyboley Forest and along the eastern edge of this LCA. The most significant concentration of archaeological sites is found within Knockdhu Area of Significant Archaeological Interest (ASAI) as designated within the Larne Area Plan 2010. This ASAI seeks to protect the setting of individual and related monuments in this historic and scenic upland landscape from inappropriate development. Scheduled monuments included within this ASAI include a promontory fort, round cairn, standing stone, two megalithic tombs, a headless cross and a prehistoric flint quarry. This area is sparsely populated and as a result there are few historic buildings of note, however, there is a B2 listed church at Feystown.

Heritage – Defence and Industry

There are no historic defence sites located within this LCA. Industrial heritage is predominantly located towards the edges of this LCA with bridges representing the majority of historic sites, although there are some historic mining sites.

Killylane Reservoir and associated water treatment plant are located at Ballyboley Forest and supply water for Larne, Ballymena, Ballyclare and parts of Antrim. Ballyboley Forest was first planted in 1957 and supplies raw material for saw mills.

Transport Infrastructure

Many of the public roads running through this LCA are narrow rural roads. Shanes Hill Road runs through the southern section of this LCA and forms part of the main transport network linking Ballymena and Larne.

Leisure & Recreation

The Antrim Hills Way long distance path passes through this LCA along a route between Glenarm and Slemish which includes Black Hill, Scawt Hill, Knockdhu, Robin Young's Hill, Sallagh Braes, Agnew's Hill, Mullaghsandall Road and Shillanavogy Road. The Ulster Way walking path also runs through this LCA incorporating the Antrim Hills Way (between Glenarm and Ballyboley Forest) and Carninard (366m) within Ballyboley Forest.

Ballyboley Forest has some non-waymarked walking trails allowing exploration of this forest on foot. Killylane Reservoir is stocked annually with rainbow trout and attracts many anglers to the area. Walking by the public is permitted in Capanagh Forest. Although there are no facilities for

recreational activities in Ballyboley or Capanagh Forests, special events or activities such as sporting events or educational visits can be arranged through the Garvagh Forest Office recreation manager.

Slemish Mountain is significant landmark within the Council area and attracts tourists and visitors to the area. There are opportunities for recreation at this landmark and there are spectacular views across the surrounding landscape. Slemish has well-defined walking trails, an interpretation and orientation area, a picnic and barbeque area, and there are organised events focused on this landmark and the surrounding area, for example, an organised climb of Slemish on St. Patrick's Day. Rare bird and plant species can be observed at Slemish or in the surrounding area.

The distinctive Shillanavogy Valley adjacent to [Slemish Mountain](#) was used to film Game of Thrones scenes which recreated the Dothraki grasslands and attracts Game of Throne 'enthusiasts'.

Visual and Sensory Perception

Tranquillity

The upper and central parts of this landscape have a wild character due to their openness and remoteness. The dramatic and majestic knolls and cliffs also have relative wildness as a result of their scale and dominance. This sparsely populated area has a low level of built development which results in extensive tranquil areas with 'dark skies' (limited to no artificial lighting), particularly on the plateau.

Views

The hills form prominent landmarks in views from the lowlands and valleys surrounding Ballymena and Larne, particularly in views from the Glenwhirry Valley, and numerous long-distance views across this landscape are available from public roads which cross this moorland and skirt its fringes.

The steep cliffs of Sallagh Braes, Knockdhu and Scawt Hill are notable landscape features and are prominent in views from Ballygalley and public roads within LCA 126. These areas are also prominent in views from within this LCA, for example, in views from Mullaghsandall Road and Feystown Road. From Mullaghsandall Road there are also views of Agnew's Hill, of the wider upland area and across to Islandmagee, Larne Lough and Larne Ridgeland (LCA 127).

Slemish is the highest point in the region and is a significant landmark which is widely visible in views from other LCAs and from within this LCA. For example, there are strong critical views of Slemish from Shillanavogy Road and Glenview Road and longer distance views from Feystown Road. From the top of Slemish there are spectacular views across the surrounding landscape.

Landscape Condition and Sensitivity

Overall, this landscape is in good condition, although there are some areas of derelict pastures and dilapidated stone walls. The summit of Slemish is under significant pressure from trampling due to the number of visitors to the site leading to the loss of some species of flora and their replacement with flora more tolerant of trampling and disturbance.

Areas of Scenic Quality

The scenic quality of this LCA is high. This LCA, with the exception of some southern fringe areas, falls within the Antrim Coast and Glens AONB.

NILCA 2000 Assessment

The moorland landscape is simple in character and in good condition. Derelict pastures and stone walls on the edges of the moor are in a slightly poorer condition. The landscape around Slemish is well maintained and it falls within the Antrim Coast and Glens AONB. The prominent ridge of the Sallagh Braes landslip is designated as an ASSI. The open character and high visibility of the moorland summits renders them highly sensitive to changes in landuse pattern, landcover or vegetation structure.

Scenic quality, AONB status and the popularity of the landscape with visitors also contribute to its sensitivity. The small moorland roads are of a suitable scale and fit with the landform; changes in alignment or status of these roads could destroy the wild moorland character of this landscape.

Wind Energy Development in NI's Landscapes (2010)

This LCA has a large scale, simple landform and land cover that suggest some suitability for wind energy development. However, the outer hills often have a distinctive form and wide visibility; hence they are especially sensitive to wind energy development, whether they lie within the AONB or not. This also applies to the narrow finger of land in the northern part of this LCA which forms an important setting to Glenarm and the coastal landscapes. As in other parts of the Antrim Plateau, areas that can be seen from the coast and coastal glens are of the utmost sensitivity.

The central parts of the LCA have an open plateau landform with simple, uniform land cover and these areas might be less sensitive, particularly where there is some topographic screening and where forestry plantations have already affected the area's landscapes and moorland habitats.

Overall Sensitivity - HIGH to MEDIUM

Assessment of Development Pressure

Renewable Energy

Wind Energy

The central and western sections of this LCA have generally not had pressure for wind energy development, apart from some areas along the western edge of this LCA which have experienced low pressure. The eastern and central-eastern areas have generally experienced low pressure for wind energy with a pocket of medium pressure in an area associated with the south-western edge of the Glenarm glen and a pocket of high pressure east of Agnews Hill.

There has been pressure for wind farm development at Douglas Top (western edge of LCA), in an area east of Agnews Hill and on the ridge of land that runs north from Knockdhu and parallel to the Feystown Road. The pressure for wind farm development has generally been resisted in this LCA, although a wind farm east of Agnews Hill received planning approval.

Within this LCA, the majority of applications for wind energy development related to proposals for large-scale (over 15 metres) wind turbines, and there has been applications to increase the height of turbines at two sites.

Within this LCA, the upland plateau has a large-scale and horizontal form which may make some areas suited to wind energy development, in particular the central plateau areas of the LCA that are away from steep hillsides, distinctive summits and rocky cliffs, and where commercial forestry reduces landscape and visual sensitivity. However, there are some significant constraints to wind energy development in this LCA. The settings of Slemish, Sallagh Braes, Knockdhu (an Area of Significant Archaeological Interest), Scawt Hill, Glenarm headland and areas open to key views from the glens and coast are of the utmost sensitivity. The majority of the southern, western and central areas of this LCA are within the Antrim Hills Special Protection Area (SPA) and there is a designated Area of Special Scientific Interest (ASSI) at Sallagh Braes and Knock Dhu. These important natural heritage conservation sites should be protected from any adverse impacts of development, including wind energy development.

Solar Energy

There have been no applications for solar energy development in this LCA. The high scenic quality of this LCA, its distinctive landscape features, the important nature conservation sites, the wild and open character of many areas, and the significance of parts of this landscape for the settings of Glenarm, Slemish, Knockdhu, Sallagh Braes and Scawt Hill make much of this LCA visually highly sensitive to solar energy development.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) much of this LCA experienced no pressure for residential development in the open countryside. There were a few pockets of low pressure, a pocket of medium pressure along the Mullaghsandall Road and a pocket of high pressure on the eastern edge of the LCA to the south of Mullaghsandall Road.

Since June 2010, the pattern of residential pressure within the open countryside has reflected that experienced between 2003 and June 2010 with the exception that the only pocket of high pressure in this period was on the southern edge of the LCA along the Ardymagh Road. This pocket of high pressure was due to a mix of application types.

Landscape Sensitivity: Key Points

- The majority of this area is covered by the Antrim Hills SPA which supports breeding hen harrier and merlin.
- Knockdhu Area of Significant Archaeological Interest (ASAI), Knockdhu Sallagh Braes ASSI, Linford ASSI and Scawt Hill ASSI are located in the eastern part of this LCA. Therefore, this eastern area is particularly important in regard to historic environment and natural heritage interests.
- The moorland landscape is simple in character and in good condition.
- The summit of Slemish has some important species of flora and is under significant pressure from trampling and disturbance due to the number of visitors to the site. This trampling and disturbance is leading to the loss of some important species of flora.
- Plantation forests have had an impact on the landscape and moorland habitats. The biodiversity of these plantation forests is low.
- This LCA, with the exception of some southern fringe areas, falls within the Antrim Coast and Glens AONB which is highly valued for its scenic and perceptual qualities.
- The upper and central parts of this landscape have a wild character as a result of their open and remote perceptual qualities. The dramatic knolls and cliffs also have relative wildness as a result of their scale and dominance.
- Slemish and associated slopes and ridgelines are undeveloped and their unspoilt character provides a distinctive setting for this landmark.
- The hills and ridgelines associated with the Knockdhu/Sallagh Braes/Scawt Hill area are undeveloped and their unspoilt character provides a distinctive setting for the coastal area.
- The Agnew's Hill area is relatively undeveloped, although single wind turbines have been erected here and there is planning permission for a wind farm in this area.

Visual Sensitivity: Key Points

- This LCA has a large scale, simple landform and the outer hills often have a distinctive form and wide visibility. The open and simple character of the moorland summits renders them highly sensitive to changes in land use pattern, landcover or vegetation structure.
- This LCA, with the exception of some southern fringe areas, falls within the Antrim Coast and Glens AONB which is highly valued for its scenic and perceptual qualities.

- Areas that can be seen from the coast and coastal glens are of the utmost sensitivity, for example, the ridgelines associated with Scawt Hill, Knockdhu and Sallagh Braes. These areas form an important setting to coastal landscapes, coastal settlements and the Coast Road.
- Slemish is a significant landmark which is widely visible in views from other LCAs and from within this LCA. From the top of Slemish there are spectacular views across the surrounding landscape. The associated slopes and ridgelines are undeveloped and this unspoilt character provides a distinctive setting for this landmark. As such, Slemish and associated slopes and ridgelines are highly sensitive to development.
- Agnew's Hill is a prominent feature in the landscape and this area is relatively undeveloped, although single wind turbines have been erected here and there is planning permission for a wind farm in this area. This setting of this prominent hill is likely to be impacted by the cumulative impact of wind energy development if all approved schemes are erected.
- Plantation forests have visually impacted the open and simple character of the landscape.
- The central parts of the LCA have an open plateau landform with a simple, uniform landcover. These areas might be less sensitive to wind energy development, particularly where there is some topographic screening and where forestry plantations have already affected the area's landscape and moorland habitats. However, the open and wild character, simple landform and limited impact of built development in these central parts means that the landscape character is highly sensitive to development.
- The presence of radio masts on some summits serves to increase their prominence.
- Stone wall boundaries are important landscape elements which contribute to the aesthetic qualities of this part of the AONB. However, some stone wall boundaries have fallen into disrepair and have a dilapidated appearance.

Landscape Value: Key Points

- This LCA, with the exception of some southern fringe areas, falls within the Antrim Coast and Glens AONB which is highly valued for its scenic and perceptual qualities.
- The majority of this area is covered by the Antrim Hills SPA which supports breeding hen harrier and merlin.
- Knockdhu Area of Significant Archaeological Interest (ASAI), Knockdhu Sallagh Braes ASSI, Linford ASSI and Scawt Hill ASSI are located in the eastern area part of this LCA. Therefore, this eastern area is particularly important in regard to historic environment and natural heritage interests.
- The narrow finger of land in the northern part of this LCA which includes Scawt Hill, Knockdhu and Sallagh Braes forms an important setting to coastal landscapes, coastal settlements and the Coast Road.
- Slemish Mountain is significant landmark within the Council area and attracts tourists and visitors to the area. There are opportunities for recreation at this landmark and

there are spectacular views across the surrounding landscape. Rare bird and plant species can be observed at Slemish or in the surrounding area.

- The distinctive Shillanavogy Valley was used to film Game of Thrones scenes and attracts Game of Throne 'enthusiasts' to this area.
- The Antrim Hills Way is a route between Glenarm and Slemish and the part of the Ulster Way within this LCA runs between Glenarm and Ballyboley Forest. Both the Antrim Hills Way and Ulster Way routes include Glenarm, Black Hill, Scawt Hill, Knockdhu, Robin Young's Hill, Sallagh Braes and Agnew's Hill. These routes are valued for the dramatic scenery, isolated hills and interesting history.
- The plantation forests have low biodiversity value, however, these forests are a valuable source of timber and provide informal opportunities for recreation such as walking and cycling. More formal activities such as educational visits can be arranged.
- Killylane Reservoir (Ballyboley Forest) provides water for Larne, Ballymena, Ballyclare and parts of Antrim. This reservoir is stocked annually with rainbow trout and attracts many anglers to the area.

Sensitivities and Forces for Change

Climate Change - Blanket bogs may begin to dry with summer droughts, leading to loss of bogland and an increase in dry heath habitats. Drier conditions will make forest, heath and bog more susceptible to fire which will damage biodiversity and scar the landscape. Warmer, drier summers may lead to increasing tourist/visitor numbers to Slemish which could result in increased adverse impacts on flora species through trampling and disturbance.

Dark Skies - Development of all types will bring the potential for additional lighting into this landscape, which is valued as a potential dark sky area with little impact from light pollution.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: As an upland plateau, this LCA may come under pressure for large-scale wind energy development. Such development would risk significant adverse impacts from wind turbines in this predominantly undeveloped landscape and could impact on adjacent smaller-scale LCAs. Prominent topographic features are highly sensitive to the siting of masts or other tall structures.

Single wind turbines have been erected within this LCA and planning permission has been granted for a wind farm in the Agnew's Hill area. Further pressure for wind energy development in the form of single wind turbines or wind farms is likely to occur in this LCA, with any approved schemes having the potential to adversely impact on the character of this area and the AONB. There may be pressure for solar farm development in the future and these schemes have the potential to significantly impact the wild character of this landscape.

Planning and Management Guidelines

- This LCA has some limited capacity for wind energy development in the central plateau areas of the LCA, away from steep hillsides, distinctive summits and rocky cliffs. Commercial forestry may reduce landscape and visual sensitivity to wind energy development and may facilitate access.
- Any wind energy development should be set well back from the plateau edges to help contain their visibility. Particular care should be taken to avoid adverse effects on the settings of Slemish, Sallagh Braes, Knockdhu ASAI, Scawt Hill and the headland at Glenarm. Adverse impacts on distinctive summits should be avoided.
- Special care should be taken to avoid adverse impacts on the wild character, fragile upland habitats, ornithological interests, wealth of archaeological sites and recreational enjoyment of the AONB.

Minerals - sensitivities and forces for change: Pressure is likely to continue for further mineral extraction which abuts the southern edge of this LCA. Expansion of existing development or cumulative effects from multiple developments could significantly affect key landscape characteristics in this area.

Planning and Management Guidelines

- it is important that extension to any existing quarry developments include appropriate landscape treatments to mitigate their landscape and visual effects, sympathetic bunding and tree planting are likely to provide effective mitigations within the landscape.
- phased restorations of quarries would limit the extent of landscape and visual impacts.

Field Boundaries - sensitivities and forces for change: Some stone wall boundaries have fallen into disrepair and have a dilapidated appearance. These features are important landscape elements which contribute to the aesthetic qualities of this part of the Antrim Coast and Glens AONB.

Planning and Management Guidelines

- Restore and maintain traditional earth hedge banks and stone walls in favour of post and wire fencing where possible.

Heath and Bogs - sensitivities and forces for change: loss of upland heathland and decline in its biodiversity. Historic peat cutting has now largely ceased, except for small-scale cutting as turbary rights. Past peat cutting has impacted adversely on the integrity and condition of peat bogs in this LCA.

Planning and Management Guidelines

- control grazing intensity on existing heathland to encourage development of heathland and of heather of different ages.
- discourage 'reclamation' to pasture fields around the heathland margins.
- maintain the integrity of intact blanket bogs by for example, preventing fires, new drainage and new peat cutting.
- consider restoration of some bog habitats through appropriate water level management (e.g. damming old drains) and phasing out peat cutting.
- prevent new forest planting on blanket bog.

Wetlands – sensitivities and forces for change: important mesotrophic reservoir and rivers of importance to Priority Species and salmonids.

Planning and Management Guidelines

- protect water quality of lakes and rivers through nutrient management and preventing increase of suspended sediments from peat cutting and forestry operations.

Trees, woodlands and forestry – sensitivities and forces for change: Extensive Forest Service coniferous forests are subject to clear-felling and replanting regimes. Any redesign should restructure forests along lines sympathetic to landscape character and landscape features.

Planning and Management Guidelines

- coniferous forestry should be limited, and not significantly increased beyond the current extents with replacement or softening of existing coniferous plantations with native broadleaves to assist with their landscape integration.
- encourage control of grazing in broadleaved woodlands to foster regeneration and if necessary, encourage replanting of canopy species.
- discourage further clearance of broadleaved woodland
- encourage planting of broadleaved plantations (through appropriate grant schemes) rather than conifer plantations which are of poor biodiversity and landscape value.
- discourage coniferous forest planting.

Tourism – sensitivities and forces for change: Slemish is a popular tourist/visitor attraction. An increase in popularity of this attraction could lead to pressure for further facilities and exacerbate the impact of disturbance and trampling on some species of flora in this area.

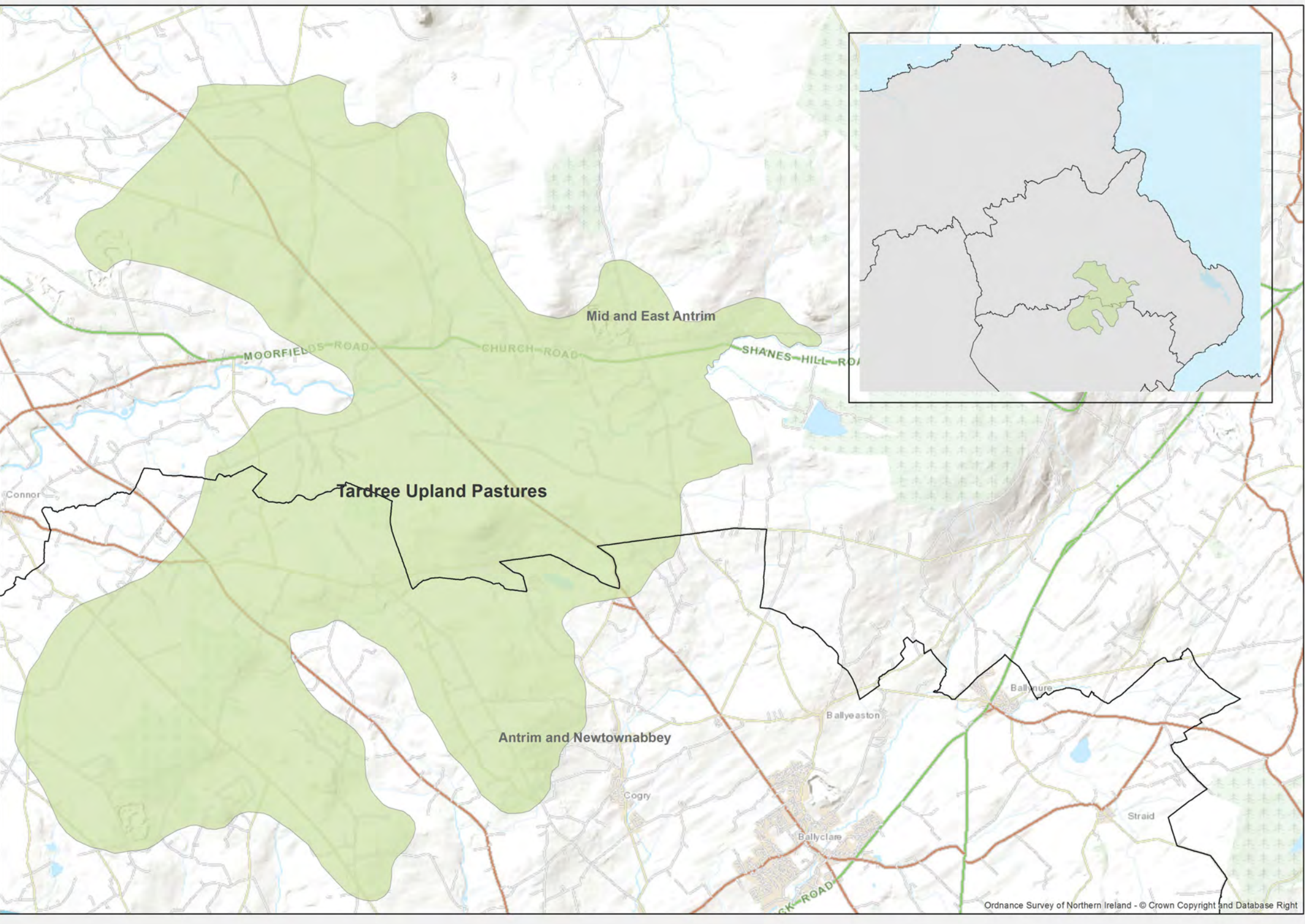
Planning and Management Guidelines

- ensure paths are well maintained and signposted.

- the siting and design of tourist facilities requires careful consideration in this sensitive landscape. Any tourism related development should be small scale and be of a design sympathetic to traditional buildings found in this area.
- areas of car parking should be sited to integrate suitably within the landscape and utilise existing vegetation where the opportunity permits.
- where there is a requirement for signage or information boards a consistent approach to signage would assist in providing a unified identity to the area.

LCA 125 - TARDEE UPLAND PASTURES





Key Characteristics - LCA 125

- Extensive upland plateau of marginal pastures, rising to 353m at Big Collin.
- Poorly drained grassland has extensive, rushy wet flushes and encroaching heather.
- Field boundaries of well-maintained stone walls or simple, unobtrusive post and wire fencing.
- Straight roads and electricity pylons cross the landscape, cutting straight paths at an angle to the grain of the landscape.
- Scattered single dwellings, with linear development in the Glenwhirry Valley along Church Road and Glenhead Road.
- Quarries are located in the north of this LCA.

Landscape Character Description

The landscape in this area is a medium scale upland fringe area of the Antrim Plateau. This LCA is found on broad, rounded summits of upper basalt and is a transitional landscape, with characteristics of both upland moorland and lowland farmland. The landscape includes an extensive upland plateau of marginal pastures, rising to 353m at Big Collin. The topography of the area is undulating and ridges have a smooth stepped profile with some rocky outcrops or crags. The Glenwhirry valley is a broad, open and shallow valley which cuts through the centre of the LCA and is an important local landscape feature.

Generally, the landscape is relatively open, however in some areas, localised enclosure is created by the topography and roadside trees. Marginal pastures, shelterbelts and poorly drained grassland and heather create a highly textured landscape divided by a strong pattern of stone walls and hedges. There are commercial coniferous forests in the Tobernaven Hill area (outside Mid and East Antrim).

There is a scattered pattern of single dwellings in the countryside with linear development in the Glenwhirry Valley along Church Road and Glenhead Road. Within Mid and East Antrim, this LCA provides a setting for roads, farmsteads and quarries, and telegraph poles appear prevalent in the landscape. The windfarm on the slopes of Big Collin is a local landmark and is prominent in views from vantage points to the north.

Physical Influences

Geodiversity

This LCA lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateau that dip gently in towards the Lough Neagh Basin.

Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape.

The Tardree Upland Pastures are found on the broad, rounded summits of upper basalt to the south-west of the Larne Basalt Moorland LCA. This is a transitional landscape, with characteristics of both upland moorland and lowland farmland. The Glenwhirry River runs through the Mid and East Antrim part of this LCA and is a tributary (via the Kells Water) of the River Maine.

For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

The land in the Mid and East Antrim part of the LCA is between 130m AOD and 353m AOD.

Topography

This transitional landscape is medium-scale and is an upland fringe area with undulating hills and ridges rising to 353m AOD at Big Collin. The broad and shallow Glenwhirry valley cuts through the centre of this LCA.

Biodiversity and Land Cover - Key Characteristics

- Extensive plateau slopes with drained, peaty soils covered by coarse grassland.
- Heather moors on some of the higher summits.
- Broadleaved woodland scarce, but coniferous forest (Tardree Forest) dominates the southwest part of the LCA (outside of Mid and East Antrim).
- Lowland occupied by improved pastures, but with damp and very rushy grasslands intermixed.
- Field boundaries in lowlands are poorly managed hedgerows or ditches with post and wire fencing.

Woodlands

Woodlands occupy 3% of the LCA with coniferous forest comprising almost all of this woodland, however this woodland predominantly lies beyond the Mid and East Antrim council boundary. Tardree State Forest is located in the south-west of the LCA and outside of the Mid and East Antrim boundary. Small patches of mature conifer planting are common on the hill slopes in this part of Antrim, but in this LCA there are only one or two on the north slopes of Big Collin - almost entirely Sitka spruce. Broadleaved and mixed woodland is scarce in this LCA.

Grassland and Arable

Grasslands account for over 80% of the LCA with improved grasslands comprising more than half. However, the improved grasslands are variable. In the flat valley floor of the Glenwhirry River, damp rough grasslands are widespread, but those intermixed improved grasslands that have not been managed well have become infested with rushes. On the slopes, unless well managed, pasture fields merge gradually into rough grassland. These damp rough grasslands dominate

many of the slopes and low plateau surfaces of this LCA; the thin peat has been drained over very large areas, especially in the north. Breeding waders such as lapwing, curlew, redshank (*all NI Priority Species*) and snipe have been recorded on these extensive open slopes, as has the Irish Hare (*NI Priority Species*).

Heaths and Bogs

Although uplands are extensive in this LCA, there is little deep peat - one small patch of cut-over bog remains near Black Top. In contrast, peaty soils are extensive. On the summits these peaty soils often have common heather as a major constituent of the vegetation. On the slopes, extensive tracts of thin peat have been drained and are dominated by coarse grasses. Marsh fritillary butterfly (*NI Priority Species*) has been recorded from these upland thin peats.

Wetlands and Lakes

Within the LCA open standing water is confined to small reservoirs – Tildarg Dam and the smaller Breckenhill Dam (both outside Mid and East Antrim boundary).

Field Boundaries

Within this LCA, field boundaries can consist of stone walls (well-maintained or dilapidated), hedges or simple unobtrusive post-and-wire fencing. At lower altitudes field boundaries are predominantly hedgerows which are generally poorly maintained. In other lowland areas, hedges are absent and field boundaries tend to consist of ditches with post-and-wire fencing.

Natural Heritage Conservation Sites – Designations

International Sites

- Antrim Hills Special Protection Area (SPA) – only a relatively small area of this SPA is located within the north-eastern part of this LCA.

National Sites

- No designations

Local Sites

- No formal designations

Historical and Cultural Influences

Settlements

There are no designated settlements located within this LCA.

Historic Environment

There are archaeological sites scattered throughout this LCA. There are eight scheduled sites including early-Christian raths and cairns (a human-made stack of stones). Within Mid and East Antrim, there are few listed buildings and no historic parks, gardens or demesnes.

Heritage – Defence and Industry

There is only one significant historic defence site recorded – a training area at Big Collin. The industrial heritage associated with this LCA is concentrated along the Glenwhirry Valley in the area around Church Road and Moorfields Road. In these areas, historic sites include sites of bridges, beetling mills, corn mills and flax mills.

Transport Infrastructure

The main transport routes between Broughshane and Ballyclare (Collin Road/Rathkeel Road) and between Ballymena and Larne (Church Road/Moorfields Road) pass through this LCA.

Leisure & Recreation

Within Mid and East Antrim, there are no significant formal opportunities for recreation. However, fishing occurs along the Kells Water and Glenwhirry River. Outside of Mid and East Antrim, Tardree Forest is valued for recreation with designated picnic areas and viewpoints.

Visual and Sensory Perception

Tranquillity

This is a rural landscape which has a high degree of tranquillity away from the main transport routes. The upland ridges with their rougher vegetation and more exposed aspect express relative wildness in places. In this LCA, man-made infrastructure such as main roads, pylons, quarries and a wind farm at Big Collin adversely impact on tranquillity.

Views

There are long open views across this landscape from the surrounding main ridges and there are views across the open Glenwhirry Valley, for example, from Church Road (A36), Collin Road and Carnlea Road North.

The uplands in this LCA form an important and prominent skyline setting for the Glenwhirry valley and Slemish. There are long critical views of these upland areas and Slemish from the Collin Road area, and there are also views of Slemish and the surrounding area from Ballynulto Road, Deerfin Road and Rathkeel Road. A windfarm on the slopes of Big Collin is readily visible from surrounding areas, for example, in views from Ballynulto Road and Church Road (A36).

Landscape Condition and Sensitivity

The condition of this landscape varies. In some areas stone wall enclosures are intact and well maintained but elsewhere stone walls are in disrepair and collapsing. In places the landscape is degraded due to quarries, electricity pylons and prominent development.

Areas of Scenic Quality

Some relatively small areas in the north-eastern part of this LCA are included within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB). This area was designated due to its interesting geological formation and rich cultural, natural and built heritage assets. The AONB designation is indicative of the scenic quality of the landscape and the area around Slemish is included within the AONB.

NILCA 2000 Assessment

The condition of the landscape varies, in some areas there are intact stone walls and well-maintained fencing, but elsewhere it is degraded due to the presence of quarries, electricity pylons and prominent development. Relatively low grazing pressures ensure that a variety of habitats are supported. The landscape is fairly sensitive to change due to its relatively elevated position and the long, open views from surrounding ridges.

The summits are most sensitive to built development and it would be particularly conspicuous on the slopes of Big Collin, Donegore Hill (Antrim and Newtownabbey District Council (ANDC)) and Drumdarragh Hill (ANDC) which form a prominent ridgeline in the landscape. The south-facing slopes of these hills form part of the landscape setting to the town of Antrim and the field patterns are a distinctive component of views from the M2.

Wind Energy Development in NI's Landscapes (2010)

The visually exposed character of this LCA suggests some sensitivity to wind energy development. The southern slopes form a setting to Antrim and are particularly visible from the M2, while the northern slopes and ridges protrude into the lower lying landscape of the Ballymena Farmland (LCA 116) and form part of the Antrim Coast and Glens AONB. Scenic quality in these areas is also relatively good.

However, there are some locations in the central and southern parts of the LCA, where the ridges have a smooth profile, visibility is reduced by dips in the landform or by forestry, and the landscape has already been affected by man-made influences. In these areas landscape sensitivity might be less.

Overall sensitivity – medium

Assessment of Development Pressure

Renewable Energy

Wind Energy

The MEA part of this LCA has experienced medium pressure for wind energy development in areas parallel to the main transport corridors – Church Road/Moorfields Road and Collin Road/Rathkeel Road. Other areas have experienced low pressure, apart from east of Collin Road where high pressure has been experienced in an area adjacent to the border with Antrim and Newtownabbey Borough Council. In this area, there has been no applications for wind energy development in the areas adjacent to the Glenwhirry River.

The majority of applications related to large-scale (over 15 metres) wind turbines and three of these applications related to increasing the height of 'approved' turbines.

This area has experienced pressure for wind farm development in the areas with the highest altitude. Five applications relate to wind farm proposals, four of which are located at Big Collin/Elliots Hill (planning permission granted) and one located to the east of Black Top (in the north of the LCA) for which planning permission was refused. There was an application for a wind farm at Douglas Top (LCA 124) which abuts the north-eastern boundary of this LCA and this proposal did not receive planning permission.

Slemish is a highly sensitive landmark feature within the AONB which is an area of high scenic quality. There are long critical views of Slemish and the surrounding area from Ballynulto Road, Deerfin Road, Rathkeel Road and Collin Road. At Big Collin, the skyline has been interrupted by an existing wind farm.

Solar Energy

Within the MEA part of this LCA, there has been no applications for solar farm development and it may be difficult to accommodate solar farm development due to the exposed character of the landscape and the long open views across it. The upland ridges are widely visible, express relative wildness and are important for the setting of the Glenwhirry Valley. The upland area to the north is important for the setting of Slemish.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21) the MEA part of this LCA experienced a mix of pressure levels for residential development in the open countryside, ranging between no pressure through to high pressure. Pockets of no development pressure were associated with the area around Big Collin and the quarry on the Glenhead Road.

Since June 2010, the MEA part of this LCA has generally experienced low or no pressure for residential development in the open countryside, although three areas have experienced medium pressure and an area on the Ardymagh Road (see LCA 124 for analysis) and an area along the

Deerfin Road have experienced high pressure. The high pressure along the Deerfin Road was a result of applications for farm dwellings, infill dwellings and replacement dwellings.

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- The landscape in this area is an upland fringe area of the Antrim Plateau and has broad, rounded summits. It is a transitional landscape with characteristics of both upland moorland and lowland farmland. The landscape rises to 353m at Big Collin.
- The Glenwhirry valley is a broad, open and shallow valley which cuts through the centre of the LCA and is an important local landscape feature.
- The north-eastern part of this LCA is within the Antrim Coast and Glens AONB, however the AONB covers only a small portion of this LCA.
- There are no ASSIs within the Mid and East Antrim part of this LCA and only a relatively small portion of this LCA is included within the Antrim Hills SPA. There are sites of local nature conservation importance, however these are not formally designated within Mid and East Antrim and need reviewed.
- The condition of the landscape varies, in some areas field boundaries consist of intact stone walls and well-maintained fencing, but elsewhere it is degraded due to the presence of quarries, electricity pylons and prominent development such as wind turbines. At lower altitudes where hedges form the dominant field boundaries, they are generally poorly maintained and field boundary stone walls are in disrepair.
- This is a rural landscape which has a high degree of tranquillity away from main road roads, however, man-made infrastructure and quarries adversely impact tranquillity.

Visual Sensitivity: Key Points

- The northern slopes and ridges protrude into the lower lying landscape of the Ballymena Farmland (LCA 116) and form part of the Antrim Coast and Glens AONB. Scenic quality in these areas is relatively good.
- The landscape is visually sensitive due to its relatively elevated position and the long, open views from surrounding ridges and Slemish. The summits are most sensitive to development, although there is a wind farm situated at Big Collin.
- In central parts of the LCA where the ridges have a smooth profile, visibility is reduced by dips in the landform and/or by trees.
- In some areas, the landscape and its' visual quality has been affected by man-made influences such as pylons, quarries and wind turbines.
- There are long distance critical views of the western and southern slopes of Slemish from this LCA and these slopes and foreground are visually sensitive as they provide the setting for this famous landmark.

Landscape Value: Key Points

- This LCA is not considered to be of exceptional landscape quality apart from those areas within the AONB.
- Some relatively small areas in the north-eastern part of this LCA are included within the designated Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB). This AONB was designated due to its interesting geological formation and rich cultural, natural and built heritage assets.
- Slemish is a famous cultural and visual landmark and the northern part of this LCA contributes to the setting of Slemish.
- The Glenwhirry Valley is an important local landscape feature and fishing occurs along the Kells Water and Glenwhirry River.
- The Antrim Hills SPA is a significant natural heritage conservation site. Only a small portion of this site is located within this LCA.
- Degradation of landscape character and quality has occurred as a result of obtrusive development such as quarries, pylons, and wind turbines.

Sensitivities and Forces for Change

Climate Change - Prolonged periods of dry weather or drought could adversely impact the remaining cut-over bog at Black Top. Increasing extreme weather events could also lead to more frequent flooding of the Glenwhirry River.

Development - sensitivities and forces for change: New single houses in the countryside in the area are of varying style and in places prominently positioned in the landscape. There are scattered dwellings with linear development in the Glenwhirry Valley along Church Road and Glenhead Road. Pressure for single dwellings in the countryside is likely to continue in the future with potential adverse impacts on rural character.

Planning and Management Guidelines

- new housing development should be sensitively sited so as not to occupy prominent locations such as hill tops.
- Development which is set back from the roadside and is concentrated in small areas will ensure that ribbon development does not dominate and that scattered housing does not erode the rural character of the landscape.
- housing development within the area should be sympathetic to the small scale and style of traditional buildings found in this upland landscape.
- native broadleaved planting around new built development would assist in its integration into the landscape.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: There is a wind farm at Big Collin and planning permission has been granted for further wind energy development. The visually exposed character of this LCA suggests some sensitivity to commercial energy development. The volcanic plug known as Slemish is an exceptional landmark. Outer summits and fringes are prominent landmarks in views from adjacent lowlands and adjacent character areas. The northern slopes form part of the setting of Slemish and form part of the Antrim Coast and Glens AONB - scenic quality in these areas is high.

Planning and Management Guidelines

- The middle slopes of the ridges in the central and southern parts of this LCA (particularly where there are existing man-made influences) may be better able to accommodate wind energy development than other areas.
- Care should be taken to ensure wind farm development relates well to topography (avoiding rocky knolls, ridge summits and steep slopes) and to field patterns, and to avoid creating visual clutter where turbines are seen in conjunction with pylons. Adverse effects on the settings of and Slemish, settlements, the AONB and cultural heritage sites should be avoided.
- Domestic wind energy development should avoid open prominent sites and should show a close relationship with existing buildings and tree groups.

Transport: sensitivities and forces for change: Main transport routes such as Church Road and Moorfields Road pass through this LCA. Any upgrades to such roads could impact on landscape character.

Planning and Management Guidelines

- Maintain the small-scale rural character of the existing road network through limiting urbanising features such as concrete kerbing, road paint, lighting, signage.

Minerals: sensitivities and forces for change: Quarrying is an intrusive feature of the landscape, towards Church Road and on the north eastern edge of this character area. Any expansion of mineral operations would have an adverse effect on landscape character.

Planning and Management Guidelines

- quarrying/ processing operations within the LCA should maintain its current relatively concentrated pattern of development so that extraction industries are not seen to proliferate throughout the LCA with undesirable cumulative effects.
- strong woodland frameworks around quarrying and processing sites should be implemented to assist with their integration into the landscape.
- potential impacts to the landscape character and views from the wider area should be considered with new minerals applications or the extension of existing consents. Impacts

to landscape character and visual amenity can be limited when operations take advantage of the available topographic screening in this area, supplemented by new woodland planting.

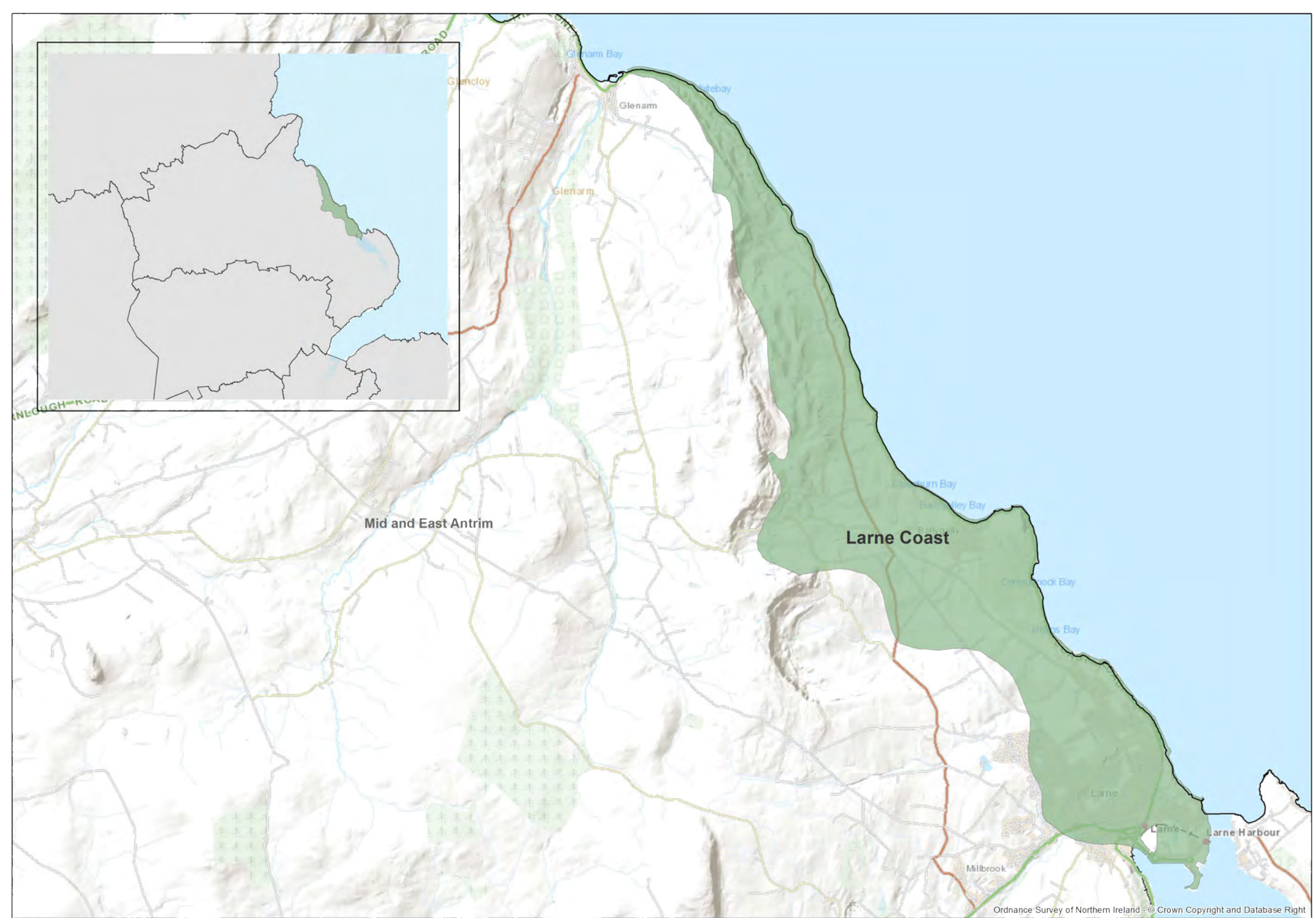
Heath and Bogs - sensitivities and forces for change: One small patch of cut-over bog remains at Black Top. Generally, historic peat cutting has now largely ceased except for small-scale cutting as turbary rights.

Planning and Management Guidelines

- Peat cutting on a small scale scattered across the area would be less damaging than its concentration in one area.

LCA 126 - LARNE COAST





Key Characteristics - LCA 126

- Rough, highly contoured pasture fringed by a rocky shoreline.
- Basalt headlands and cliffs create a sequence of striking 'gateways'.
- Sparse scrubby landcover, exposed rocks and stone walls.
- Small wooded glens on steep slopes of basalt uplands.
- Coastal settlements (Ballygalley and Larne).
- Larne has a prominent dockland area.
- Expansive seaward views.

Landscape Character Description

The Larne Coast is an undulating lowland to the east of the Larne Basalt Moorland. To the north of Ballygalley, the lowland forms a narrow strip between the steep slopes of the basalt uplands to the west and the coast. To the south, the coastal lowlands broaden to form an attractive, undulating landscape which extends from Carncastle to the town of Larne at the mouth of Larne Lough. The dramatic Coast Road is confined to a narrow platform (a raised beach) which hugs the coastline and this coastal route has superb seaward views. The steep, stepped basalt cliffs and rocky headlands provide a sequence of 'gateways' along the coast, framing views and lending an air of anticipation.

Immediately adjacent to the coast is a steep, rugged belt of rough pasture with wind-sculpted vegetation and partially derelict stone walls. The coastline is renowned for its landslips and the Coast Road shows signs of frequent repair. Inland, the lowlands are backed by the steep slopes of the Larne Basalt Moorland which have an attractive pattern of stone walls and narrow, wooded glens. The circular cliffs of Sallagh Braes are a dramatic landmark to the south. Farmsteads nestle in sheltered sites towards the foot of the slopes and the village of Carncastle is a local focus for routes inland from the Coast Road. The area has significant archaeological interest along the upland margins, for example, various scheduled mottes, historic tombs and ecclesiastical sites. Larne is a major town within this area with a prominent dock area, a ferry port and a peripheral fringe of housing which extends onto the uplands above the town.

Ballygalley is sited beneath Ballygalley Head and has a compact and contained form. Individual dwellings, recreation sites, car parks and tourist developments, are scattered sporadically along the A2 Coast Road and detract from the wild, windswept character of the coastal strip.

Seascape Character Description

Southern Glens Coast

The Southern Glens seascape character area includes the dramatic coastline of the Larne Glens from Garron Point to the northern edge of Larne and the inshore waters (to the outer extent of the circalittoral zone) of the North Channel. This seascape character area is centred on the

sweeping Carnlough Bay backed by the Larne Glens, and key characteristics include the dramatic basalt cliffs and scarp slopes, the prominent Ballygalley Head, coastal settlements with open and exposed headlands and the Coast Road.

There are panoramic views across the extensive North Channel towards Kintyre, Ailsa Craig, Arran and the Rhins of Galloway. Views to adjacent coastal seascape character areas are curtailed by rocky headlands, although there are views to the northern tip of Islandmagee (Gobbins Coast) which is visible to the south of Ballygalley Head and of Larne Lough (Larne Lough Coast) which is visible from Larne town. The Coast Road provides a dramatic experience with views of the exposed headlands, scarp slopes and the North Channel.

Gobbins Coast

The Gobbins Seascape Character Area is focused on the eastern and northern coast of the Islandmagee peninsula and includes the coastal edges of the towns of Larne and Whitehead. There are critical views of Larne Lough and the busy shipping lanes of the North Channel, and there are long distance views along the coast from the open cliff tops of Islandmagee. On the Islandmagee peninsula the low rising hills with a distinctive pattern of regular hedgerows forms a contrasting backdrop to the exposed cliffs and open sea.

Larne Lough

The Larne Lough Seascape Character Area includes the port and industrial/commercial areas in the south east of Larne town and extends around the Lough down to the northern edge of Whitehead. Larne town has an important influence on the setting of Larne Lough. A series of hills on the western side of the Lough and the low rising hills of Islandmagee, with their regular pattern of hedgerows, are important to the contained setting of the Lough. Within the seascape character area, views of the North Channel are largely limited to vantage points in the Ballylumford area and on the south-eastern edge of Larne town.

Physical Influences

Geodiversity

This LCA lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh Basin. Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape. The plateaux are separated from each other and their frequently dramatic margins are fretted by often fault-guided, steep-sided glens. The plateaux margins are typically characterised slope failures that range from large rotational landslides to individual blockfalls.

The Larne Coast is an undulating lowland to the east of the Larne Basalt Moorland (LCA 124) with its steep slopes and circular cliffs of Sallagh Braes. The dramatic Coast Road is confined to a

narrow platform (a raised beach), which hugs the coastline, and along this coastline steep, stepped basalt cliffs and rocky headlands provide a sequence of 'gateways'.

The entire northern coastline of the LCA is dominated by an integrated system of landslides and other slope failures operating at a range of scales. In detail it can be seen that small terraces or 'terraces' cut across many of the low angled slopes. These are generally taken to indicate the downward creep of the superficial glacial till that covers many of the lower slopes and/or the Lias clays that underlie it. What appears to be the cliff line is only the front of a series of large, rotated landslides that extend up to half a kilometre inland before the true edge of the plateau is reached. Typically, each landslide consists of an arcuate block of basalt above chalk that has both dropped and rotated backwards. The origin of these failures lies in the structurally weak Lias clays that occur beneath the chalk and basalt, combined with the over-steepening of the coast during the last glaciation and the subsequent disappearance of supporting ice. The coastal margins of these rotated blocks are themselves subject to a range of slope failures, most notably at Minnis North. Minnis is one of the most intensively studied slope failure complexes in the whole of the British Isles.

The Coast Road runs along a series of raised beach platforms that are mainly of late- and post-glacial age and are most prominent at Larne. The Coast Road is protected along much of its length by a reflective sea wall that denies much fresh sediment to the beach and has resulted in the scouring away of beach sediment down to a boulder lag.

For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

The relatively narrow coastal strip rises from the shoreline of the North Channel to approximately 200m AOD.

Topography

To the north of Ballygalley, this lowland area forms a narrow strip between the coast and the steep slopes of the basalt uplands to the west. To the south of Ballygalley, the coastal lowlands broaden to form an undulating landscape which extends from Carncastle to the town of Larne at the mouth of Larne Lough. Headlands and cliffs along the coast create a sequence of striking 'gateways'.

Biodiversity and Land Cover - Key Characteristics

- Woodland covers around 4% of the LCA, less than the average for Northern Ireland (c.8%).
- Apart from small private plantations of Sitka spruce and larch, there are no coniferous woods in the LCA.

- The largest woodlands are associated with Carnfunnock historic park, garden and demesne; elsewhere broadleaved woodland restricted to boulder-strewn slopes and small valleys and largely of hazel scrub.
- Improved pastures of low biodiversity account for more than four-fifths of the grassland although the extent of 'improvement' varies, becoming less inland towards the basalt cliffs.
- This and neighbouring coastal LCAs are the only areas of Northern Ireland with species-rich chalk grassland.

Woodland

Woodland covers around 4% of the LCA, less than the average for Northern Ireland (c. 8%). Apart from small private plantations of Sitka spruce and larch, there are no coniferous woods in the LCA. The largest woodlands are associated with Carnfunnock Country Park and Cairndhu House (*NI Priority Habitat: Parkland*); elsewhere woodlands and scrub are largely of hazel.

To the north of Carnfunnock House is Cairndhu (the old Sir Thomas and Lady Dixon Hospital). Parts of the demesne have a great diversity of trees. The northern part is now a golf course where there are several wooded plantations.

Outside of this parkland, woodland is mainly in the northern part of the LCA on the slumping slopes of the basalt, chalk and Lias clays where hazel scrub is dominant. Examples include Tummillis Hill and sheep grazing can often leave the ground bare at these sites. Bailey's Glen is a small rocky ravine with some trees and woodland at Sugar Loaf Hill, which straddles the shared boundary with LCA 124, is mainly hazel scrub and heavily trampled and grazed.

Grassland

Grassland accounts for almost 60% of the land cover of the LCA (NI average is circa 71%) and this relatively low level can be largely explained by the presence of Larne town in this small coastal LCA; built-up land accounts for approximately 20% of the land cover in this LCA. Improved pastures account for more than four-fifths of the grassland although the extent of 'improvement' varies, becoming less inland towards the basalt cliffs. Generally the most improved pastures are of low biodiversity.

This LCA and adjacent coastal LCAs are the only areas in Northern Ireland that have calcareous grassland similar to the chalk of southern England. The 'Little Deer Park' in the extreme north of the LCA consists of a series of disused chalk quarries and undulating chalk banks. The skeletal soils with a high content of chalk fragments provide an ideal location for species-rich grassland that includes the purging flax and many spring-flowering plants. There is very little arable land (includes grass re-seeding) in the LCA.

Despite the lack of hedges and the dominance of improved pastures, the farmland has records of several bird species, including bullfinch, linnet, skylark, song thrush, spotted fly-catcher and reed bunting (*all NI Priority Species*).

Heaths and Bogs

Apart from small patches of gorse on boulder slopes, there are no significant heaths in the LCA. There are no peat bogs within the LCA.

Wetlands and Lakes

There are no significant wetlands, lakes or rivers in the LCA, although the southern border of the LCA abuts Larne Lough.

Coastal

Most of the coast is of boulders, either of basalt or chalk. Generally, apart from more sheltered locations, the furoid flora (seaweed) is patchy, but when the intertidal region is composed of a platform of rough, creviced limestone ridges and rock pools (*NI Priority Habitats: sub-tidal and intertidal chalk*), algal diversity can be rich.

Field Boundaries

Inland pastures are divided by stone walls, which are in a good state of repair, and hedgerows. There is a rugged belt of rough pasture along the coastline with partially derelict stone walls. Hedgerows, which are often the main contributor to biodiversity in areas of improved pasture, are not well developed in many areas of this LCA, and in some areas, have been replaced by post-and-wire fencing.

Natural Heritage Conservation Sites – Designations

International Sites

- Proposed East Coast (Northern Ireland) Marine SPA
- Larne Lough Special Protection Area (SPA)
- Larne Lough Ramsar

National Sites

- Ballygalley Head ASSI
- Knock Dhu Sallagh Braes ASSI
- Larne Lough ASSI
- Little Deer Park ASSI
- Minnis ASSI
- Waterloo ASSI

Local Sites

Larne Area Plan 2010

Nature Conservation Sites (Local):

- 13: Sugarloaf Escarpment – Wooded Scarp
- 16: Whitebay Escarpment
- 19: Scawt Hill Escarpments - plants
- 20: Ballycoos Heath – Bog
- 25: Carnfunnock Wood – Woodland
- 31: Larne Quarry – Plants
- 55: Carnfunnock – Woodland. High Landscape Value
- 58: Sugar Loaf – High Landscape Value
- 78: Curran Point – Shore. Recent raised spit.
- 79: Waterloo – Shore/Cliff. Outstanding Mesozoic sequence – fossil locality.
- 80: Camels Hump – Shoreline. Richly fossiliferous locality.
- 81: Ballygalley Head – Cliff. Dolerite plug with jointing and marginal chalky agglomerate.
- 82: Balleygalley Shore – Shore. Fossiliferous Lias clay.
- 83: Minnis – Shore/Cliff. Fossiliferous Lias clay. Recent landslip.
- 84: Minnis – Glenarm section – Cliff. Section through chalk and clay-with-flints. Paleo-Karst features. Mineralogical interest.
- 92: Scawt Hill – Cliff/Hill. Dolerite plug. Chalk contact produced many rare and new skarn type minerals

Historical and Cultural Influences

Settlements

Larne is designated as a town within the Larne Area Plan 2010. Larne is a major town with a prominent dock area, ferry port and a peripheral fringe of housing which extends onto the uplands above the town. Within Larne settlement development limits, Chaîne Park and Drumalis are two Historic Parks, Gardens and Demesnes (see descriptions below).

Chaîne Park is a registered Historic Park, Garden and Demesne which is open to the public. It lies on a steep slope adjacent to the Larne coastline. The land was donated to the people of Larne in the 1920s and the design and layout date from that time. The site has meandering paths with steps, bedding and seats. There are shelters, grassed areas and streams leading to a pond. Between Chaîne Park and the adjacent Town Park is an early Christian Rath surrounded by railings of 1885, which are recorded (HB 06/08/06) but not listed.

Drumalis is a registered Historic Park, Garden and Demesne and is privately owned. The gardens at Drumalis were developed round the house of 1872 (listed HB 06/08/05). Shelter belts of trees planted around the house have been successful in protecting the gardens, which retains many

original features and is a good example of a late Victorian layout. The house is surrounded by lawns, embanked by balustrading on the western and southern sides. The latter is terraced with good stone work and hedges. Terraces lead to southern sloping lawns where there is a rose garden. The original iron pergolas and supports survive. There is a recently restored rockery, probably once a fernery and a pond. An extension for the convent was built in the grounds c.1960, land was sold in the 1930s and recently more was lost by compulsory purchase, all of which reduced the area of the gardens. The attractive gate lodge on the Glenarm Road is listed (HB 06/08/04). There is an extensive walled garden to the north of the house, which is rented out for use as a nursery garden.

Ballygalley is designated as a village within the Larne Area Plan 2010. This settlement is located on the A2 Coast Road between Larne and Glenarm, located in the Parish of Cairncastle (Cairn of the Castle) which derives its name from the old castle on a rock island near Ballygalley Head. The castle is sometimes referred to as O'Halloran's Castle. The stone ruins were originally built by the Anglo Norman Knight Duncan Fitzgilbert who was given lands here in the early 13th century.

Ballygalley Castle is a classic example of a Scottish baronial house. It was built in 1625 by James Shaw who arrived here in 1606 from Greenock during the Plantation of Ulster. In 1621 a grant was made to him by the Earl of Antrim of land which included one hundred and twenty acres at Carnfunnock and eighty acres at Corkermain and Ballyruther. Today the land at Carnfunnock is part of the well-used Carnfunnock Country Park.

Carncastle is designated as a small settlement within the Larne Area Plan 2010 and is a local focus for routes heading inland from the coast.

Historic Environment

The most significant concentration of archaeological sites is found within Knockdhu Area of Significant Archaeological Interest (ASAI) as designated within the Larne Area Plan 2010. Within this LCA, Knockdhu (from Irish: Cnoc Dubh, meaning "black hill") and an area abutting the north of Knockdhu is included within this ASAI. This ASAI seeks to protect, from inappropriate development, the setting of individual and related monuments in this historic and scenic upland landscape. Scheduled monuments included within this ASAI include a promontory fort, round cairn, standing stone, two megalithic tombs, a headless cross and a prehistoric flint quarry. A rectangular stone enclosure and a settlement site within this LCA are included within the ASAI. There are archaeological sites scattered throughout this LCA. Outside of the ASAI, scheduled historic sites include mottes such as the scheduled Ballyhackett Motte, a raised raths, ecclesiastical sites and prehistoric tombs.

Outside of settlement limits, Historic Parks, Gardens and Demesnes within this LCA include Carnfunnock Country Park and Cairndhu. Following construction of the Coast Road between 1832

and 1842, two residences were built in this area. One house was called 'Carncastle Lodge' (now known as Carnfunnock) and the other was named 'Seaview' (now known as Cairndhu).

Carnfunnock Country Park is a registered Historic Park, Garden and Demesne which is open to the public. This demesne was originally created around Carncastle Lodge, a mid-19th century house which no longer exists but evidence of its style remains in the two ornate listed gate lodges (HB 06/03/03). There is also evidence in the landscape as there is a double shelter belt of mature trees. These protect grazing fields and there is a path among the trees to the highest ground where there is a look-out today and in former times there was a summer house. The Ice House (HB 06/03/05) is in the same area. Walls and gates are also listed (HB 06/03/04). The site was purchased by Larne Borough Council in 1957 and has been developed as a public amenity site since that time. The walled garden was refurbished in 1990 and is fully planted up to a contemporary style. The theme of a 'Time Garden' is followed both in the planting and with differing gnomonic designs displayed on the walls or free-standing to catch the sun. A hornbeam maze was planted in the shape of Northern Ireland for the Year of the Maze in 1991.

Cairndhu is a supplementary Historic Park, Garden and Demesne. Cairndhu was built as a summer residence in 1875 (listed HB 06/03/08) on a beautiful site overlooking the sea, which hitherto had a small amount of planting around a former smaller house called Sea View. The trees that now form an effective shelter belt date from the late 19th century. Gardens were developed around the house with steeply terraced lawns. The grounds rise on a steep slope from sea level, east to west. The productive gardens were to the west side of the house at the most elevated level. Vestiges of these remain and some dilapidated glass houses. There are good specimens of mature trees, shrub planting and lawns. The site includes former stables (listed HB 06/03/09) and a gate lodge, walls and gate (listed HB 06/03/07). The northern end of the grounds is now a golf course which is not included within the designated Historic Park, Garden and Demesne.

There are also Registered Historic Parks and Gardens within Larne Town at Chainé Park and Drumalis (see Larne 'Settlements' section above for descriptions). Within Larne town, and along the coast, Chainé Memorial Tower (B1 listed) and Olderfleet Castle are significant sites. Further north, on the Coast Road, Blackcave Tunnel (B2 listed) is a landmark feature and in Ballygalley, a scheduled Bawn and Walled Garden and a terrace of Coastguard houses (B2 listed) contribute to the character of this coastal settlement.

Heritage – Defence and Industry

Outside of settlement development limits, there are two historic defence sites in the north of the LCA close to Sugarloaf Hill – a radar station and observation post. Historic industrial sites include a flax mill site, limekiln sites and bridges, and Larne harbour is a key industrial site and ferry port.

Transport Infrastructure

The A2 Coast Road is part of the world-renowned Causeway Coastal Route which is popular with tourists and visitors. Main routes running north from Larne and converging at Carncastle include the Ballymullock Road, Brustin Brae Road and Old Glenarm Road (leading on to Weyburn Road). From Carncastle, the Drumnagreagh Road runs north to join the A2 Coast Road in the northern part of the LCA.

Some narrow public roads run from this LCA, in a westerly direction, to give access to the Larne Basalt Moorland (LCA 124), for example Ballycoose Road (leading to Feystown Road) and Dickeystown Road.

Leisure & Recreation

The exceptional character and scenic quality of this landscape attracts tourists and visitors to the area. Within this LCA there are a number of car parks, picnic sites and a Glenarm Coast Walk located along the popular A2 Coast Road, which is a popular tourist route. There are beaches (boulders and sand) at Ballygalley and Drains Bay and these bays are popular for sailing. In Larne town, there is a coastal path which runs from Chaine Memorial Tower to the Coast Road passing Chaine Park.

The Ulster Way and Antrim Hills Way are marketed walking routes which include Scawt Hill, Knockdhu, Robin Young's Hill and Sallagh Braes. The East Coast Canoe Trail highlights Sandy Bay (Larne), Drains Bay (Larne), Tweed's Port (between Larne and Ballygalley) and Ballygalley as embarkation/disembarkation points. East Antrim Boat Club and Larne Boating and Fishing Club are based out of premises on Coastguard Road, Larne. The Coast Road between Larne and Ballygalley is also used for annual running events such as the Larne Half Marathon and such events help bring visitors into the area.

Carnfunnock Country Park covers 191 hectares of mixed woodland, colourful gardens, walking trails and has panoramic views of the Antrim Coast and North Channel. Cairndhu Golf Course is to the north of Cairndhu House (B1 Listed) and associated stables (B2 listed). Cairndhu House which was owned by Sir Thomas and Lady Dixon was donated to the Ministry of Health and Local Government for use as a convalescent home and hospital, however it was closed after funding difficulties and is now a derelict mansion. From the shoreline in Carnfunnock Bay, gannets, fulmars and various species of gull can be seen flying out at sea. The rocky coastline is also home to waders including redshank, curlew (*both NI Priority Species*), oystercatcher, ringed plover and turnstone. During the summer months the bay is also a great place to watch common, Arctic and sandwich terns diving for food. Cairndhu Golf Club is located adjacent to the north of Carnfunnock Country Park and is a key recreational site.

Visual and Sensory Perception

Tranquillity

Outside of Ballygalley and Larne, the coastline is sparsely populated and has an undeveloped appearance. There is a wild and windswept character along the coast and on the upper slopes in the northern and western parts of the LCA. When travelling along the open Coast Road, there is a sense of exposure to the open sea. At night, the lights of coastal settlements contrast with large stretches of dark, undeveloped cliffs.

Views

The dramatic headlands, basalt cliffs and scarp slopes provide a distinctive setting for the coastal area and associated settlements, particularly when viewed from the Coast Road and the sea. When travelling along the Coast Road, the diversity of geology and landforms provide constantly changing views of dramatic coastal scenery and expansive open seas. Whilst views along the coast are contained by headlands, there are panoramic views across the open sea and sailing boats and commercial shipping activity adds interest to the sea views. Views inland from the Coast Road can be limited by the steep slopes on the landward side of this road, however, views of Sallagh Braes, Knockdhu, Scawt Hill and the ridgeline running north are widely visible from Ballygalley. There are also views of Knockdhu, Sallagh Braes, Scawt Hill and the foreground slopes from roads running north-west from Larne, for example, Brustin Brae Road and Old Glenarm Road.

Areas which are prominent in views along the Coast Road include Ballygalley Head, Ballygalley Bay and the northern part of the Islandmagee peninsula. From the high ground in the western part of the LCA, for example, from Ballycoose Road and Dickeystown Road, there are long views of the coast and Ballygalley Head and across the upper slopes of this LCA. From Larne Harbour area there are views to Carnduff and the wooded scarps flanking Glynn.

Landscape Condition and Sensitivity

This LCA is a landscape of high scenic quality which, with the exception of Larne, is included within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB).

NILCA 2000 Assessment

This is a landscape of high scenic quality, which is within the Antrim Coast and Glens AONB. The stone walls are an important element of the landscape and their state of repair provides a clear indication of landscape condition. This coastline is highly sensitive to change as it is a scenic area which is viewed by many visitors on the A2 coastal road, a popular tourist route. The topography deters significant development pressure and development has been concentrated on the wider parts of the coastal strip, around Larne in particular. Here, new housing and changes in the urban fabric of the town have resulted in expansion at its periphery and the loss of a distinct urban edge. The Larne Coast has a number of important sites of earth science interest, including the

Waterloo ASSI at Chainé Memorial Park, where the underlying Antrim basalts and chalk are exposed at the shore within a series of fossil-rich strata.

Wind Energy Development in NI's Landscapes (2010)

This LCA is highly sensitive to wind energy development because it is highly visible from the A2 tourist route and from elevated land above – particularly from key viewpoints such as Sallagh Braes. Towards Larne urban influences make the area somewhat less sensitive but nevertheless it is still highly visible. This high visibility, together with high scenic quality, dramatic and memorable coastal views, strong natural and cultural heritage interests, and value in terms of tourism and recreation, means that there are limited areas within this LCA of lower sensitivity to wind energy development. The only possible exception is land associated with the port of Larne, where brownfield and industrial sites might have a lower sensitivity to appropriately scaled wind energy development.

Overall Sensitivity – HIGH

Assessment of Development Pressure

Wind Energy

Much of this LCA has either experienced no pressure for wind energy development or low pressure. However, there are pockets of medium pressure adjacent to Ballygalley and close to the Dickeystown Road on the Glenarm headland. There has also been pressure for single wind turbines within Larne town and a wind turbine has been approved within Ballygalley settlement development limits. Approximately two-thirds of the proposed turbines are for large-scale (over 15 metres) wind turbines and there has been an application to increase the height of a turbine at a site located on the Glenarm headland. There has been no applications for wind farm development within the LCA.

This LCA has limited potential to accommodate wind energy development as it is a narrow-elongated area which is spatially constrained. Additionally, this LCA is highly sensitive to wind energy development as it is of exceptional scenic quality, has dramatic coastal views and is highly visible from the A2 Coast Road and from elevated land to the west. The landscape quality and amenity value in this area is important for tourism and recreation such as hill walking and cycling. Key features in this landscape include exposed slopes and ridges, the shoreline, key views and significant natural and historic environment features. Adverse impacts on these key features should be avoided.

Solar Energy

There has been no applications for solar energy development in this LCA. The high scenic quality and distinctive landscape features of this LCA and its importance for the settings of the A2 Coast Road, Sallagh Braes, Knockdhu ASAI and settlements of Ballygalley and Larne make much of this

LCA visually highly sensitive to solar farm development. These factors act as key constraints on solar farm development within this spatially constrained LCA.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21), the northern section of this LCA generally experienced low to medium pressure for residential development in the open countryside. In the main, the upper slopes did not experience pressure for residential development in this period. Larne is located in the southern section of this LCA and pressure for residential development was low in countryside areas adjacent to the north/north-west of this town. In this period, central areas of this LCA to the north-west and south/south-west of Ballygalley experienced high pressure for residential development.

Since June 2010, the MEA part of this LCA has generally experienced low pressure for residential development in the open countryside, with many upper slopes not experiencing any pressure for residential development. There was a pocket of medium pressure south/south-west of Ballygalley and a pocket of high pressure at a point along the Drumnagreagh Road. This pocket of high pressure was largely due to applications for farm dwellings and replacement dwellings.

The visual impact of single dwellings in the countryside needs careful consideration in this LCA. The cumulative impact of single dwellings and/or the erection poorly sited or badly designed dwellings in this highly sensitive landscape could have significant adverse impacts on the high scenic quality and landscape character of this LCA.

Landscape Sensitivity: Key Points

- This narrow coastal strip which includes the Coast Road is valued for its high scenic quality (with the exception of Larne Town, this area is within the designated Antrim Coast and Glens Area of Outstanding Natural Beauty).
- The areas closest to the coast exhibit wild qualities and the countryside further inland is deeply rural and tranquil.
- The countryside and undeveloped coast is unspoilt and predominantly undeveloped, with rugged cliffs and slopes and a raised beach platform representing exceptional landscape features.
- The basalt headlands and cliffs create a sequence of striking 'gateways' when travelling along the Coast Road.
- This coastal strip and its farmland slopes provide a picturesque foreground setting for Sallagh Braes, Knockdhu and the ridgeline running north to Glenarm.
- This coastal area, with its undeveloped character, is highly significant for the settlements of Ballygalley, Carncastle and Larne.
- Parts of the North Channel, including the intertidal area of this LCA, are included within the proposed East Coast (Northern Ireland) Marine SPA which is designated to protect a diverse range of seabed habitats which are important for various seabird species.

- Larne Lough Ramsar and SPA abut Larne town and the boundary of the proposed East Coast (Northern Ireland) Marine SPA. These sites support internationally important numbers of Light-bellied Brent Geese in winter and nationally important numbers of breeding populations of Roseate Terns (NI Priority Species) and Common Terns.
- The coastal area, Sallagh Braes and Knockdhu and Larne Lough have designated nature conservation sites of national importance (ASSIs).
- The diversity of geology and the active geological processes found along the Coast Road contributes to a dramatic and interesting landscape.
- Part of Knockdhu Area of Significant Archaeological Interest (ASAI) is located within the western part of this LCA and this designation seeks to protect the setting of individual and related monuments in this historic and scenic upland landscape.
- There are Historic Parks, Gardens and Demesnes at Carnfunnock (registered), Cairndhu (supplementary), Chaine Park (registered) and Drumalis (registered). These areas contain important landscape historic environment and natural heritage assets.
- Stone walls are an important visual component of this landscape and are in a good state of repair.
- The urbanised area of Larne town and its associated commercial port is less sensitive than other areas of the LCA.

Visual Sensitivity: Key Points

- This LCA, with the exception of Larne Town, is within the Antrim Coast and Glens AONB which was designated, in part, to protect its high scenic quality and natural heritage features. This LCA is a narrow coastal strip which exhibits a wildness along the coast and is predominantly undeveloped in character.
- The Coast Road and shoreline is a visually exposed area that is highly distinctive as this Coast Road follows a raised beach platform where headlands and cliffs form a sequence of 'striking 'gateways'.
- The striking undeveloped headlands are prominent features when travelling along the Coast Road which is a world-famous tourist route.
- There are impressive expansive seaward views and views across this landscape from settlements, public roads, caravan sites and 'viewing' points within this LCA.
- There are panoramic views across this landscape and the coast from the Ulster Way and Antrim Hills Way designated walking routes which include Scawt Hill, Knockdhu, Robin Young's Hill and Sallagh Braes.
- The East Coast Canoe trail follows the shoreline of this LCA and there are landward views of the undeveloped ridgeline that provides a dramatic backdrop for the coastal area.
- This coastal area, with its' undeveloped character, is highly significant for the settlements of Ballygalley, Carncastle and Larne.
- Knockdhu ASAI contains numerous important historic environment assets and the setting of these is highly sensitive to development.

- The settings of the historic parks, gardens and demesnes at Carnfunnock, Cairndhu and within Larne are visually highly sensitive.
- Around Larne town urban influences and the commercial port make the area less visually sensitive, nevertheless there are significant landscape features that make the setting of this settlement unique, for example the cliff of Agnew's Hill, Sallagh Braes, Chaine Memorial Tower and the coastal shoreline.

Landscape Value: Key Points

- This narrow coastal strip, which includes the Coast Road, is valued for its high scenic quality and significant natural heritage assets (with the exception of Larne Town, this area is within the designated Antrim Coast and Glens Area of Outstanding Natural Beauty).
- The intertidal area of this LCA includes the following international sites of nature conservation importance – proposed East Coast (Northern Ireland) Marine SPA and Larne Lough Ramsar and SPA.
- This coastal LCA contains numerous designated nature conservation sites of national importance (ASSIs).
- Part of Knockdhu Area of Significant Archaeological Interest (ASAI) is located within the western part of this LCA and this designation seeks to protect the setting of individual and related historic monuments in this historic and scenic upland landscape.
- The shoreline (outside of Larne town) has a wild undeveloped character and the farmland slopes are deeply rural and tranquil. These areas are significant for the settings of Ballygalley, Carncastle and Larne town.
- The world-famous Coast Road is a highly distinctive coastal drive which hugs the shoreline, along which, headlands and cliffs form a sequence of 'striking 'gateways' and the undeveloped ridges of the Antrim Plateau provide a stunning backdrop. All these elements combine to create the Causeway Coastal Route which draws tourists world-wide.
- Along the A2 Coast Road, there are a number of car parks (viewing points), picnic sites and Glenarm Coast Walk.
- Carnfunnock Country Park (registered Historic Park, Garden and Demesne) has mixed woodland, colourful gardens, walking trails and has panoramic views of the Antrim Coast and North Channel. This destination is popular with visitors. Cairndhu historic demesne contains Cairndhu Golf Club which is an important site of recreation and Chaine Park in Larne provides a pleasant area for walking and enjoying views of the coast.
- The Ulster Way and Antrim Hills Way are marketed walking routes which include Scawt Hill, Knockdhu, Robin Young's Hill and Sallagh Braes. These areas are also used by fell runners and groups interested in the natural and historic environment.
- There are beaches (boulders and sand) at Ballygalley and Drains Bay and these bays are popular for sailing.

- In Larne town there is a coastal path which runs from Chaine Memorial Tower to the Coast Road passing Chaine Park.
- This coast is part of the East Coast Canoe Trail and there are embarkation/disembarkation points at Sandy Bay (Larne), Drains Bay (Larne), Tweed's Port (between Larne and Ballygalley) and Ballygalley.
- East Antrim Boat Club and Larne Boating and Fishing Club are based out of premises on Coastguard Road, Larne.

Sensitivities and forces for change

Climate Change

Increasing incidence of extreme weather events could lead to more frequent flooding events in this coastal area. Drier summers could also lead to increasing tourist numbers with an associated potential increase in demand for facilities and accommodation.

Development – sensitivities and forces for change: the expansion of settlements such as Ballygalley, Carncastle and Larne should be carefully controlled to avoid inappropriate urban sprawl into the countryside, and also avoid linear coastal development along the Coast Road; both of which are patterns of development which would adversely impact on the landscape character of this LCA. There is likely to be future pressure for 'second homes' in this popular tourist area.

Planning and Management Guidelines

- the restriction of peripheral development at Ballygalley, Carncastle and Larne will ensure the landscape setting of these settlements is conserved.
- development in line with the traditional pattern of clustered settlements at strategic points along the coast will prevent a continuous strip of coastal development. Ribbon development should be avoided.
- conservation of the traditional compact settlement form will protect the exceptional scenic quality of this landscape.

Tourism – sensitivities and forces for change:

The scenic qualities of the landscape lead to some pressure for leisure and tourism development. So far development has mostly been accommodated successfully, without undue intrusion or loss of character, however greater numbers or larger scales of tourism development may be difficult to accommodate without affecting key landscape characteristics. Some recreation/tourism developments are scattered sporadically along the Coast Road. Recreation and tourism development can be obtrusive in the landscape, and within this LCA, this type of development is likely to be best located within existing settlements. The popularity of this area with visitors is likely to bring continued pressure for development and there may be scope to exploit tourism opportunities around Ballygalley and Larne.

Planning and Management Guidelines

- tourism related facilities/buildings should be directed towards existing settlements.
- small car parks, laybys and viewpoints may be developed at sustainable locations along the Coast Road in order to provide opportunities to experience the sea and coastal views. Adversely impacts on key landscape and historic environment features should be avoided.
- Where there is a requirement for signage or information boards, a consistent signage strategy would assist in providing a unified identity to the area.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: a single turbine is a prominent feature on the headland to the east/south-east of Glenarm. There is expected to be some low-level future pressure for renewable energy schemes in this LCA, however, there are many constraints to this type of development within this landscape as wind turbines have the potential to have a significant adverse impact on the exceptional character of this LCA.

Planning and Management Guidelines - sensitivities and forces for change:

- due to the highly sensitive nature of this landscape to commercial wind energy development and because it is highly visible from the A2 tourist route and from elevated land above, particularly from key viewpoints such as Sallagh Braes, there is no further capacity for non-domestic wind energy development within this LCA.

Coastal Processes - sensitivities and forces for change: The Antrim Coast is a dynamic environment and the natural coastal processes of erosion and accretion are integral to the sustainability of the sand and gravel beaches along this coastline. The natural functioning of these processes should be safeguarded as this will have benefits for biodiversity and ecosystem services in general. The increasing frequency of flood events in this coastal area could lead to increasing costs associated with maintenance of existing 'hard' coastal defences and pressure for new coastal defence infrastructure. There may also be increased effects of sewage outfalls on coastal communities.

Planning and Management Guidelines

- develop a coastal strategy to guide and inform the maintenance, siting and design of existing and future coastal defences.

Trees, woodland and forestry- sensitivities and forces for change: Native woodland cover is limited, but with some very significant examples of upland oakwood, ashwood and hazel wood/scrub. Native woodland cover tends to be restricted to scarp slopes, although mixed and ancient/long established woodlands are associated with Carnfunnock Country Park. Coniferous plantings are uncharacteristic of most of the landscape.

Planning and Management Guidelines

- enhance the biodiversity value of demesne/parkland woodland by encouraging further planting of saplings of the standard trees and retention of fallen and veteran trees for biodiversity value.
- encourage control of grazing in broadleaved woodlands and hazel scrub to foster regeneration and if necessary, encourage replanting of canopy species
- encourage planting of broadleaved woods (through appropriate grant schemes) rather than small conifer plantations which are of poor biodiversity and landscape value.

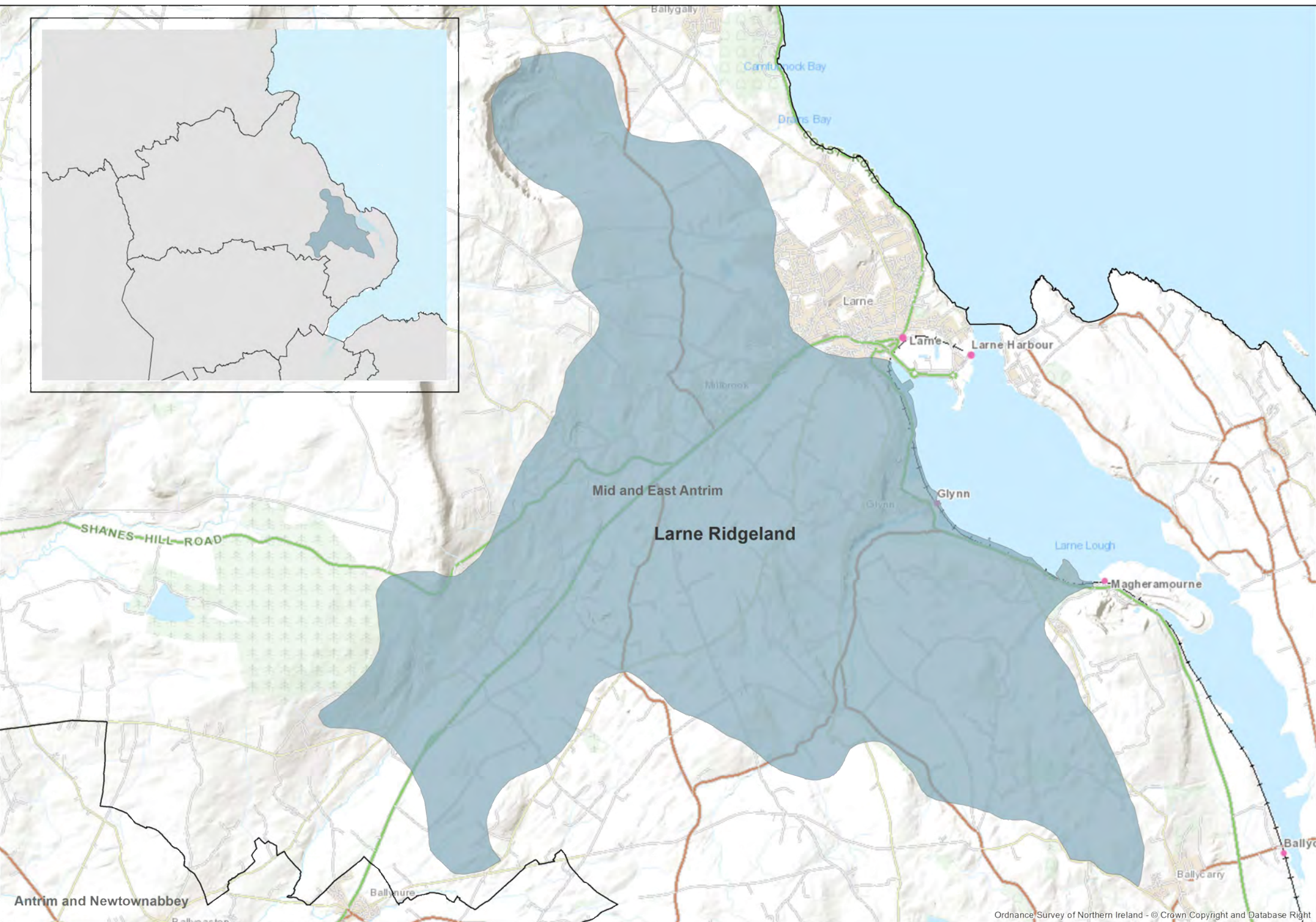
Agriculture - sensitivities and forces for change: land cover is dominated by improved grasslands with low biodiversity quality. Stone walls are an important visual component of this landscape and are in a good state of repair. The post -medieval field system in this area is potentially vulnerable to changes in farming practices or insertion of new houses in the countryside, which may erode the tangible time-depth apparent in this area through the removal of stone walls or hedgerows.

Planning and Management Guidelines

- encourage the maintenance of stone walls to preserve the robust landscape pattern and enhance landscape condition.
- maintain and improve field boundaries especially hedgerows. This may be achieved through adoption of correct cutting cycles, hedge laying and replanting where necessary.
- encourage adoption of less intensive management of pastures to allow reversion to more species-rich grassland and protect unsown areas of species-rich grassland - especially on base rich chalk and basalt soils

LCA 127 - LARNE RIDGELINE





Key Characteristics – LCA 127

- Gently undulating landform dominated by long south-west to north-east ridges.
- Gradual transition from lush pastures to upland with smaller, scrubby, wall-enclosed fields.
- Well-structured pastoral farmland of large geometric fields bound by ample hedgerows.
- Communications and services corridor; prominent pylons and roads.
- Sparse settlement; farm buildings and occasional isolated bungalows and houses.
- Long views bounded by skyline moorland ridges.
- Wind turbines are prominent features in elevated parts of the LCA.

Landscape Character Description

In common with the hills overlooking Larne Lough, the Larne Ridgeland is dominated by long ridges on which are superimposed a more complex relief of low hills and shallow hollows. The Six Mile Water Fault traverses the area, extending from Lough Neagh to Larne, and the south west to north east alignment of the fault is reflected by that of the long basalt ridges. To the south west of the area, the fault is constricted between the uplands of Spennin Hill and Carninard, forming a distinct valley with a more tightly rolling topography. In this LCA pasture predominates, regular fields are bound by robust hedges and small thickets of woodland add to the diversity of landcover. However, this pattern frequently forms a transition to more marginal upland areas where there are smaller fields, numerous stone walls, greater encroachment from scrub and rushes and a more exposed feel.

Strips of dense woodland on upper valley slopes, such as Glenoe, enhance the strong sense of enclosure and the steep woodlands on the slopes of Carnduff and Glynn Hill provide a strong setting for the settlement of Glynn.

The massive Magheramorne quarry on the steep slopes overlooking Larne Lough is prominent in views from Island Magee, but views of this quarry from the A2 Shore Road are restricted by vegetation and elevated ground adjacent to this road.

The long trough-like valleys provide a natural corridor for roads and services which converge to the south west. Housing pressure is concentrated within these valleys, but built development is generally sparse elsewhere. Views, although locally constrained, are generally extensive and are bounded by the skyline ridges of moorland that enclose the area.

Seascape Character Description

Larne Lough

The Larne Lough Seascape Character Area includes the port and industrial/commercial areas in the south east of Larne town and extends around the Lough down to the northern edge of Whitehead. Larne town has an important influence on the setting of Larne Lough. A series of hills on the western side of the Lough and the low rising hills of Islandmagee, with their regular pattern of hedgerows, are important to the contained setting of the Lough. Within the seascape character area, views of the North Channel are largely limited to vantage points in the Ballylumford area and on the south-eastern edge of Larne town.

Physical Influences

Geodiversity

This LCA lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh basin. The Larne Ridgeland is dominated by long ridges on which are superimposed a more complex relief of low hills and shallow hollows. The Six Mile Water Fault traverses the area, extending from Lough Neagh to Larne. The south-west to north-east alignment of the fault is reflected by that of the long basalt ridges. To the south-west of the area, the fault is constricted between the uplands of Spennin Hill and Carninard, forming a distinct valley with a more tightly rolling topography.

In general, Cretaceous greensands and limestones or Tertiary basalts rest uncomfortably and in faulted contact with and on a range of older Mesozoic rock units. The LCA includes the waterfalls associated with Tertiary igneous rocks around Glenoe.

For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

This transitional landscape includes coastal areas abutting Larne Lough, a trough-like valley and low ridges which define the edge of the upland areas (areas generally over 200m AOD) to the north-west and south. In the south-eastern area of this LCA, the elevation rises to 219m AOD at Black Hill.

Topography.

This LCA is dominated by long ridges on which are superimposed a more complex relief of low hills and shallow hollows and displays a gently undulating landform, dominated by long south-west to north-east basalt ridges. The foreground of the cliffs of Sallagh Braes is located in the northern part of this LCA.

Biodiversity and Land Cover - Key Characteristics

- Woodlands account for approximately 2.5% of the land cover, significantly less than the average for Northern Ireland of c.8% .
- Nearly four-fifths of the woodland is broadleaved, in estates or parklands, mature woodland or hazel woodland-with-standards, and hazel dominated low woodland and scrub.
- Some of the best examples of upland mixed ashwoods and of hazel woodlands in northeast Ulster.
- Grassland accounts for about 76% of the land cover, slightly above the Northern Ireland average (71%). Almost nine-tenths of this is in improved pasture, generally of low biodiversity although Priority Species of farmland birds are recorded.
- No significant heaths or bogs and little wetland.
- Coastal zone part of the internationally important Larne Lough, particularly tern colonies of Swan Island.

Woodland

Woodland accounts for approximately 2.5% of the land cover. Nearly four-fifths of the woodland is broadleaved or mixed with conifer woods in small private plantations and a small portion of Ballyboley Forest is located within the western part of this LCA.

There is estate woodland (*NI Priority Habitat: Parkland*) at Kilwaughter Castle and Magheramorne Hotel. Relatively little remains of the once extensive woodlands at Kilwaughter Castle. Magheramorne, despite the quarry on its southern flank, retains the extensive planting of the early and late nineteenth century.

The mature woodland and hazel woodland is concentrated mainly in Glenoe and the steep slopes to the north and south of Glynn and a small area of planted woodland at Glenoe is a National Trust site. Most have ash as the dominant tree species (*NI Priority Habitat: Mixed Ashwoods*). At Glynn Hill Wood ash dominates most of the wood, with frequent sycamore and beech.

Glynn River Wood/Ballylesson Wood has a canopy dominated by hazel with occasional tall ash. Glynn North Wood has a dense, even-aged low canopy of hazel and is one of the best examples of calcicolous (lime loving) hazel scarp woodland in southeast Antrim.

Grassland and Arable

Grassland accounts for about 76% of land cover (approx. 90% improved pasture). There are some areas of damp grassland in the flat bottom of valleys and where there are thin peaty soils. Irish Hare and marsh fritillary butterfly (*both NI Priority Species*) have been recorded in some of these grasslands. Improved pastures generally have low biodiversity as a result of relatively intensive management. Biodiversity in areas of improved pastures and arable is often concentrated in hedgerows, which are of varying quality in this LCA.

Arable land, which includes grass-reseeding, accounts for 11% of the land cover, almost double the Northern Ireland average. It is concentrated on more freely draining soils to the north of Glynn, around Browndod and around Ballyboley Reservoirs; elsewhere less well drained soils and steep slopes restrict arable agriculture.

Heaths and Bogs

There are no significant areas of heath in the LCA except for patches of gorse (whin) that occupy some steeper slopes, sometimes merging into scrub and low woods, and some peaty areas.

Most of the former peat bogs that existed have been reclaimed for agriculture, with only small pockets of damp rough grazing remaining. The only extant bog is Riggs Moss, but this is cut-over.

Wetlands and Lakes

There are few significant wetlands in the LCA. There is some fen at Kilwaughter Lake and at the brackish lagoon at Glynn where there is a small amount of *wet woodland (NI Priority Habitat)*.

The lakes and reservoirs have been classed as of low priority for conservation and biodiversity interest.

Only a small portion of the Six Mile Water, which has river *water-crowfoot (NI Priority Species)*, is located within the western portion of this LCA.

There has been *otter (NI Priority Species)* recorded at the Larne (Inver) River.

Coastal

This LCA abuts Larne Lough. Areas of Larne Lough and Swan Island are included within Larne ASSI, Ramsar and Special Protection Area (SPA) which are designated nature conservation sites which provide important habitat for breeding terns and overwintering brent geese. Generally, the coastal communities immediately along the border of this LCA are not of major significance to biodiversity. The boulders and stones of the sheltered headland at Dalaradia Point provide a rich habitat for several algae species. There are also soft mudflats between Glynn and Dalaradia Point.

Field Boundaries

Generally well-structured farmland of large-scale geometric fields bound by hedgerows. In this LCA, there is a gradual transition from lush grassland to smaller marginal upland fields defined by stone walls.

Natural Heritage Conservation Sites – Designations

International Sites

- Antrim Hills Special Protection Area (SPA)
- Larne Lough Ramsar
- Larne Lough SPA

- Proposed East Coast (NI) Marine SPA

National Sites

- Swan Island Statutory Nature Reserve
- Carneal Area of Special Scientific Interest (ASSI)
- Glynn Woods ASSI
- Knock Dhu Sallagh Braes ASSI
- Larne Lough ASSI
- Newlands ASSI

Local Sites

Larne Area Plan 2010

- 22: Knockdhu Escarpment Nature Conservation Site (NCS)
- 23: Sallagh Braes Escarpment NCS
- 93: Sallagh Braes NCS
- 30: Kilwaughter Castle NCS
- 95: Rory's Glen NCS
- 42: Carndoo NCS
- 43: Carndoo Marsh NCS
- 44: Thorny Hill NCS
- 60: Mackeystown NCS
- 34a: North Glynn Gut NCS
- 34b: South Glynn Gut NCS
- 34c: Swan Island & Blue Circle Island NCS
- 38: Glynn River NCS
- 39: Glynn Hill NCS
- 48: Glynn Lagoon NCS
- 52: Glynn North Wood NCS
- 53: Glynn River Valley NCS
- 54: Glynn Hill NCS
- 76: Glynn Hill NCS
- 77: Banks Quay NCS
- 78: Curran Point NCS
- 37: Carnduff NCS
- 38: Glynn River NCS
- 39: Glynn Hill NCS
- 40: Glenoe NCS
- 57: Craiganee NCS
- 59: Glenoe Ashwood (Alias Ballywillin Wood) NCS
- 96: Glenoe NCS
- 97: Carneal NCS

Historical and Cultural Influences

Settlements

Larne (majority of the town is outside the LCA) – this settlement is designated as a town within the Larne Area Plan 2010 and is a seaport and industrial market town. The name Larne derives from the Latharna which was a small feudal territory that stretched from Larne to Glenarm. The town has been used as a seaport for over 1,000 years and is presently a major passenger and freight port.

Glynn is a designated village in the Larne Area Plan 2010 and abuts Larne Lough. Its physical development is restricted by the surrounding topography, the river, the railway and the coast.

Crosshill is a designated small settlement in the Larne Area Plan 2010 and consists of a small cluster of development around a cross-roads. The focus of the settlement is a church and public house.

Glenoe or Gleno (from Irish: Gleann Ó) is designated as a small settlement in the Larne Area Plan 2010 and is situated 2 kms to the south of Larne at the head of the Glenoe Water valley. The waterfall and glen beside the settlement, which are in National Trust ownership, are an important scenic attraction and St. Columbas Church of Ireland church is a landmark building in this area.

Mounthill is designated as a small settlement in the Larne Area Plan 2010. The settlement has a primary school.

Raloo is a designated small settlement in the Larne Area Plan 2010. The original clachan was built by immigrants from Scotland in the late 1500's or early 1600' and Raloo Church was built in 1838 which reflects the plain Scottish style of architecture.

Historic Environment

There are archaeological sites dispersed throughout the LCA. Outside of settlement development limits there are 14 Scheduled Monuments. These scheduled monuments include mottes, raths, souterrains, standing stones, ecclesiastical sites and a heavy anti-aircraft battery.

Outside of settlement development limits there are 16 listed buildings including, for example, listed houses, gates/screens/lodges and ice houses etc.

Kilwaughter Castle supplementary Historic Park, Garden and Demesne includes a cluster of listed buildings including a listed country house incorporating the earlier castle, a gate lodge and gate screen and farm buildings. Early 19th century parkland provides setting for the now ruinous house (listed HB 06/07/03). Designed before 1803 by John Nash in his romantic castle style, for Edward Jones Agnew, a leading Belfast merchant. The building incorporates a Scottish style plantation house of c.1622, built by Patrick Agnew, whose sister-in-law lived at the very similar nearby

Ballygalley Castle. It is known that the place had a Norman origin and the remains of a motte exist nearby. The parkland (formal landscaping) of c.1810 has had its extensive shelter belts depleted and many parkland trees have been lost. The artificial lake, created as a result of massive damming, is in danger of silting up. The walled garden, in separate ownership from the greater part of the park, is partly cultivated. There is an Ice House (B1 listed) near the lake. The main entrance gates are dated c.1807, but the lodge is dated c.1835. The big house was occupied by the army in 1940 and in 1951 became a roofless ruin. This registered demesne also contains the site of a medieval church and graveyard and a scheduled motte. The demesne is privately owned and not open to the public.

Magheramorne House registered Historic Park, Garden and Demesne is located within this LCA. The present house on the site was built in the 1880s and replaces an earlier house of 1817 called Ballylig House. It is listed (HB 06/05/17) as is the lodge (HB 06/05/16 – dated 1881) and outbuildings (HB 06/05/23 also dated 1881). There is also an Ice House (B1 listed) and a registered mound in the grounds. The layout of the grounds is essentially in the style of the late 19th century, though there has been further upgrading in the 1930s. There are two glens immediately behind the house which are planted with trees and have paths and bridges to give ornamental walks up through the glens. The streams level out to the immediate east of the house and there are woodland walks in this area. There is a maintained formal terrace garden to the north-east of the house with a stone fountain. The avenue is of lime and a small area of parkland between this and the road contains mature trees. The site is the Ireland Headquarters of Forever Living Products.

Heritage – Defence and Industry

Outside of settlement development limits, there is a large number of historic industry sites in this LCA which are predominantly concentrated along the A8 Belfast Road and north of Shanes Hill Road. Historic industry sites close to the A8 Belfast Road include sites of cotton and flax mills and sites of infrastructure associated with the Ballymena-Larne Harbour Narrow Gauge Railway, for example Kilwaughter Halt which was opened on 1 January 1888 and closed to passengers on 1 October 1933. The historic industry sites to the north of Shanes Hill Road include sites associated with limestone quarrying and corn and flax mills.

There is only one historic defence site located within this LCA which a heavy anti-aircraft battery on Carnduff hill is (east of Ballysnod Road).

Transport Infrastructure

The A8 Belfast Road runs on a south-west to north-east axis and is the main transport route from Larne town to the M2 and Belfast. Shanes Hill Road is a direct transport route from Larne town to Ballymena. Ballymullock Road (northern area of LCA) and Ballyrickard Road and Rectory Road (both southern area of LCA) serve the Larne town hinterland.

Within this LCA, and between Larne town and Magheramorne, the A2 Causeway Coastal Route and the Belfast-Larne railway line hug the shore of Larne Lough and provides expansive views out across the lough to Islandmagee.

Leisure & Recreation

Glenoe Waterfall is a National Trust site located beside the village of Glenoe where designated paths wind around a small glen with one of the most picturesque waterfalls in Northern Ireland. This site is popular with visitors who can experience the 30 foot waterfall, avail of picnic sites and enjoy pleasant walks around the edge of the glen.

Clements Wood is a Woodland Trust site located off the Ballygowan Road and has a designated path which runs along a rivers edge and provides access to woodland and a meadow and parts of this site afford views of the Larne valley and the South Antrim Hills. This site is managed to facilitate informal recreation and enjoyment of the wildlife, riverside and woodland, but not for high public usage.

A marina on the western edge of Larne Lough is located within this LCA and is occupied by the Blue Circle Cruising and Sailing Club. The mudflats of Larne Lough and Swan Island statutory nature reserve provide important habitat for birds and this attracts ornithologists to Larne Lough. However, access to the shoreline of the lough within this LCA is limited.

Visual and Sensory Perception

Tranquillity

Larne town is a large settlement with a busy port and the associated activity contributes to a dynamic and busy experience. At night, the concentration of lights at Larne reflects across Larne Lough which is relatively tranquil.

Relative wildness can be felt on the upper slopes and ridges above Shanes Hill Road and Ballymullock Road and the areas along Rectory Road are deeply rural and tranquil. Generally, tranquillity is felt away from the main transport corridors but is not widespread across the LCA. The rurality and tranquil feel of the central areas of this LCA is impacted by the presence of the A8 transport corridor, Larne town and pylons that traverse the LCA. Quarries at Kilwaughter, Shane's Hill Road, and between the A8 Belfast Road and Ballyrickard Road have degraded the rural character of these areas.

Views

There are expansive views of the Islandmagee peninsula, the ridgelines of the Larne Basalt Moorland and across Larne Lough from areas within this LCA. The power station at Ballylumford (outside LCA) is a prominent landmark and there are expansive views of this power station and across Larne Lough from Larne town, the A2 Causeway Coastal Route and Belfast-Larne railway.

Although views from higher ground can be expansive, the topography and vegetation in some parts can significantly restrict views across the landscape. Views from the valleys within this LCA are bounded by the skyline ridges.

The wooded escarpments on Carnduff and Glynn Hill provide a strong setting for the settlement of Glynn and form a distinctive and pleasant backdrop to Larne Lough, contrasting with lower lying areas within Larne town. These wooded escarpments can be readily viewed from Larne town, Islandmagee and when sailing on Larne Lough.

Landscape Condition and Sensitivity

The landscape condition of this LCA is reasonable. The field structure is robust but vulnerable to decline. Within this LCA, an area north of Shanes Hill Road and north-west of Larne town is within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB) and exhibits high scenic quality. Outside of the AONB the scenic quality is mixed.

NILCA 2000 Assessment

The field structure is robust although it has been subject to decline from lack of management. Roads and pylons have become visually intrusive, although they generally follow natural contours. The area to the north west of the A8 to Larne falls within the AONB. The pattern of fields and woodlands on the valley slopes and the ridgetops are particularly sensitive to change and the shores of Larne Lough are protected as part of the Larne Lough SPA and ASSI designations.

Wind Energy Development in NI's Landscapes (2010)

This landscape is contained visually by higher land to the north and south; and parts of the LCA are affected by development such as the power station, quarrying, pylons and transport corridors. These factors tend to reduce the landscape's sensitivity to wind energy development. However, the northern slopes of this LCA are valued for their scenic quality and the ridges in the south-east are highly visible from Larne Lough and the coast to the north. These factors tend to increase sensitivity.

The low ridges behind Black Hill and Cross Hill are potentially most suited to wind energy development, but they are relatively narrow, and the landscape could easily be overwhelmed by inappropriate wind energy development. They would be less sensitive to turbine groupings that are set well back from the edge of Larne Lough, thus avoiding both significant visual impacts and also impacts on important bird habitats and species.

Assessment of Development Pressure

Renewable Energy

Wind Energy

This LCA has experienced a mix of pressure for wind energy development ranging from low to high pressure. The areas of medium pressure are located west / north-west of Larne town and on the ridgeline between Ballycarry and Glynn. The areas of high pressure are located between Agnews Hill and Larne town and between Glynn and Larne town. Applications predominantly relate to proposals for large-scale (over 15 metres) single wind turbines and only one site has an application for an increase in turbine height. In this LCA, there have been no applications for wind farm development.

The majority of sites on which proposals for single wind turbines did not receive planning permission are located in the northern part of the LCA and west of Larne town. The northern slopes of this LCA are sensitive to wind energy development as they are within the Antrim Coast and Glens AONB, valued for their high scenic quality and highly significant for the setting of Larne town and Agnews Hill. It should be noted that planning permission has been granted for numerous single wind turbines in this sensitive area and there is an increasing risk that the cumulative impacts of wind turbines could have a significant adverse impact on the high scenic quality of this area and the setting of Agnew's Hill and Larne town.

There is pressure for wind energy development around the ridges in the south-east of this LCA. These ridges are highly visible from Islandmagee and Larne Lough and its shoreline, and these ridges are highly significant for the settings of Ballycarry and Glynn. In this area, the valleys of the Glynn River and Dunisland Water exhibit scenic quality and are important for the wider settings of Glenoe and Glynn. The cumulative impacts of wind energy development in these areas has the potential to result in adverse visual impacts on these important ridges and valleys.

Other areas within this LCA may be less sensitive to wind energy development than the aforementioned 'sensitive areas', for example transport corridors and areas impacted by existing commercial/industrial development.

Solar Energy

There have been no applications for solar energy development in this LCA. The high scenic quality of the northern slopes of this LCA and their importance for the setting of Larne town make this part of the LCA visually highly sensitive to solar farm development. The slopes and ridges in the south-eastern part of the LCA and the valleys of the Glynn River and Dunisland Water would also be visually highly sensitive to solar farm development. In less sensitive areas such as the A8 transport corridor, there may be some potential to accommodate solar energy development depending on constraining factors such as the topography and critical views.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21), this LCA generally experienced low to medium pressure for residential development in the countryside. Some pockets of high pressure were experienced on the edges of this LCA and in an area close to the Browndod Road/Uppertown Road junction.

Since June 2010, the pressure for residential development in the open countryside is reflective of that between 2003 and June 2010. However, in this period pockets of high pressure were located in two areas – an area close to the Ballysnod Road/Browndod Road junction and an area close to where the Moss Road meets the Larne Road.

The high pressure experienced close to the Ballysnod Road/Browndod Road junction was largely due to applications for infill dwellings. The high pressure close to where the Moss Road meets the Larne Road was predominantly due to applications for farm dwellings and infill dwellings.

Within this LCA, linear development has impacted the rural character along parts of the Ballygowan Road and Lower Ballyboley Road.

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- Within this LCA, an area north of Shanes Hill Road and north-west of Larne town is within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB) which was designated, in part, to protect its high scenic quality and natural heritage features. However, the majority of this LCA lies outside of the AONB where the scenic quality is mixed.
- The northern slopes of this LCA are sensitive to development as they are valued for their scenic quality. These slopes are within the Antrim Coast and Glens AONB or contribute to the setting of the AONB and are also highly significant for the setting of Larne town and Agnew's Hill (within AONB).
- In the south-east of this LCA, the prominent ridges can exhibit 'wildness' and the valleys of the Glynn River and Dunisland Water exhibit relative scenic quality and are deeply rural in character.
- A relatively small area of the western part of this LCA is included within the Antrim Hills SPA.
- The shoreline and mudflats of Larne Lough are included within nature conservation sites of international importance (Larne Lough Ramsar and SPA and Proposed East Coast (NI) Marine SPA).
- There are designated nature conservation sites of national importance (ASSIs) at Sallagh Braes in the northern part of the LCA and at Carneal, Glynn Woods, Larne Lough and Newlands in the south-eastern part of the LCA.

- Glenoe Waterfall is a National Trust site located beside the village of Glenoe and is one of the most picturesque waterfalls in Northern Ireland.
- There are Historic Parks, Gardens and Demesnes at Kilwaughter (supplementary) and Magheramorne (registered).
- Relative wildness is experienced on the upper slopes and ridges. Tranquillity is experienced away from the main transport corridors but is not widespread.
- Quarries, transport corridors and the expanding settlement of Larne have created a 'busy' feel in parts of this LCA.

Visual Sensitivity: Key Points

- Within this LCA, an area north of Shanes Hill Road and north-west of Larne town is within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB) and exhibits high scenic quality. However, the majority of this LCA lies outside of the AONB where the scenic quality is mixed.
- The northern slopes of this LCA are highly significant for the setting of Larne town and Agnew's Hill (within AONB).
- In the south-east of this LCA, the prominent ridges and the valleys of the Glynn River and Dunisland Water exhibit relative scenic quality and are important for the wider settings of Glenoe and Glynn.
- The cliffs at Sallagh Braes are an exceptional landscape feature which provide a spectacular setting for coastal lowlands (LCA 126).
- The settings of the Historic Parks, Gardens and Demesnes at Kilwaughter (supplementary) and Magheramorne (registered) are visually highly sensitive.
- The wooded scarps flanking the settlement of Glynn are prominent landscape features when travelling along the A2 Shore Road which is part of the Causeway Coastal Route. There are views across Larne Lough from the A2 Shore Road.
- There are expansive views across this landscape from Shanes Hill Road.
- Views from the valleys are bounded by the skyline ridges.
- The cumulative impact of wind turbines and electricity pylons have had an adverse visual impact on upper slopes and ridges within this LCA.

Landscape Value: Key Points

- Within this LCA, an area north of Shanes Hill Road and north-west of Larne town is within the Antrim Coast and Glens AONB which was designated, in part, to protect its high scenic quality and natural heritage features. However, the majority of this LCA lies outside of the AONB where the scenic quality is mixed.
- A relatively small area of the western part of this LCA is included within the Antrim Hills SPA.
- The shoreline and mudflats of Larne Lough are included within nature conservation sites of international importance (Larne Lough Ramsar and SPA and Proposed East Coast (NI) Marine SPA). These areas provide important habitat for birds and this attracts

ornithologists to Larne Lough. However, access to the shoreline of the lough within this LCA is limited.

- There are designated nature conservation sites of national importance (ASSIs) at Sallagh Braes in the northern part of the LCA and at Carneal, Glynn Woods, Larne Lough and Newlands in the south-eastern part of the LCA.
- The A2 Shore Road is part of the internationally renowned Causeway Coastal Route which draws tourists world-wide.
- Glenoe Waterfall is a National Trust site and is one of the most picturesque waterfalls in Northern Ireland.
- Clements Wood is a Woodland Trust site which facilitates informal recreation and enjoyment of the wildlife, riverside and woodland, but does not cater for high public usage.
- A private marina on the western edge of Larne Lough is occupied by the Blue Circle Cruising and Sailing Club.
- There are Historic Parks, Gardens and Demesnes at Kilwaughter (supplementary) and Magheramorne (registered) and these sites contain important archaeological sites and listed buildings.
- The ridges flanking Glenoe and Glynn are important for the setting of these settlements and the slopes in the north of this LCA are highly significant for the setting of Larne.

Sensitivities and forces for change

Climate Change - pollution and sea level rise could impact on sensitive coastal habitats. The water quality of Larne Lough is likely to reduce if river flows become lower, with greater concentrations of contaminants potentially building up.

Coastal Processes - The shoreline around Larne Lough is a dynamic environment. The natural coastal processes are integral to the sustainability of intertidal habitats and their functioning should be safeguarded as this will have benefits for biodiversity and other ecosystem services.

Planning and Management Guidelines

- continued monitoring of commercial and recreational activities on the lough in relation to birds and their habitats
- continued monitoring of the effects of quarries and tipping on the water quality and sediments of the lough.

Trees, woodlands and forestry – sensitivities and forces for change: low woodland cover of variable biodiversity value, but with significant estate woodland and particularly significant ash and hazel woodlands.

Planning and Management Guidelines

- encourage planting of native broadleaved plantations rather than the small conifer plantations which are of poor biodiversity and landscape value.
- encourage control of grazing in broadleaved woodlands, especially ash and hazel woodlands, to foster regeneration and if necessary, encourage replanting of canopy species.

Development - sensitivities and forces for change: There is pressure to develop land on the edges of Larne town for residential, commercial and industrial development, particularly on the western edge around Millbrook, and this pressure is expected to continue. There pressure for single dwellings in the countryside is expected to continue, although stricter planning policy (PPS 21) has reduced the number of approved applications for single dwellings in the countryside. Settlement focuses in the valleys including settlement of Millbrook which forms an extension or suburb of Larne.

Planning and Management Guidelines

- focusing new development around existing clustered settlements will avoid sporadic, ad hoc housing development in rural areas which would lead to erosion of countryside character.
- continuous linear development along the strongly aligned transport corridors will lead to an impression of dense housing development and should be avoided.
- new dwellings in the countryside should correspond to traditional styles and scales.
- native woodland planting would assist integration of new development in the landscape.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: part of this landscape is a main communications and service corridor containing prominent pylons and roads which are visually intrusive at times. Moorland ridges above form a prominent and simple skyline. The steep woodland on the slopes of Carnduff and Glynn Hill provide a strong setting for Glynn. The power station at Ballylumford (outside the LCA) forms a prominent landmark. The upland ridge of Black Hill forms an immediate setting to Larne Lough. The northern slopes are valued for their scenic quality as are the ridges in the south-east.

Planning and Management Guidelines

- although generally of high to medium sensitivity, this LCA has some limited, localised capacity to accommodate a small degree of development, with the low ridgelines behind Black Hill and Cross Hill in the south-east best suited to such development.
- care should be taken to avoid locations that would adversely affect the Glenoe valley or views from the coast to the north.
- care should be taken to avoid creating visual clutter where turbines may be seen in conjunction with electricity transmission lines.
- turbine layouts should relate well to field and lane patterns and should not adversely affect the settings of settlements.
- domestic wind energy development should avoid open prominent sites and should be associated with groups of buildings and trees.

Minerals - sensitivities and forces for change: Quarrying is an intrusive feature of the landscape, towards the east at Kilwaughter, expansion of mineral operations would have an adverse effect on landscape character. Excavation of new quarry sites or expansion of existing quarry sites will impact on the rural character and the landscape condition of areas within this LCA.

Planning and Management Guidelines

- quarrying/ processing operations within the LCA should maintain its current relatively concentrated pattern of development so that extraction industries are not seen to proliferate throughout the LCA with undesirable cumulative effects.
- strong woodland frameworks around quarrying and processing sites should be implemented to assist with their integration into the landscape.
- quarries should be sited to take advantage of natural variations in topography in the undulating terrain to reduce landscape and visual impacts, utilising sympathetic bunding and tree planting.

LCA 128 - ISLANDMAGEE





Larne Larneg Harbour

Glynn

Larne Lough

Magheramurke

Mid and East Antrim

Island Magee

Ballycarry Ballystruder

Ballycarry

Whitehead

Straid

Antrim and Newtownabbey

ROAD

Key Characteristics – LCA 128

- Farmed ridges enclosing a lough with tidal mudflats.
- Distinct, regular field pattern on hills, established by prominent hedges.
- Rocky eastern shore to Islandmagee with enclosed harbours on the eastern and northern coast of the peninsula.
- Principal settlements (Larne and Whitehead) to north and south of the Lough.
- Villages and small settlements to the west and east of the Lough.
- Pylons prevalent along valley and across skyline. Power station with three stacks and steam plume provides a strong visual focus.
- Steep roads descend ridges to lough edge.
- Single dwellings stand out on sides of the ridges on both sides of Larne Lough.
- Numerous nature conservation designations.

Landscape Character Description

This character area includes three different types of landscape which together form a single area with its own distinct identity. At its centre is Larne Lough, which extends from its sea outlet at Larne southwards to Whitehead. The flat expanse of the lough and its valley is set between long basalt ridges to its west and east. Islandmagee, to the east of the Lough, itself comprises a series of ridges which run north-south, culminating at sheer basalt cliffs along the eastern coastline. To the west of Larne Lough are farmed valley slopes, and in this area Magheramorine Quarry and associated quarry spoil (which forms a basalt peninsula) are prominent features when viewed from the Islandmagee peninsula. The lough and valley are open with a floodplain of rough grassland extending from the lough shores to the base of the ridges which enclose them.

Larne town is situated at the mouth of the lough and Whitehead, contained between basalt headlands, lies to the south. A power station at Ballylumford on the opposite shore to Larne town is a prominent vertical feature amidst the flat expanse, and its three stacks and steam plume form a strong visual focus. The numerous transmission lines converging on the power station reinforce its visual emphasis and interrupt the smooth skyline. These pylons stand out from the flat terrain at the southern end of the lough. The presence of single wind turbines along the ridges to the east of the lough has started to create a cluttered appearance in the skyline.

The ridges on either side of the valley support pastoral farmland which, in these areas, has a distinctive structure of regular fields bound by prominent hedges creating a grid-like pattern on the valley slopes. Large areas of woodland on the slopes add tone and texture.

Scattered single dwellings stand out on the slopes, while residential and other development shelter at the foot of the ridges, for example, along on the Shore Road (A2) and in the Millbay

area of the Islandmagee peninsula. The eastern side of Islandmagee is more remote and Blackhead lighthouse, Portmuck Harbour and the Gobbins Coastal Path are all landmarks on the peninsula's east coast. In the north of the peninsula, Brown's Bay has an enclosed setting and a caravan park at Ferris Bay and Larne Golf Club (Barr's Point) are locations which afford views of the Larne coast and the Northern Channel.

Seascape Character Description

The Gobbins Coast

The Gobbins Seascape Character Area is focused on the eastern and northern coast of the Islandmagee peninsula and includes the coastal areas of Larne town and Whitehead. There are critical views of Larne Lough and the busy shipping lanes of the North Channel, and there are long distance views along the coast from the open cliff tops of Islandmagee. On the Islandmagee peninsula the low rising hills with a distinctive pattern of regular hedgerows forms a contrasting backdrop to the exposed cliffs and open sea.

Larne Lough

The Larne Lough Seascape Character Area includes the port and industrial/commercial areas in the south east of Larne town and extends around the lough down to the northern edge of Whitehead. These towns have an important influence on the setting of Larne Lough. A series of hills on the western side of the Lough and the low rising hills of Islandmagee with their regular pattern of hedgerows are important elements that contribute to the contained setting of the lough. Within this seascape character area, views of the North Channel are largely limited to vantage points in the Ballylumford area and the south-eastern edge of Larne town.

Physical Influences - Geodiversity

This character area lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateau that dip gently in towards the Lough Neagh Basin. Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape.

Larne Lough and its wide valley are set between long basalt ridges to the west and east. To the east of Larne Lough, the Islandmagee peninsula comprises a series of ridges which run north-south, culminating at sheer basalt cliffs along the eastern coastline. North of Black Head these cliffs are prone to occasional rock falls as they are undermined by a combination of marine erosion and weathering of the basalt. Between Black Head and the town of Whitehead, the coast is backed by hummocky (hilly) terrain produced by a series of slumps, mainly in superficial drift deposits. To the west of Larne Lough are farmed valley slopes.

A number of drift free ridges (running north/north-west to south/south-east) reflect a series of fault lines running in the same direction. The effects of this structural control are best seen in the orientation of Larne Lough and behind Brown's Bay, where a fault guided valley is now partially filled in by alluvium.

This landscape has a number of sites that have been identified for their significant geological interest, for example Areas of Special Scientific Interest (ASSIs) situated on the east coast of Islandmagee.

For further details on the geodiversity profile of this character area please refer to NILCA 2000.

Altitude range

Altitude in this character area ranges between sea level and approximately 160m AOD.

Topography

Larne Lough is a flat expanse set between long basalt ridges to its west and east. To the east of the Lough, the ridges of the Islandmagee Peninsula run NNW-SSE rising to approximately 110 – 140m AOD and culminate in sheer basalt cliffs on the eastern shoreline. To the west of the Lough, the valley slopes rise to a ridgeline which runs north-south and rises to approximately 120 – 160 metres AOD. Whitehead is contained between basalt headlands which reach approximately 120m AOD.

Biodiversity and Land Cover Key Characteristics

- Predominantly pastures
- Woodland sparse and restricted to pockets on the western ridge (north and south of Ballycarry) and at Diamond Jubilee Wood.
- Important coastal habitats, especially for bird life, including both Larne Lough, the eastern cliffs of Islandmagee and the Isle of Muck.

Woodlands

Woodlands occupy approximately 3% of the character area, mixed woodland associated with demesnes. They are also spatially confined to the centre of the western ridge which stretches from Whitehead in the south to Ballylig Hill in the north. The most extensive woodlands are associated with Red Hall estate where there is lowland woodland pasture and parkland (*NI Priority Habitat*). There is also a strip of woodland to the north of Red Hall. South-east of Ballycarry at Fort Hill, young ash trees are dominant and on the lower slopes mature ash and beech form a dense mixed upland ashwood (*NI Priority Habitat*). Woodland also occurs at Diamond Jubilee Wood (abuts the northern edge of Bentra Golf Club) and on the north-western part of Muldersleigh Hill. Small patches of mixed woodland occur close to Ballylumford Power station.

Grassland and Arable

Grassland occupies approximately 70% of the LCA, the majority in improved pastures. Generally, improved pastures have low biodiversity because they are sown and are intensively managed. Arable land is relatively extensive at approximately 14% of the LCA, and as elsewhere in NI, biodiversity in this land cover resides in the hedgerows that surround such fields. However, away from roads, hedges are poorly managed and there has been significant loss of hedges through field amalgamation. Areas of species-rich grassland are small in extent and restricted to the odd field, but a more extensive example is found at Castletown ASSI. Other localities for semi-natural grassland include landslip and coastal areas as at Ballykeel. Skernaghan Point is of high biological interest for its unimproved grassland and habitat diversity in a narrow fringe of maritime grassland and rock crevice communities. Wet grassland with rushes occurs on small headlands on the west coast of the Islandmagee peninsula, such as at Oldchurch Bay, and in low areas in the centre where peaty soils have been reclaimed to pasture.

Heaths and Bogs

There are no examples of lowland bog in this LCA as former peaty areas have been reclaimed to pastures. Small areas of gorse heath and scrub are found on steep slopes, for example, on the north side of Muldersleigh Hill and on the raised cliff edges and slopes on the east coast.

Wetlands and Lakes

There are no significant standing waters or rivers in this LCA.

Coastal

Coastal communities in the LCA are diverse as a result of the varied physical environment. There are rocky shores and cliffs on the eastern shore of Islandmagee and on the western shoreline of the peninsula there are extensive mudflats, saltmarsh and brackish water habitats and rocky shores. Larne Lough and its associated mud-flats and sea-grass beds are internationally important nature conservation sites for birds such as breeding common tern, sandwich tern and wintering populations of wildfowl and waders. The rocky Isle of Muck is a designated ASSI and has maritime cliffs and slopes (*NI Priority Habitat*) which are ideal for many nesting seabirds. The sparsely vegetated plateau maintains a large gull nesting population and is an important habitat for other birds such as puffin, guillemot, razorbill and kittiwake.

Field Boundaries

The ridges on either side of the valley have a distinctive regular field pattern with prominent hedgerow boundaries which create a grid-like pattern on the valley slopes.

Natural Heritage Conservation Sites – Designations

International Sites

- Larne Lough Special Protection Area (SPA)
- Larne Lough Ramsar

- Proposed East Coast (Northern Ireland) Marine SPA
- North Channel Special Area of Conservation (SAC)

National Sites

- Swan Island Statutory Nature Reserve
- Castletown Area of Special Scientific Interest (ASSI)
- Cloghfin Port ASSI
- The Gobbins ASSI
- Kilcoan ASSI
- Larne Lough ASSI
- Portmuck ASSI

Local Sites

- Beach Road Nature Reserve, Whitehead
- Isle of Muck Nature Reserve

Belfast Metropolitan Area Plan (BMAP)

- CE 02/02: Bentra Wood Site of Local Nature Conservation Importance (SLNCI)
- CE02/14: White Head SLNCI
- CE02/16: Black Head SLNCI
- CS14/05: Coast North and South of Cloghan Point SLNCI (the southern portion of this SLNCI lies outside of the LCA)
- WD05: Antrim Coast (Black Head to Whitehead) SLNCI

Larne Area Plan 2010

List of Nature Conservation Sites (Local):

- 32: Brown's Bay
- 71: Ferris Bay–Barrs Point
- 70: Brown's Bay
- 33: Skernaghan Point
- 67: South Portmuck
- 68: Portmuck
- 69: Mclroys Port
- 35: Isle of Muck
- 36: Islandmagee Cliffs (Gobbins)
- 64: Gobbins Caves
- 66: Gobbins
- 65: Cloghfin Port
- 34: Larne Lough
- 34d: Ballycarry Estuary
- 63: Barneys Point
- 72: Barneys Point

- 74: Magheramourne dump
- 34c: Swan Island and Blue Circle Island
- 75: Magheramourne Quarry
- 56: Fort Hill
- 61: Red Hall
- 73: Red Hall

Historical and Cultural Influences

Settlements

Whitehead was settlement was designated as a town in the Belfast Metropolitan Area Plan 2015. Located at the base of Muldersleigh Hill, Whitehead lies in a small bay between two headlands with the Blackhead Lighthouse marking the entrance to Belfast Lough. In late Victorian and Edwardian times, Whitehead was a popular seaside holiday destination and a Victorian-era railway connected the town with Belfast. The town has a Conservation Area and the historic railway station is within this designated area. The town is the starting point for the popular Blackhead Path seaside walk past Sunshine House and around Blackhead Lighthouse.

Ballycarry was designated as a village in the Larne Area Plan 2010 and is situated on the slopes west of Larne Lough. Neolithic artefacts found in the village suggest ancient settlement and there was a Norman settlement at Redhall and Brackenbergh, now the centre of modern Ballycarry.

Ballystrudder was designated as a village in the Larne Area Plan 2010 and is situated on the southern edge of Larne Lough.

Magheramorne was designated as a small settlement in the Larne Area Plan 2010 and is situated west of Magheramorne Quarry.

Mullaghboy was designated as a small settlement in the Larne Area Plan 2010 and is situated in the north-east of the Islandmagee peninsula.

Historic Environment

This area has a rich historic environment. There are many archaeological sites scattered throughout the LCA, particularly around the settlements of Ballycarry and Whitehead, Portmuck Harbour and the western part of the Islandmagee Peninsula. Archaeological sites include Druid's Alter (*a State Care monument*) and numerous scheduled monuments such as mottes and a medieval church. This LCA also has numerous listed buildings such as Blackhead Lighthouse and its associated dwellings, Druid's Cottage and buildings and structures associated with Red Hall estate.

Red Hall estate is a registered Historic Park, Garden and Demesne. It is a wooded demesne laid out on an axial plan typical of sites dating from the 17th century. The grounds at Red Hall remain

little altered in plan. The house (listed HB 06/05/13 A & B) enlarged from its 1627 origins stands at the apex of straight avenues leading from north to south and from east to west. There is an oak avenue, a lime avenue which leads to the church of 1848 and a late 19th century Wellingtonia avenue (the latter is in addition to the axial plan mentioned above). There has been continuous tree planting in the demesne including less formal areas around a glen and waterfall. Terraced lawns at the house are reminiscent of the Victorian era. The walled garden is close to the house and is part cultivated with fruit trees. There is a stone building, possibly built as a summer house. The lodge on the Larne Road is listed (HB 06/05/12) and a tower is a recorded (HB 06/05/11) but not listed. This historic demesne also includes archaeological sites such as a Tower House on the site of a medieval parish church, an enclosure, a battle site, a 'pin well' and a scheduled motte. The house is private but can be rented for weddings.

At the Gobbins, a scenic path stretching three miles along the rugged coast includes dramatic tubular and suspension bridges and caves and tunnels carved through the rock. The original path at The Gobbins was first opened in 1902 and was designed by a pioneering Irish railway engineer called Berkeley Deane Wise, who also built a new path along the coast from Whitehead to the lighthouse at Blackhead in 1892.

Saint Patrick founded Kilcoan Church (Cille Caomhán) which carries the name of one of his disciples Caomhán who became known as St. Caomhán. He is said to have been buried at Kilcoan or the nearby Ross graveyard but today hardly anything remains to be seen of this ancient church.

Heritage – Defence and Industry

This LCA is rich in industrial heritage. There are harbours at Ballylumford and Portmuck, and lighthouses at Ferris Point and Blackhead. The bay of Portmuck has previously been the site of a coastguard station, used as an export harbour, the site of a fortress and monastery, and was well known for smuggling.

Ballycarry and Magheramorne halts are located along the Belfast-Whitehead-Larne railway line, and this railway runs along the western shoreline of Larne Lough. Magheramorne quarry has seen commercial extraction of basalt and chalk on the western side of the Larne Lough, and quarry spoil forms a substantial basalt peninsula which partially blocks the entrance to the upper Lough. There are various disused limestone quarry and limekiln sites scattered throughout this LCA, for example, sites at Kilcoan and Portmuck.

This area is not significant in regard to defence heritage sites, however, it has an important scheduled World War Two anti-aircraft battery to the east of Brown's Bay Road in the north-east of Islandmagee.

Transport Infrastructure

The A2 Larne Road connects Larne with Belfast and Whitehead and this road runs north-south hugging the shoreline between Larne and Magheramorne Quarry. The A2 is part of the scenic

Causeway Coastal Route which is a renowned tourist route. A looped route around Islandmagee, which includes part of Browns Bay Scenic Route and Gobbins Road, is part of the Causeway Coastal Route.

The railway between Belfast and Larne passes through this LCA with stops at Whitehead, Ballycarry (between Ballycarry and Ballystrudder), Magheramorne, Glynn and Larne town.

Leisure & Recreation

This LCA has numerous opportunities for recreation and leisure pursuits. For example, on the northern shoreline of the Islandmagee peninsula, there are sandy beaches at Brown's Bay and Ferris Bay, there is a caravan site to the east of Ferris Bay and Brown's Bay Scenic Route is an identified route with quality scenery.

On the eastern coast of Islandmagee the Gobbins Coastal Path is a renowned tourist attraction and it has an associated cliff top path and viewing platform. The Gobbins Visitor Centre is situated in Ballystrudder. There is also a coastal path located at Portmuck which is a popular destination due to the quaint harbour, unique tombolo and Isle of Muck Nature Reserve; interesting marine life such as seals and marine birds can be seen in this area. The East Coast Canoe Trail follows the eastern shoreline of Islandmagee. This LCA has 3 golf courses: Bentra Golf Course, Larne Golf Course and Whitehead Golf Course.

The rocky shore of Larne Lough and Ballylumford Harbour are good locations for fishing, Islandmagee Boat Club is based at Ballylumford Harbour and Blue Circle Cruising and Sailing Club is located on the western side of the Lough. Further, there is a caravan park at Ford Farm on the eastern side of the Lough. However, generally there is limited opportunity for recreation on or around Larne Lough.

At Whitehead, there are two slipways, with the southernmost slipway used by County Antrim Yacht Club. Blackhead coastal path runs between Whitehead Car Park and Blackhead Lighthouse.

Visual and Sensory Perception

Tranquillity

The east coast of Islandmagee has a wild and remote character due to its relative inaccessibility and exposure to the Irish Sea. The eastern coastline has an undeveloped character with a strong sense of remoteness, tranquillity and naturalness. On the western side of the Islandmagee peninsula, Ballylumford power station and its associated chimneys provide a strong visual focus and the associated pylons and transmission lines clutter the landscape and create a more developed feel than on the eastern side of the peninsula. Single wind turbines have contributed to the developed feel of this side of the peninsula and have further interrupted the smooth ridgeline in this area.

The shores of Larne Lough are relatively tranquil with less development compared to the Belfast Lough shoreline. The southern end of Larne Lough has extensive mudflats and saltmarsh and has a relatively undeveloped and tranquil character. The northern end of Larne Lough, around Larne and Ballylumford is less tranquil with busy commercial and industrial development, much of which, is associated with the energy sector and the Port of Larne.

The western farmland slopes have a rural character and the sense of tranquillity is increased by the presence of Larne Lough and the enclosure provided by the topography and pockets of woodland.

Views

The long basalt ridges on the Islandmagee peninsula form a backdrop to the rugged, exposed coastline. From the sea, the rugged formations of undeveloped cliffs and headlands are important visual features and add to the exhilarating experience of the Gobbins Coastal path and the East Coast Canoe Trail. At night occasional lights of scattered dwellings on higher ground contrast against the undeveloped cliffs and the extensive dark backdrop of the sea. From the open cliff tops and from the coastal paths at Blackhead and the Gobbins, there are long views along the coastline and of the expansive North Channel and associated busy shipping lanes, with distant views of Scotland.

From Brown's Bay, Ferris Bay and the headlands on the northern coast of Islandmagee there are long distance views of the Larne Coast and the Antrim Plateau. There are critical views of the northern part of Islandmagee from Larne town.

There are views from the Larne to Belfast railway line and the A2 Larne-Belfast Road (part of the Causeway Coastal Route) across Larne Lough and of the western slopes of the Islandmagee peninsula. There are also some key views of the western slopes of the peninsula from Ballycarry and the upper slopes west of Larne Lough.

Muldersleigh Hill to the north of Whitehead is particularly prominent in this small-scale landscape and is widely visible from surrounding vantage points, for example, from the settlements of Ballycarry and Ballystrudder. Muldersleigh Hill, Carnbrock Hill and the coastal headlands in this area are important for the setting of Whitehead.

The upper slopes and ridgeline west of Larne Lough are also widely visible from Ballystrudder, Whitehead and the Islandmagee peninsula. Magheramorne Quarry and associated quarry spoil are prominent features when viewed from the Islandmagee peninsula.

Landscape Condition and Sensitivity

The condition of landscape elements is mixed, being relatively good on Islandmagee but showing signs of degradation in the valley floor and on some of the ridges.

Areas of Scenic Quality

The scenic quality in this LCA is generally high. NILCA 2000 identified the majority of the Islandmagee peninsula as an Area of Scenic Quality (ASQ) with only the westernmost parts of the peninsula excluded. This ASQ includes Muldersleigh Hill which abuts the northern edge of Whitehead.

NILCA 2000 Assessment

The landscape has a diverse land cover, strong field pattern, elevated views and well sited and designed houses. The majority of Islandmagee is an ASQ. Any development should be undertaken with respect and consideration for these elements, which are key to the landscape's character. In addition, there are several nature conservation designations which are based around Larne Lough and the coastline. Larne Lough carries Larne Lough ASSI, SPA and Ramsar site designations and its mudflats support a wealth of wildlife.

The lough head carries an ASI designation (superseded) at Ballycarry and Swan Island is a designated Nature Reserve. The eastern coast of the peninsula is also designated as an ASI (superseded). Landscape sensitivity is high due to the area's high scenic quality, landscape and nature conservation designations. In addition, the remote character of the peninsula and the openness of the valley bottom will render any development within it highly visible. Pylons are detrimental to some views presenting a confusing array of vertical structures within the flat valley.

Wind Energy Development in NI's Landscapes (2010)

The general openness of the landscape and the remote and wild qualities of the Islandmagee peninsula itself make this LCA very sensitive to wind energy development. Similarly, the hills and ridges which flank the settlement of Whitehead are important in defining a setting to the town and are visually sensitive to wind energy development. In addition, Islandmagee is valued for its high scenic quality, and Larne Lough and its shores for their nature conservation sites and bird habitats. It may therefore be difficult to accommodate wind energy developments in this landscape.

A possible exception is land associated with the power station at Ballylumford, which might have lower sensitivity to appropriately scaled wind energy development.

Overall sensitivity – high

Assessment of Development Pressure

Renewable Energy

Wind Energy

The Islandmagee peninsula has generally experienced medium pressure for wind energy development with pockets of high pressure around the Gobbins Road close to the area of the Gobbins Coastal Path and at Muldersleigh Hill north of Whitehead. At the edge of this LCA, there has also been a pocket of high pressure to the south-west of Whitehead inland of Cloghan Point (LCA 129) and White Head headland. The farmed valley slopes to the west of Larne Lough have generally experienced low pressure for wind energy development with a pocket of medium pressure adjacent to Ballycarry.

The majority of applications for wind energy development within this LCA have related to proposals for large-scale (over 15 metres) wind turbines and none of these applications have proposed an increase in the height of an 'approved' wind turbine. There has been no proposals for wind farm development within this LCA.

On the Islandmagee peninsula the areas with the highest altitude have experienced concentrated pressure for wind energy development, namely areas around Middle Road/Gobbins Road and at Muldersleigh Hill; other areas of the peninsula have experienced medium pressure. The general openness and small-scale of the Islandmagee peninsula landscape and its high scenic quality make this part of the LCA very sensitive to wind energy development. In other parts of the LCA, key landscape features such as the ridges west of Larne Lough, Muldersleigh Hill and the headlands flanking Whitehead are visually highly sensitive to wind energy development, particularly as they contribute significantly to the settings of nearby settlements and Larne Lough.

Solar Energy

Solar energy proposals have been approved at three sites in this LCA and all proposals were for small-scale solar energy schemes. The high scenic quality, general openness of the landscape and the remote and wild qualities of Islandmagee make many areas of this peninsula visually highly sensitive to solar farm development. Other areas of this LCA, and not on the Islandmagee peninsula, are also visually highly sensitive to solar farm development as they are prominent in long range views from public receptors, for example settlements and the Causeway Coastal Route, and these areas contribute significantly to the setting of Larne Lough and nearby settlements.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21), this LCA generally experienced a mix of pressure for residential development in the open countryside ranging between pockets of no development pressure through to areas experiencing high development pressure.

Since June 2010, the pressure for residential development in the open countryside has generally been low to medium with some areas experiencing no development pressure, for example some

eastern parts of the Islandmagee peninsula. Only one area to the north-east of Whitehead in the McCrae's Brae area has experienced high pressure which was due to applications for farm dwellings and replacement dwellings.

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- The central and eastern parts of the Islandmagee peninsula are within an Area of Scenic Quality (ASQ). A series of north-south ridges, cliffs on the east coast, Brown's Bay and associated headlands and Muldersleigh Hill to the north of Whitehead all contribute to the high scenic quality of this area.
- The eastern coastline including the headland at Skernaghan Point is highly sensitive to change as this area is unspoilt and has an undeveloped character. In this area the rugged basalt cliffs and Isle of Muck are exceptional landscape features. This side of the peninsula has a strong sense of remoteness, tranquillity and naturalness.
- Browns Bay and Ferris Bay have sandy beaches enclosed by headlands and are important landscape features on the northern shoreline of Islandmagee.
- Muldersleigh Hill is an important element in the landscape, particularly in regard to the setting of Whitehead.
- The Islandmagee peninsula has numerous natural heritage conservation sites of international and national importance and these are predominantly located along its eastern and western shorelines.
- Larne Lough is a relatively tranquil area and its shoreline and marine habitats such as saltmarsh are included within designated nature conservation sites.
- The farmland slopes to the west of Larne Lough are rural in character and their level of tranquillity is increased by the presence of Larne Lough and enclosure provided by the topography and areas of woodland. The western ridgeline and woodland at Red Hall and Fort Hill are important for the setting of Ballycarry.
- Red Hall Estate is a registered historic park, garden and demesne which is a highly significant historic environment and natural heritage asset in this area.
- The condition of landscape elements is mixed, being relatively good on Islandmagee and mixed elsewhere. The landscape has a distinctive structure of regular fields bound by prominent hedges which create a grid-like pattern which is particularly visible on the valley slopes.

Visual Sensitivity: Key Points

- This landscape has a strong horizontal form due to the low north-south ridges on either side of the flat open expanse of Larne Lough. This landscape has a general openness such that important landscape features such as ridgelines and prominent hills are widely visible from key receptors such as Larne, Whitehead and smaller settlements in the wider area around Larne Lough.

- The horizontal form and openness of this landscape make the ridges and hills particularly sensitive to prominent forms of development.
- Visual sensitivity is high on the Islandmagee peninsula which is a small-scale landscape and open to views from Larne Town, Ballycarry, the Causeway Coastal Route, the Larne-Belfast railway line and the North Channel (for example from the East Coast Canoe Trail).
- The undeveloped headlands around Brown's Bay are exposed to views from Larne town, walking routes in this area and the Browns Bay Scenic Route, which has been included in the Causeway Coastal Route.
- The Isle of Muck is exposed to views from Portmuck Harbour and walking routes in this area.
- The rugged basalt cliffs of the Gobbins Coast are exposed to views from the Gobbins Coastal path. The undeveloped cliff tops in this area are seen in key views from Gobbins Road which has been incorporated into the Causeway Coastal Route and from the Blackhead path.
- Muldersleigh Hill, Carnbrock Hill and coastal headlands in the southern part of this landscape character area form an important setting for Whitehead and are exposed to key views from within this settlement. These landscape features are highly sensitive to change due to their prominence in the landscape, however woodland to the north of Carnbrock Hill may reduce the visual sensitivity of this hill to some forms of development.
- On the western farmland slopes visual sensitivity is reduced by enclosure and screening provided by the topography and pockets of woodland. However, the ridgeline is a visually sensitive feature in this area which is open to views from Larne, Whitehead, Ballystrudder and the western side of the Islandmagee peninsula. Magheramorne Quarry and associated quarry spoil have degraded part of the landscape in this area.

Landscape Value: Key Points

- The Islandmagee peninsula is valued for its high scenic quality (central and eastern parts of the peninsula are within an identified ASQ).
- The relatively inaccessible east coast of Islandmagee is a predominantly undeveloped coastline with a strong sense of remoteness, tranquillity and naturalness. This coastline is an important point of interest on the East Coast Canoe Trail, and includes the Gobbins Coastal Path, Portmuck Harbour and the Isle of Muck Nature Reserve and associated tombolo.
- There are key views out to sea and along the coast from publicly accessible vantage points on this eastern shoreline, for example, the Gobbins, the Blackhead coastal path and a coastal path at Portmuck.
- Brown's Bay is an enclosed sandy beach and Browns Bay Scenic Route is a scenic drive which takes in the pleasant views in the northern part of Islandmagee.

- The eastern basalt cliffs and Isle of Muck (a nature reserve) are important nature conservation sites and are important habitats for seabirds. These sites are also of geological interest.
- Larne Lough is an important nature conservation site which supports breeding and wintering birds and maritime plant communities. The lough is also of special scientific interest by reason of its rocky shores, mudflats and salt marshes. Swan Island is located in Larne Lough and is a Statutory Nature Reserve.
- The rocky shoreline of Larne Lough and Ballylumford Harbour are good locations for fishing, and slipways around Larne Lough provides opportunities for sailing.
- The significant pockets of woodland at Red Hall Estate, Diamond Jubilee Wood and Fort Hill are significant for visual amenity to west and south of Larne Lough and increase biodiversity in the area. However, Magheramorne Quarry and associated quarry spoil have degraded part of the landscape west of Larne Lough.
- The woodland at Red Hall Estate and on Fort Hill are highly significant for the setting of Ballycarry.
- Muldersleigh Hill, Carnbrock Hill and the coastal headlands in this area form an important setting for Whitehead.
- This landscape has a numerous important historic environment sites, for example Druid's Alter (State Care monument), numerous scheduled monuments and listed buildings such as Blackhead Lighthouse, Druid's Cottage and buildings and structures associated with Red Hall estate (registered Historic Park, Garden and Demesne).

Sensitivities and Forces for Change

Climate Change - The intertidal mudflats which are of high biodiversity value could be impacted by the effects of climate change. Coastal flooding could impact on key infrastructure and historic environment and natural heritage sites along the shoreline. Increased frequency of extreme weather events could increase the erosion rate of the cliffs on the eastern coast of Islandmagee.

Coastal Processes - sensitivities and forces for change: The coastline is a dynamic environment, for example parts of Larne Lough and the sandy beaches of Ferris Bay and Brown's Bay. The natural processes of erosion and accretion are integral to the sustainability of intertidal habitats and beaches and these processes should be safeguarded as this will have benefits for biodiversity and other ecosystem services. There are man-made revetments protecting the Blackhead coastal path and, going forward, these coastal defences may require more intensive maintenance due to the increased frequency of extreme weather events associated with climate change.

Planning and Management Guidelines

- protect mudflats from potential impacts of nutrient enrichment, land claim, coastal defences, dredging and human disturbance.
- ensure that dredging operations, fishing activities, land reclamation or eutrophication do not affect the integrity of intertidal and subtidal sea-grass beds.
- protect rare coastal saltmarsh communities from sources of pollution and waste tipping, in addition to damaging activities such as landfill and construction.
- maintain wherever possible free functioning of coastal physical processes acting on maritime cliff and slopes; cliff areas are vulnerable to development which may cause erosion - any new development needs to be carefully considered.
- ensure that NI Priority Species, rare plants and RSPB Red List Species are protected from factors such as new development, erosion, waste tipping and pollution.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: The Islandmagee peninsula has accommodated development associated with the energy sector such as Ballylumford Power Station, pylons and transmission lines. Single wind turbines have subsequently been erected. In the medium term the visual impact of prominent energy infrastructure on the western side of the Islandmagee peninsula is likely to remain. Longer term, changes in the energy mix may instigate redevelopment or closure/removal of some elements of this energy infrastructure. Recent proposals, which have not yet been realised, have included gas storage chambers and a Compressed Air Energy Storage (CAES) plant. There may be future pressure for wind and solar energy development, for example new sites or applications for increasing the height of existing turbines.

Planning and Management Guidelines

- Non-domestic wind turbines should not be sited on the eastern or central areas of the peninsula, particularly on the elevated central ridge or the lower lying farmland adjacent to the cliff edge.
- The more elevated landscape has a very low capacity to accommodate further wind energy development which has the potential to undermine its remote and largely undeveloped character and sense of wildness.
- Telecommunications or radio masts are more suited on the western slopes rather than the central ridge or the eastern farmed slopes and headlands. Larger scale electricity transmission lines should be routed to avoid this area.

Development – sensitivities and forces for change: Rural housing occurs frequently in the landscape. Larger scales of housing would be particularly intrusive, while linear housing development along the roads running through the LCA would have an adverse effect on landscape character. Tourism related developments have the potential to be intrusive to the setting of the loughs Gobbins and the basalt cliff edges.

There is likely to be further pressure for leisure, tourism and housing development within the LCA. The lough shore landscapes and their associated semi-natural vegetation are sensitive to development. Such development could have adverse visual impacts, particularly in coastal areas and on visually sensitive slopes and ridges. There is currently planning permission for a mixed-use development on the Magheramorne Quarry site.

Planning and Management Guidelines

- the design and location of tourist infrastructure is important to ensure that they are not prominent and do not detract from the quality of this coastal and lough landscape.
- the important rural and remote character of this area may be retained by avoiding linear settlement along the lough edge and roads. The majority of new housing development should be sited and concentrated in existing settlements.
- new single dwellings should be avoided on the farmed landscape adjacent to the basalt cliffs along the eastern coastline.
- native broadleaved planting and traditional stone walls around new built development would assist in its integration into the landscape.

Trees, woodlands and forestry – sensitivities and forces for change: Woodland cover is sparse but includes the NI Priority Habitats lowland woodland pasture and parkland and mixed upland ashwood.

Planning and Management Guidelines

- enhance the biodiversity value of demesne woodlands by discouraging any further felling or pollarding; by retention of fallen and veteran trees (particularly for bryophytes, ferns, fungi and fauna); ensure that hazel scrub is not cleared.
- encourage control of grazing in broadleaved woodlands to foster herb layer and regeneration and if necessary, encourage replanting of canopy species; removal of invasive species could increase the diversity of ground flora, especially where the canopy species are not beech.
- manage broadleaved woodlands at Bentra and Fort Hill, particularly any ancient and long-established.
- management plans for demesne woodland should be directed toward their survival through natural regrowth or planting of native broadleaf species; farmers and landowners could be encouraged to plant field corners or set-aside fields.

Grassland and Arable - sensitivities and forces for change: Predominantly improved pastures and poorly managed hedges of low biodiversity, however, Castletown ASSI includes extensive species-rich grassland.

Planning and Management Guidelines

- manage grazing levels to ensure that species-rich grassland areas are not encroached by scrub vegetation or experience a fall in species richness due to overgrazing.
- maintain and enhance wet grassland by where, possible, restricting field or arterial drainage.
- maintain and improve field boundaries, especially hedgerows where they occur.

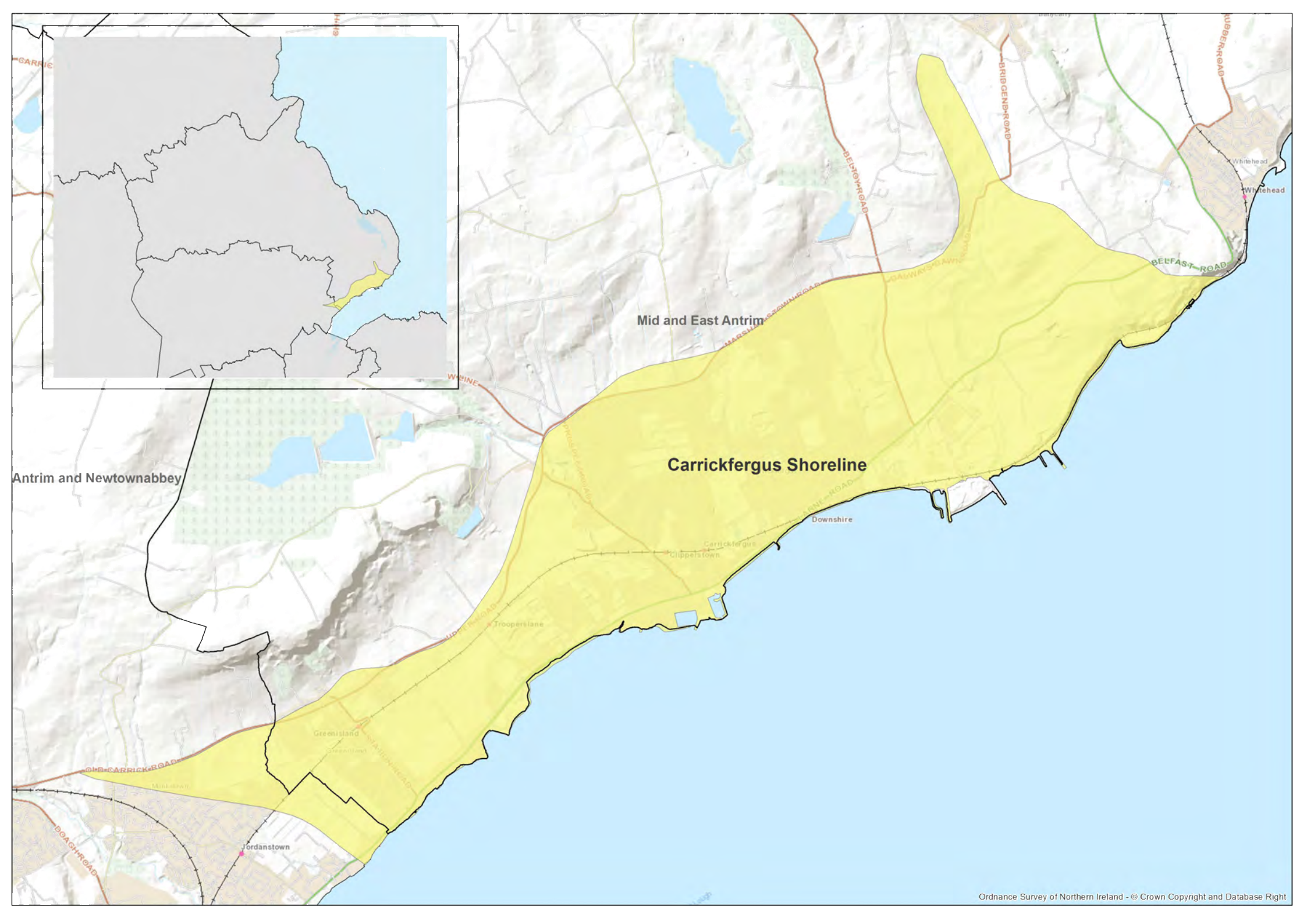
Heaths and Bogs - sensitivities and forces for change: Islandmagee has limited areas of gorse heath and scrub.

Planning and Management Guidelines

- control grazing intensity on existing heathland to encourage development of heathland and of heather of different ages.
- discourage 'reclamation' to pasture fields around heathland margins and commercial afforestation.

LCA 129 - CARRICKFERGUS SHORELINE





Key Characteristics - LCA129

- Narrow flat coastal plain.
- Large industrial and commercial developments along coastal edge.
- Almost continuous belt of development which includes the settlements of Carrickfergus and Greenisland.
- Peripheral industry and linear development along roads links separate coastal settlements and obscures their separate identities.
- Pockets of woodland around Castle Dobbs.
- This area is a key communications and services corridor.
- Expansive views of the sea.

Landscape Character Description

This landscape is a narrow relatively flat coastal plain which rises gently inland towards the Carrickfergus Escarpment, which along with Belfast Lough, provides the setting for this area. Planting Hill at Castle Dobbs is a prominent hill in the east of this landscape. There are areas of woodland that provide some sense of enclosure, for example at Castle Dobbs and Bashfordsland, however generally the landscape is open in character.

There is an almost continuous belt of coastal development along the shoreline which includes the settlements of Carrickfergus and Greenisland and is broken only by farmland. Ribbon development extends along parts of the B90 on the northern edge of Carrickfergus and Greenisland and along the A2 on the coast. Carrickfergus is the most concentrated area of settlement and is contained by Belfast Lough to the south and the B90 to the north. However, some residential development has occurred north of the B90, for example, as at Greenisland.

There are large commercial and industrial developments along the coast and the landscape character area is part of a communication and services corridor. Prominent industrial structures provide a strong visual focus e.g. the stack of Kilroot Power Station, and the transmission lines associated with this power station are visually intrusive in the north-eastern part of the landscape character area. The linearity of the Carrickfergus Shoreline is emphasised by the roads and railway that run parallel to the coast. Views of the sea are a fundamental aspect of the local landscape character and, while coastal development blocks visibility from a number of locations inland, there are a number of significant waterfront viewpoints, such as at Carrickfergus Castle. The railway line follows the edge of the shoreline east of Carrickfergus affording excellent views across the Lough.

Physical Influences

Geodiversity

This landscape can be considered as an extension of the region described as the Central Lowlands, although it derives much of its character from proximity to, and the visual impact of, the escarpment of the Antrim Plateau. The Central Lowlands owe much of their large-scale morphology to the early Tertiary subsidence of the Lough Neagh basin into the magma chamber from which the basalts that underlie much of the landscape originated. In the east of the Central Lowlands region the lowlands extend north-eastwards along the fault-guided Lagan Valley. Belfast Lough, with the port of Belfast at its head, is the fault-guided boundary between the Palaeozoic basement to the south and the Tertiary lava plateau to the north.

The Carrickfergus shoreline forms a fringe of flat land up to three kilometres wide and is situated between the high basalt ridge of the Carrickfergus Farmed Escarpment (landscape character area 130) to the north and Belfast Lough to the south.

There has been considerable man-made modification of the shoreline around the Belfast metropolitan area over the course of the 20th Century. Most of the coastal road system and the northern edge of Belfast is on 'made-ground'. Some minor sea-level falls have accompanied this landfill. Sediment supply to Belfast Lough is now very limited and in some cases, as at Carrickfergus, shoreline extensions have overstepped existing sediments and have required the construction of coastal defences.

For further details on the geodiversity profile of this landscape character area please refer to NILCA 2000.

Altitude range

The land in this part of the landscape character area is between 0 and 110m AOD.

Topography

This landform is a narrow flat coastal plain. The land rises gently inland in a north/north-westerly direction towards the escarpment. The landform reaches an elevation of approximately 110m AOD at Planting Hill and at a ridge running north/north-west from the Castle Dobbs area.

Biodiversity and Land Cover - Key Characteristics

- Land cover is dominated by urban land uses.
- Farmland is under threat from urban expansion, particularly between Carrickfergus and Greenisland.
- Biodiversity is weak but can improve.

Woodlands

Woodlands are scarce in this area with the only extensive area of woodland around Dalways Bawn and the Castle Dobbs estate which has mature woodland, parkland trees and a treed avenue. Oakfield Glen and Bashfordsland Wood is a recent attempt to increase the woodland cover where the Woodland Trust has planted trees.

Grassland and Arable

Grasslands account for approximately 40% of coverage. To the east of Carrickfergus this is generally improved pasture, but elsewhere there is a mix of improved pastures, golf-courses, playing fields and areas designated for development.

Coastal

This landscape character area is adjacent to the following natural heritage conservation designations: Belfast Lough Ramsar, Belfast Lough Special Protection Area (SPA), Belfast Lough Open Water SPA, proposed East Coast (NI) Marine SPA and Outer Belfast Lough Area of Special Scientific Interest (ASSI). The habitat range includes open mud flats and boulder and rocky shores.

Field Boundaries

In the countryside, generally exhibits a regular small-scale field pattern. Boundaries generally consist of hedgerows and hedgerow trees, however some hedgerow removal has occurred being replaced with post-and-wire fencing. Some enclosure is provided by woodland in the north-east.

Natural Heritage Conservation Sites – Designations

International Sites

- Belfast Lough RAMSAR
- Belfast Lough Special Protection Area (SPA)
- Belfast Lough Open Water SPA
- Proposed East Coast (NI) Marine SPA

National Sites

- Outer Belfast Lough Area of Special Scientific Interest (ASSI)

Local Sites

- Bashfordsland Wood and Oakfield Glen Local Nature Reserve
- Carrickfergus Mill Ponds Local Nature Reserve
- CE02/03 Castle Dobbs Site of Local Nature Conservation Importance (SLNCI)
- CE02/05 Dalway's Bawn SLNCI
- CE02/06 Jointure Bay Stream SLNCI
- CE02/13 West of Mutton Burn SLNCI
- CS14/01 Kilroot Stream SLNCI
- CS14/02 Oakfield SLNCI

- CS14/03 South Woodburn SLNCI
- CS14/04 Woodburn SLNCI
- CS14/05 Coast North and South of Cloghan Point SLNCI
- CS33 Carrickfergus Castle SLNCI

Historical and Cultural Influences

Settlements

Carrickfergus is designated as a town in the Belfast Metropolitan Area Plan 2015. Carrickfergus is County Antrim's oldest town and became inhabited shortly after 1170 when Anglo-Norman knight John de Courcy invaded Ulster, established his headquarters in the area and built Carrickfergus Castle in 1177. The castle is widely known as one of the best-preserved Norman castles in Ireland. The historic walled core of this settlement is designated as a Conservation Area.

Greenisland is designated as a small town in the Belfast Metropolitan Area Plan 2015. The town has two distinct areas, known locally as Upper Greenisland and Lower Greenisland. From 1602 to 1606 the "freemen", leading citizens of Carrickfergus, obtained the right to redistribute land in this area from the Crown, renaming the area the West Division. Farmland was distributed in strips from Knockagh Hill, to the shore of Belfast Lough and lanes were constructed to provide access to the farms and their houses and residences such as Castle Lugg. This pattern of land distribution and access provision has influenced the pattern of development in Greenisland.

Historic Environment

There are archaeological sites scattered along the length of this landscape character area with a concentration of sites located in the old town just north of Carrickfergus Castle (*State Care monument*). Outside of settlement development limits there are 6 scheduled monuments and one state care monument (Dalways Bawn fortification – also scheduled) located in the north-east of the landscape character area. These monuments include an anti-aircraft battery, a fortification at Castle Dobbs, early Christian sites at Kilroot and Bronze Age sites.

There is a concentration of listed buildings in Carrickfergus, mainly associated with Carrickfergus Conservation Area. Outside of settlement development limits there is a concentration of listed buildings and structures associated with the Castle Dobbs Estate.

Castle Dobbs estate is a registered Historic Park, Garden and Demesne and was established in the 16th century. The present house dates from 1730 (listed HB 22/13/01). There is remaining evidence of the formal gardens for the 17th century house, which is now in ruins adjacent to the later house. The present layout is in relation to the 18th century house and takes the form of a landscape park, with a lake, bridge and cascade. The whole demesne contains fine mature trees in shelter belts, parkland, woodland and avenues. There are informal glenside walks, recent planting by the lake and ornamental areas near the house. One walled garden is no longer cultivated but another, to the west of the house is fully maintained. The design of this garden was

created to commemorate the 300th anniversary of Arthur Dobbs's birth in 1689. Arthur Dobbs was a plantsman and is noted for recognition of *Dionaea muscipula* (Venus fly-trap) whilst governor of North Carolina. The site has been in the continuous care of one family. There have been successful adaptations through the years to suit the style of the times. Two late 19th century gate lodges remain but two from earlier in the century have gone. Archaeological sites within this historic demesne include two circular paths, two enclosures and a scheduled fortification.

Sea Park is a supplementary Historic Park, Garden and Demesne located on the south-western edge of Carrickfergus. Sea Park is a lough shore house dating from 1804 (listed HB 22/7/11) with lawns sweeping down to the water. There is a boat house and a bathing house at the shore. Mature trees give the house shelter, though no ornamental planting remains. The walled garden is cultivated and contains the remains of a glazed grotto, which was photographed by R J Welch. The site is now privately owned.

Heritage – Defence and Industry

Outside of settlement development limits, there is a heavy anti-aircraft battery in Knocknagullagh townland close to Whitehead and Carrickfergus Castle is an important defence heritage site on the shore of Belfast Lough.

Within Castle Dobbs there is a historic mill race and site of a disused quarry and limekiln. Within Carrickfergus settlement development limits there are numerous sites of industrial heritage.

Transport Infrastructure

This area functions as a communications and service corridor. The B90 and A2 are the main transport routes within the area. The A2 is part of the Causeway Coastal Route and both this scenic drive and the Belfast-Whitehead railway line run parallel to the coastline.

Leisure & Recreation

Most opportunities for recreation are concentrated in Carrickfergus, particularly along the waterfront e.g. boating at Carrickfergus marina and harbour, fishing and walking along the shoreline and activities at Carrickfergus Castle. Bashfordsland Wood and Oakfield Glen provides an opportunity for walking and a local nature reserve at this site and Mill Ponds local nature reserve both provide an opportunity for exploring the natural environment.

Visual and Sensory Perception

Tranquillity

Overall this landscape has limited tranquillity as much of this coastal landscape is developed. Areas in the north-east of this landscape character area are less developed and there are pockets of tranquillity away from the main roads. The seascape of Belfast Lough is very dynamic and busy with a diversity of land uses and a long history of settlement, defence and industry. At night the lighting of settlements fringing the Lough and the fluid movement of maritime traffic provides an interesting visual experience and outline of the intensive use.

Views

Views of Belfast Lough are a key characteristic of this landscape, particularly from Carrickfergus and Greenisland. For example, there are long range expansive views across Belfast Lough and along the coast particularly from Carrickfergus Castle, vantage points along the A2 and from waterfront residential properties in Greenisland. East of Carrickfergus the railway follows the shoreline offering views across the Lough. There are long range views of Belfast Lough from the B90. Within Greenisland, public views of Belfast Lough are generally restricted by shoreline development.

From within, for example from the A2 and B90, there are medium to long range views of the Carrickfergus Escarpment and the monument at Knockagh. These striking features are an important backdrop for the settlements of Carrickfergus and Greenisland.

There are medium to long range views into this landscape from higher ground to the west and north-west. The shoreline of this landscape character area is also open to expansive views from Belfast Lough and its southern shoreline. The chimney stack at Kilroot power station is a prominent landmark from these vantage points.

Landscape Condition and Sensitivity

Much of this landscape character area is included within the settlements of Carrickfergus and Greenisland and the shoreline largely has a developed character. However, the shoreline is a sensitive area with significant natural heritage assets and this is reflected by the inclusion of the inter-tidal area south of Kilroot Power Station within the following designations: Belfast Lough Ramsar; Belfast Lough SPA and Outer Belfast Lough ASSI. Belfast Lough is included within the proposed East Coast (NI) Marine SPA which will subsume the existing Belfast Lough Open Water SPA.

Areas of Scenic Quality

There are only localised areas of scenic quality within this landscape, for example at Castle Dobbs with its associated woodland. Carrickfergus Escarpment Area of Scenic Quality (ASQ) was identified by NILCA 2000 and abuts this landscape character area to the north of Greenisland. The shoreline is a distinctive feature within this landscape, however it has been impacted by urban development and sites related to industry or the energy sector.

NILCA 2000 Assessment

The landscape has been subject to extensive recent development, especially between Carrickfergus and Newtownabbey. This has detracted from the identity and uniqueness of separate communities and has depleted the character of the natural rocky shoreline and views of the sea. Additional development will therefore be less pronounced in its effect. All development [at the time of the NILCA 2000 assessment] was situated south of the B90 which forms a northern boundary to this coastal strip landscape. If development extends beyond this boundary, it will

extend into the adjacent Carrickfergus Farmed Escarpment, where the characteristic small-scale ladder field pattern is highly sensitive to landscape change.

The Outer Belfast Lough ASSI includes the intertidal area from Newtownabbey to Kilroot Power Station in Carrickfergus which highlights that the water's edge is a particularly sensitive area.

Wind Energy Development in NI's Landscapes (2010)

This landscape is generally not sensitive in landscape terms due to the existing extent of man-made influence but is of higher sensitivity visually as it forms the foreground to views of the Carrickfergus Escarpment and is very open to view from Belfast Lough and its southern shores. There might be some opportunity for wind energy development associated with existing industrial sites, where sensitivity is less.

Overall sensitivity – high to medium

Assessment of Development Pressure

Renewable Energy

Wind Energy

This LCA has generally experienced low pressure for wind energy development with a pocket of high pressure between the settlements of Carrickfergus and Whitehead and inland of Cloghan Point and White Head headland (LCA 128). Four sites within Carrickfergus settlement development limits have received applications for wind energy development and only one of these proposals, located at Kilroot Business Park, was for a large-scale (over 15 meters) wind turbine. Outside of settlement development limits, the majority of applications relate to large-scale (over 15 metres) single wind turbines. None of the applications propose to increase the height of an 'approved' turbine and there has been no proposals for wind farm development.

Generally this LCA is not sensitive in landscape terms. However, the landscape features associated with Castle Dobbs registered Historic Park, Garden and Demesne are considered to be highly sensitive and many parts of the LCA are considered to be visually sensitive as they contribute significantly to the foreground setting of Carrickfergus Escarpment and to the setting of Belfast Lough.

Solar Energy

Within the MEA part of this LCA, a solar farm has been granted planning permission on a site located west of Castle Dobbs and north of Kilroot Business Park. This LCA has limited potential to accommodate any further solar farm development, as much of this area is urbanised and other areas are visually highly sensitive. For example, some areas are within rural landscape wedges which seek to stop the coalescence of settlements and other areas are important for the setting of settlements or the coast.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21), the MEA part of this LCA generally experienced low pressure for residential development in the open countryside with a pocket of medium pressure along the Belfast Road between Carrickfergus and Whitehead.

Since June 2010, there has been no or low pressure for residential development in the open countryside within the MEA part of this LCA.

It should be noted that there are two Rural Landscape Wedges designated within draft BMAP between Greenisland and Newtownabbey and between Carrickfergus and Greenisland. These designations seek to protect the setting of these settlements and prevent their coalescence and consequently constrain residential development in these areas (*NB: although not extant designations, these rural landscape wedges are material considerations in any planning application within their extent*).

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- This landscape is generally not as sensitive in landscape terms due to the existing extent of man-made influence. The shoreline is predominantly urbanised and the settlements of Carrickfergus and Greenisland dominate the landscape. However, there are some localised areas of scenic quality, for example at Castle Dobbs demesne and in the Killyglass Road area.
- This landscape is significant for the setting of Knockagh monument, Carrickfergus ASQ and the coastal settlements.
- The shoreline is a sensitive area with significant natural heritage assets. The inter-tidal area south of Kilroot Power Station is within the following designations: Belfast Lough Ramsar; Belfast Lough SPA; Outer Belfast Lough ASSI and the proposed East Coast (NI) Marine SPA.
- Sea Park Historic Demesne, Carrickfergus Castle and Harbour, Carrickfergus Conservation Area and Greenisland Areas of Townscape Character (BMAP 2015: GD06 & GD08) are all important historic environment assets along the shoreline and the settings of these assets are highly sensitive to change.
- Hard coastal defences are prevalent in this landscape and emphasise the "hard edge" development has created along this shoreline.
- Pylons and transmission lines associated with Kilroot Power Station are prominent in the landscape east of Carrickfergus, adding to the sense of a developed character in this area.

Visual Sensitivity: Key Points

- This landscape is visually sensitive as it forms the foreground to views of the Carrickfergus Escarpment and its shoreline is very open to expansive views from Belfast Lough and its southern shoreline.

- There are medium to long range views into this landscape from higher ground to the west and north-west.
- Views of Belfast Lough are a key characteristic, particularly from Carrickfergus where there are key views of the lough from Carrickfergus Castle and the Marine Highway. There are also key views from waterfront residential properties in Greenisland. East of Carrickfergus the railway follows the shoreline offering views across the Lough. There are long range views of Belfast Lough from the B90.
- Visual sensitivity can be less in locations where industrial development has occurred, for example Kilroot Power Station or where the urban environment is low in quality. However, due to the exposure of the shoreline to long distant views, the lough shore is generally considered to be highly sensitive.
- The setting of important historic environment assets along the shoreline increases the visual sensitivity of the coastal area e.g. Carrickfergus Castle and Conservation Area.
- The 'green wedge' areas between Jordanstown and Greenisland, and Carrickfergus and Greenisland, are open areas which provide a visual break between the coastal settlements, thereby protecting the integrity and setting of these settlements.

Landscape Value: Key Points

- There is high community value placed on important historic environment assets in this coastal area, such as the state care monument of Carrickfergus Castle, Carrickfergus Conservation Area, Areas of Townscape Character in Greenisland and the quality landscape settings of Castle Dobbs and Sea Park.
- The shoreline is a sensitive area with internationally and nationally significant natural heritage assets. This area provides an opportunity for local residents and visitors to explore the nature along the coast.
- The shoreline of Belfast Lough is highly significant for the setting of the coastal settlements.
- Carrickfergus Castle is a landmark tourist attraction.
- Carrickfergus marina and harbour provide opportunities for sailing, and local residents and visitors enjoy fishing and walking along the shoreline.
- Public and private views of the coast are a valued asset for their amenity value and are enjoyed by local residents, visitors and tourists.
- Carrickfergus Escarpment ASQ and Knockagh monument add visual interest to views from within this landscape and are highly significant for the setting of the coastal settlements.
- The 'green wedge' areas between Jordanstown and Greenisland, and Greenisland and Carrickfergus, are open areas which contribute significantly to the visual amenity at the edge of these settlements and are key to protecting their integrity as separate settlements.

Sensitivities and Forces for Change

Climate Change - Rising sea levels and increased coastal erosion could impact on the biodiversity of intertidal mudflats. Coastal flooding events could impact on properties and key infrastructure such as power stations and ports, as well as threatening cultural heritage sites along the shore.

Coastal Processes - sensitivities and forces for change: The natural coastal processes of erosion and accretion are integral to the sustainability of intertidal habitats. On the coast of there are man-made revetments protecting the shoreline, for example at Carrickfergus, and these impact on natural coastal processes. These coastal defences may require more intensive maintenance in the future due to the increased frequency of extreme weather events associated with climate change. Outer Belfast Lough ASSI features mudflats and is of international importance for birdlife.

Planning and Management Guidelines

- protect mudflats from potential impacts of nutrient enrichment, land claim, coastal defences, dredging and human disturbance.
- ensure that mussel beds are protected from physical impacts such as aggregate extraction, pipe/cable laying, dumping of spoil/cuttings; offshore fishing activities such as trawls and dredges can also have an impact.
- ensure that NI Priority Species, rare plants and RSPB Red List Species are protected from factors such as new development, erosion, waste tipping and pollution
- ensure that urban, coastal defence and industrial development, as well as recreational activities do not damage coastal habitats

Harbours - sensitivities and forces for change: Any future development at Carrickfergus harbour and marina and Whiteharbour marina has the potential to impact on the character of the coast.

Planning and Management Guidelines

- the coastal landscape and the settings of Carrickfergus harbour and Castle, and Whiteharbour should be respected.

Settlements - sensitivities and forces for change: The landscape in this area has been subject to urbanisation associated with the settlements of Carrickfergus and Greenisland. As the population of settlements that are within commuting distance of Belfast continues to rise, there is likely to be pressure for urban expansion around the satellite towns of Carrickfergus and

Greenisland. The coalescence of settlements would mar the distinction between them and adversely impact on the character of the area and the setting of the settlements concerned.

Planning and Management Guidelines

- ensure that the coalescence of the settlements does not occur and maintain the separate identities and settings of Greenisland and Metropolitan Newtownabbey at Jordanstown and Carrickfergus and Greenisland.
- development should respect the rural setting in terms of layout and design and minimises visual intrusion into the landscape.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: Kilroot Power Station is expected to close in the future and any alterations to this site and/or changes to its associated transmission lines could impact on the landscape and visual amenity in the area. However, it should be noted that these elements in the landscape are likely to remain in the medium term. There is the potential for increased development pressure for wind energy and solar power in this area. A solar farm has recently been approved in the Castle Dobbs area.

Planning and Management Guidelines

- there is limited capacity for wind energy development within this LCA. There may be some capacity for wind energy development in localised areas which have a strong visual relationship with existing industrial structures. For example, at Kilroot Power Station. Particular care should be taken not to interrupt key views of Belfast Lough from public open space and residential areas within the LCA.
- the settings of the monument at Knockagh on the cliffs above Greenisland, Carrickfergus harbour and Castle, and Castle Dobbs should be respected.
- ornithological issues will require very careful consideration to ensure that there are no unacceptable impacts on bird life.

Trees, woodlands and forestry – sensitivities and forces for change: Broadleaved woodland is a relatively minor feature in the landscape often poorly maintained and open to grazing but could play an important role in improving the landscape structure and screening views to industry.

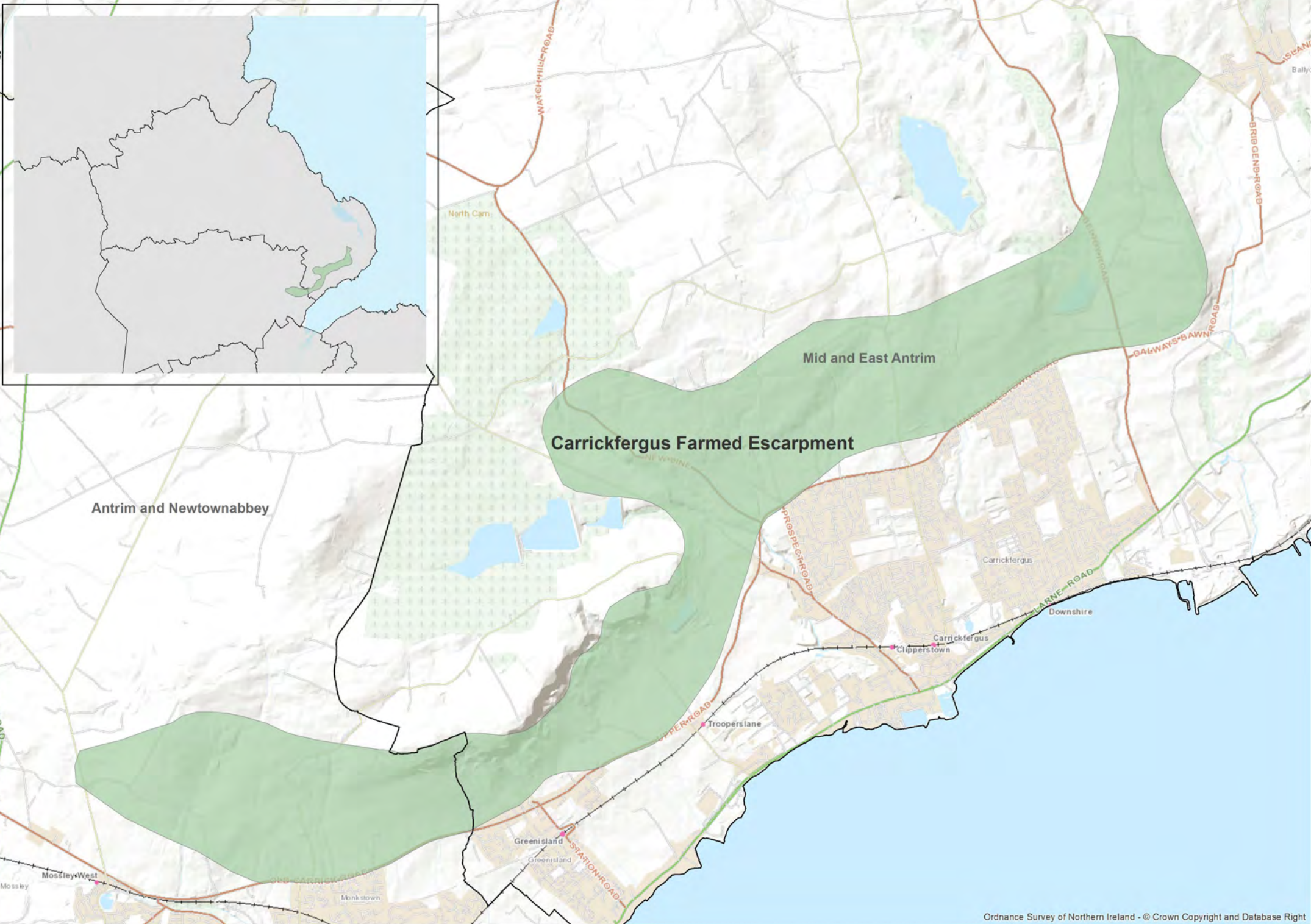
Planning and Management Guidelines

- enhance the biodiversity value of woodlands around Dalways Bawn and Castle Dobbs estate, by discouraging any further felling or pollarding; by retention of fallen and veteran trees (particularly for bryophytes, ferns, fungi and fauna); ensure that hazel scrub is not cleared.

- encourage control of grazing in broadleaved woodlands through fencing to foster herb layer and regeneration; encourage replanting of canopy species; removal of invasive species could increase the diversity of ground flora, especially where the canopy species are not beech.

LCA 130 - CARRICKFERGUS FARMED ESCARPMENT





Key Characteristics - LCA 130

- Gently rolling landform on the margins of a basalt plateau.
- Narrow wooded glens
- Small regular grid pattern of pasture defined by hedges which are generally gappy and poorly maintained.
- Scattered new houses
- Numerous transmission lines and pylons
- Hedgerow trees and Scots pines
- Panoramic views over Belfast Lough and its northern and southern shores.

Landscape Character Description

The landscape has a strong rural character and forms a transition between the flat coastal fringe of the Carrickfergus Shoreline (LCA 129) and the Carrickfergus Upland Pastures (LCA 98). It is a fairly narrow strip of undulating land on the margins of the basalt plateau that leads from the pasture on the elevated slopes to the coastal plain. Woodburn Glen cuts back into the slope, breaking the otherwise regular and smooth profile.

The escarpment contributes to the setting of Belfast Lough, Carrickfergus and Greenisland and is highest and most pronounced in the south-west of the LCA where the basalt scarp of Knockagh forms a notable skyline element.

The LCA is almost wholly pasture land with a grid of small regular fields enclosed by hedge boundaries and trees and in some areas pockets of woodland occur. Copeland Reservoir and Dorisland Reservoir are small reservoirs within the LCA and woodland and hedgerows provide some enclosure for these features. Relatively recent dwellings are a notable addition within this rural area and these exhibit a range of styles that bear little relation to the vernacular stone farmhouses.

There are elevated views over Belfast Lough and its heavily developed northern shoreline and distant southern shoreline. Kilroot Power Station and its associated chimney stacks form a strong visual focus on the northern shoreline of the lough. The numerous transmission lines that extend from this landmark are prominent elements in the landscape that encroach over the slopes and on to the upland pasture.

Physical Influences

Geodiversity

The LCA lies within the region described as the Antrim Plateau and Glens. This upland area is dominated by a series of structural plateaux that dip gently in towards the Lough Neagh Basin.

Detailed topography is largely controlled by a succession of Tertiary basalt lava flows that define successive, large-scale steps within the landscape.

This LCA forms a transition between the flat coastal fringe of the Carrickfergus Shoreline (LCA 129) and the Carrickfergus Upland Pastures (LCA 98). The drift geology map for this LCA clearly shows the drift free crestline of the basalt escarpment above Greenisland and also identifies large areas of landslip below the Knockagh escarpment. The plateau margins are typically characterised by slope failures. Because of the over-steepening of the basalt escarpment by ice within the Lagan Valley, and the presence beneath the basalt and chalk of weathered Mercian Mudstone that becomes liquid when wet, the escarpment was inherently unstable following the removal of ice support from the Lagan Valley. Instability would have been further enhanced by the greater availability of groundwater as climatic conditions ameliorated.

The collapse of large sections of the escarpment therefore represents a post-glacial adjustment in the landscape. This continues into the present day, as the dropping down of large masses of basalt and chalk had the effect of bulging out the underlying beds. Below the escarpment, the lower slopes are generally mantled with a cover of Late Midlandian till, which itself can be subject to slope failure when locally saturated.

For further details on the geodiversity profile of this LCA please refer to NILCA 2000.

Altitude range

The land in this part of the LCA is between 50m and 200m AOD.

Topography

This LCA has a gently rolling landform on the margins of the basalt plateau. It is a fairly narrow apron of undulating land that leads from the pasture on the elevated slopes to the coastal plain. Woodburn Glen cuts back into the slope, breaking the smooth slope profile.

Biodiversity and Land Cover - Key Characteristics

- Narrow LCA along the steep slopes and southern foothills of the basalt plateau.
- Predominantly pasture land with a grid of small regular fields enclosed by hedge boundaries and trees.
- Biodiversity is poor, but this could improve if opportunities arise to develop woodland and more species-rich grassland on the steeper slopes.

Woodlands

Woodlands occupy only 2% of the LCA. The North Woodburn Glen ASSI comprises the most important area of broadleaved woodland and is an example of Upland Mixed Ashwood (*NI Priority Habitat*). Apart from hazel wood and scrub on the steep slopes of the basalt plateau, broadleaved trees are confined to small pockets at Greenisland Golf Club, Burnfield House Golf Club (Antrim

and Newtownabbey Council area), around houses and in hedgerows. A small part of Woodburn Forest (almost entirely coniferous) extends into this LCA.

Grassland and Arable

Grasslands occupy approximately 77% of the LCA and most of this is improved pasture. Immediately above the Dorisland Reservoir there are several fields that are fairly species-rich and at Stoney Glen there is a more diverse, species-rich dry grassland that tends towards calcareous grassland (*NI Priority Habitat*) where soils are thin.

Wetlands and Lakes

There are two reservoirs in this LCA: Copeland Reservoir and Dorisland Reservoir; both are of limited biodiversity interest.

Urban

Urban land-uses occupy approximately 3% of the LCA. There is ribbon development prevalent along the B90 and on some country roads which can adversely impact on biodiversity through, for example, hedgerow removal and pollution of streams from septic tanks and waste water.

Field Boundaries

The LCA displays a ladder field pattern of small rectangular fields enclosed by hedge boundaries. Hedges are often poorly maintained and gappy, especially towards the steep slopes of the basalt plateau. Scot's pines are a characteristic feature in hedgerows on the steeper slopes.

Natural Heritage Conservation Sites – Designations

International Sites

None

National Sites

- Copeland Reservoir Area of Special Scientific Interest (ASSI)
- North Woodburn Glen ASSI
- South Woodburn ASSI

Local Sites

Belfast Metropolitan Area Plan (BMAP)

- CE02/04 Copeland Reservoir Site of Local Nature Conservation Importance (SLNCI)
- CE02/05 Dalway's Bawn SLNCI
- CE02/08 Knockagh-Dorisland SLNCI
- CE02/13 West of Mutton Burn SLNCI

- CS14/03 South Woodburn SLNCI (western part outside LCA)

Historical and Cultural Influences

Settlements

Carrickfergus is designated as a town in the Belfast Metropolitan Area Plan 2015. Carrickfergus is County Antrim's oldest town and became inhabited shortly after 1170 when Anglo-Norman knight John de Courcy invaded Ulster, established his headquarters in the area and built Carrickfergus Castle in 1177. The castle is widely known as one of the best-preserved Norman castles in Ireland. The historic walled core of this settlement is designated as a Conservation Area. *Only a small area of this settlement is located within this LCA.*

Greenisland is designated as a small town in the Belfast Metropolitan Area Plan 2015. The town has two distinct areas, known locally as Upper Greenisland and Lower Greenisland. From 1602 to 1606 the "freemen", leading citizens of Carrickfergus, obtained the right to redistribute land in this area from the Crown, renaming the area the West Division. Farmland was distributed in strips from Knockagh Hill, to the shore of Belfast Lough and lanes were constructed to provide access to the farms and their houses and residences such as Castle Lugg. This pattern of land distribution and access provision has influenced the pattern of development in Greenisland. *Only a small area of this settlement is located within this LCA.*

Historic Environment

There are seven scheduled archaeological sites within the MEA part of this LCA and four of these are located close to New Line (B58). There is one listed house (Grade B1) located within the MEA part of this LCA.

There are multiple sites in the area where evidence of prehistoric settlements have been uncovered, most notably at Lough Mourne where several crannogs were uncovered during draining of the lough in 1881, as well as several ancient structures and a wooden canoe which are all thought to be late-Neolithic in origin.²⁹

Evidence suggests that Kilroot, just east of Carrickfergus, was founded as a monastic and ecclesiastical site around 500 CE and is possibly the oldest documented settlement site in the area.²⁹

Heritage – Defence and Industry

Historic industry sites are found throughout the LCA and a concentration of these sites are found in the New Line road area. These sites include salt mine sites, a limestone quarry and limekiln site, and a cotton mill and bleach work site. There are no significant historic defence sites within the MEA part of this LCA.

²⁹ <https://carrickfergushistory.co.uk>

Transport Infrastructure

The B90 functions as a physical boundary which defines the southern edge of this LCA and distinguishes this LCA from the more urbanised Carrickfergus Shoreline (LCA 129). Moving west to east Woodburn Road, New Line (B58), Red Brae Road and Beltoy Road (B149) are the main routes that run in a northerly direction from the B90.

Leisure & Recreation

Greenisland Golf Club is located within this LCA, however generally there are few formal opportunities for recreation. There is informal use of some key natural environment sites by the local population e.g. North Woodburn Glen, Copeland Reservoir and Dorisland Reservoir. At Copeland Reservoir there are angling facilities and wheelchair accessible fishing stands.

Visual and Sensory Perception

Tranquillity

There is a sense of wildness and grandeur associated with views from the upper slopes. The areas which abut Greenisland and Carrickfergus are less tranquil and traffic noise on the B90 road further disrupts any sense of tranquillity, particularly during medium to high traffic flows. There is a strong rural character in the LCA, however some new dwellings are an incongruous recent addition to the area, exhibiting a range of styles which bear little relation to vernacular stone farmhouses.

Views

This LCA is very open to views topographically. The basalt scarp and monument of Knockagh are notable skyline elements within the landscape. From coastal areas to the east, and from within this LCA, there are critical views of these landmark features and also of the ridgeline and hills to the north-east.

Views from elevated parts of this LCA are distinctive and overlook Belfast Lough and the concentrated urban development at Carrickfergus and Greenisland. There are views of these urban areas and Belfast Lough from the Beltoy Road/Bellahill Road area and Red Brae Road. There are also distant views of the southern shoreline of Belfast Lough from this LCA. It is noted that within this LCA views can be restricted by the topography and hedgerow trees.

Landscape Condition and Sensitivity

Much of the farmland retains a rural character however there is high pressure for development on the lower slopes. Hedges are gappy and poorly maintained, and in some areas, this has degraded the distinctive small-scale pattern of fields and hedgerows. The scarp slopes and North Woodburn Glen are sensitive landscape features within this LCA.

Areas of Scenic Quality

Notwithstanding some intrusive influences scenic quality is relatively high, reflecting the views and strategic role of this LCA relative to Belfast Lough.

Carrickfergus Escarpment Area of Scenic Quality (ASQ) was identified by NILCA 2000. Within MEA, this ASQ stretches from the Woodburn Road/New Line area to the shared council boundary in the south-west of this LCA and is bounded by the top of the escarpment and the B90.

NILCA 2000 Assessment

The landscape has experienced significant encroachment from ad hoc housing; the boundary of coastal settlement is currently well contained south of the B90, but pressure on this is high. Hedges are not well managed and have generally become gappy and relatively untidy, in places leading to a decline in the distinctive small-scale pattern of pastures and hedgerows. However, much of the local farmland retains a rural character, with elevated seaward views.

The escarpment slope is sensitive due to its prominent position within the landscape and the encroaching pressures from housing developments on the lower slopes. The gradual transition from the small-scale pastures on the lower slopes to the broader, more wooded landscape pattern on the ridgetop is particularly sensitive and constitutes an ASQ. This distinctive landscape pattern is important in visual terms as it conserves the integrity of the ridge as a strong feature in the landscape and provides an attractive setting for Carrickfergus and other coastal towns. The Woodburn Glen is a sensitive feature within this context which is designated as an ASSI.

Wind Energy Development in NI's Landscapes (2010)

Notwithstanding some intrusive influences, this LCA is intrinsically highly sensitive to wind energy development in landscape and visual terms, sharing many of its characteristics and sensitivities with other escarpment landscapes around Belfast, notably the Belfast Basalt Escarpment, of which it is the geological continuation. It has distinctive small-scale field patterns, notable skylines and settings and is visually very exposed, with a relatively wild character. Wind energy development could easily dominate the landscape character, and be visually very prominent, intrusive and be difficult to access.

Overall sensitivity – high

Wind Energy

This LCA has experienced a mix of low and medium pressure for wind energy development. The medium pressure areas are located adjacent to Greenisland and between Beltoy Road and Red Brae Road. There was a mix of proposals for large-scale (over 15 metres) and small-scale (below 15 metres) wind turbines and there were no applications to increase the height of an 'approved' wind turbine. There has been no proposals for wind farm development within this LCA.

Generally, this LCA is highly sensitive to wind energy development. It is a distinctive landscape which provides an attractive setting for the settlements of Carrickfergus and Greenisland and

contributes significantly to the setting of the Carrickfergus escarpment. Further, this landscape is visually exposed to views from key receptors such as residential areas and public roads. In this LCA, wind turbines have the potential to be obtrusive in the landscape which, depending on their location, is likely to have an adverse impact on the setting of Knockagh monument, the Carrickfergus Escarpment ASQ and/or the coastal settlements.

Solar Energy

There has been one application for a solar farm in the MEA part of this LCA. This site is located east of Red Brae Road and was granted planning permission. This LCA has very limited potential to accommodate solar farm development as the landscape is important for the setting of the Carrickfergus Escarpment and the coastal settlements and is widely visible from surrounding areas, particularly from the B90. The views into and across this landscape and the elevated position of the land may make it difficult to avoid any adverse visual impacts of solar farm development.

Dwellings in the Countryside

Between 2003 and June 2010 (introduction of PPS 21), the MEA part of this LCA generally experienced low to medium pressure for residential development in the open countryside, with a pockets of high pressure in an area between New Line and Woodburn Road and along the western section of Liberty Road.

Since June 2010, the residential pressure in the open countryside within the MEA part of this LCA has generally been low with pockets of medium pressure along a stretch of Liberty Road and in an area east of Red Brae Road.

It is noted that there is likely to be high pressure for urban expansion around Carrickfergus and Greenisland, particularly around the Rural Landscape Wedges (proposed within draft BMAP) and along the B90. Further encroachment of development into the Carrickfergus Escarpment Area of Scenic Quality (ASQ) to the north of the B90 should be avoided so as to protect the rural character and scenic quality of this special landscape, which is highly significant for the setting of Knockagh monument and the coastal settlements.

Landscape Sensitivity and Managing Landscape Change

Landscape Sensitivity: Key Points

- The Carrickfergus Escarpment ASQ is valued for its high scenic quality where there is a gradual transition from the small-scale pastures on the lower slopes to the broader, more wooded landscape pattern on the ridgetop of the escarpment which dominates the landscape.

- The distinctive landscape pattern of the ASQ is important in visual terms as it conserves the integrity of the ridge as a strong feature in the landscape. This ridgeline provides a distinctive setting for the monument at Knockagh.
- The scenic quality is relatively high in this LCA and this landscape performs an important strategic role in regard to contributing to a unique setting for Belfast Lough and the settlements of Carrickfergus and Greenisland.
- There is a sense of wildness and grandeur associated with views from the upper slopes and there is a strong rural character in the LCA. However, development pressure is high on the lower slopes and transmission lines and modern dwellings are intrusive elements in the landscape.
- The Woodburn Glen is a sensitive feature within this LCA and is designated as an ASSI. There are also designated ASSIs at Copeland Reservoir and at South Woodburn.

Visual Sensitivity: Key Points

- This LCA is very open to views topographically.
- The basalt scarp and monument of Knockagh are notable skyline elements. The escarpment slope is highly sensitive due to its prominent position within the landscape.
- From coastal settlements such as Carrickfergus and Greenisland, and from within this LCA, there are medium to long critical views of Carrickfergus Escarpment and the Co. Antrim war memorial at Knockagh.
- The ridgeline and slopes in the north-east of this LCA are highly visible elements in this landscape and there are long views of these features from areas to the east.
- The elevated views from this LCA are distinctive and overlook Belfast Lough and the concentrated urban development along the coast. There are also distant views of the southern shoreline of Belfast Lough.
- Visually prominent development within this LCA could dominate the landscape character and adversely impact on key views.

Landscape Value: Key Points

- Carrickfergus Escarpment is valued for its high scenic quality (ASQ).
- The monument at Knockagh, Carrickfergus Escarpment, Woodburn Glen and the prominent hills are attractive features which are prominent in views from the settlements of Carrickfergus and Greenisland.
- The escarpment, farmland slopes and unspoilt ridgeline provides an attractive setting for the monument at Knockagh, which is a distinctive and widely visible landmark.
- This LCA contributes to a unique setting for Belfast Lough and the settlements of Carrickfergus and Greenisland.
- Extensive views of the escarpment, Belfast Lough and the coastal settlements provides visual amenity within this LCA.
- Within this LCA, there is informal use of some key natural environment sites by the local population e.g. North Woodburn Glen for walking and Copeland Reservoir and Dorisland Reservoir for fishing.

- Copeland Reservoir, North Woodburn Glen and Woodburn Forest (South Woodburn ASSI) are sensitive features in this LCA and are designated ASSIs.

Tall Structures and Energy Infrastructure - sensitivities and forces for change: due to the extensive views into and out of this LCA it is highly sensitive to wind energy development in landscape and visual terms. This landscape has distinctive small-scale field patterns, notable ridgelines, is visually exposed and is important for the setting of coastal settlements. Any large-scale (over 15m) wind energy development would be prominent in the landscape and visually intrusive.

Kilroot Power Station is expected to close in the future and any alterations to this site and/or changes to its associated transmission lines could impact on the landscape and visual amenity. However, it should be noted that this energy infrastructure is likely to remain in the medium term. Some wind turbines have been approved in the LCA and there may be further development pressure for wind energy or for increases in turbine height. The blades of a wind turbine behind Knockagh war memorial are visible from certain viewpoints along the B90 and within Greenisland and are incongruous with the unspoilt ridgeline of the escarpment. There has been permission granted for a solar farm east of Red Brae Road and development pressure for this type of renewable energy may occur in the future as the technology becomes more efficient and cost effective.

Planning and Management Guidelines

- this LCA has no capacity for large-scale wind energy development due to its very high landscape and visual sensitivity. Even domestic-scale turbines may have an adverse impact on the landscape in this highly prominent location.
- any wind energy development should therefore be limited to small-scale single domestic turbines, which should be closely associated with groups of buildings and trees. Particular care should be taken to avoid any impacts on the LCA's sensitive ridgelines and key views.

Development - sensitivities and forces for change: urban land currently occupies only approximately 3% of the LCA, but there is ribbon development on both the east-west roads and north-south lanes that poses a potential threat to the biodiversity of the LCA - not only directly, but also through abandonment of agricultural practices (such as hedgerow management) as the potential for building increases, and through pollution of streams from septic tanks and waste water. The population of settlements within commuting distance of Belfast continues to rise. Therefore, it is expected that there will be pressure for urban expansion around the settlements of Carrickfergus and Greenisland. This landscape has a strong rural character, but new houses close to the coastal settlements are an incongruous relatively recent addition.

Planning and Management Guidelines

- The edges of new development could be softened through additional planting and, wherever possible, by integration with the existing field pattern and hedgerow structure.
- Further development should be designed to fit with the existing landscape pattern and should avoid forming a solid horizontal line along the B90 and any further encroachment of housing north of the B90 should be avoided.

Agriculture - sensitivities and forces for change: There is evidence of hedgerow removal and field amalgamation in some areas. If this trend continues it will likely lead to a more open character in some areas of this landscape and may adversely impact on biodiversity. Hedges are gappy and poorly maintained and this is affecting the small-scale landscape patterns in places. Much of the farmland retains a rural character although there are strong pressures for housing on the lower slopes.

Planning and Management Guidelines

- The distinctive small-scale gridded field pattern on the lower escarpment slopes could be conserved by preventing enlargement of fields, dereliction of hedgerows and encroachment of built development.
- Afforestation of the slopes should be designed in such a way as to retain a large proportion of open space and to develop vistas for views over Belfast Lough.
- manage grazing levels to ensure that species-rich grassland areas are not encroached by scrub vegetation or experience a fall in species richness due to overgrazing.
- protect unsown areas of grassland including dry, calcareous grassland above the Dorisland Reservoir and at Stoney Glen

Forestry, trees and woodland - sensitivities and forces for change: limited woodland cover but including the NI Priority Habitat Upland Mixed Ashwood within North Woodburn Glen ASSI.

Planning and Management Guidelines

- enhance the biodiversity value of broadleaved woodlands by discouraging any further felling or pollarding and by retention of fallen and veteran trees.
- encourage control of grazing in broadleaved woodlands to foster herb layer and regeneration and if necessary, encourage replanting of canopy species; removal of invasive species could increase the diversity of ground flora, especially where the canopy species are not beech
- enhance biodiversity through measures to improve and extend woodland cover.
- management plans for broadleaved woodland should be directed toward their survival, through natural regrowth or planting of native broadleaf species; farmers and landowners could be encouraged to plant field corners or set-aside fields

Wetlands - sensitivities and forces for change: There are two reservoirs located within this LCA, Copeland Reservoir and Dorisland Reservoir, but both are of limited biodiversity interest - although the beaked beardlessmoss has been recorded at Copeland Reservoir. No Priority Species have been recorded from the rivers and streams of the LCA.

Planning and Management Guidelines

- care should be exercised to maintain the water quality and biodiversity of the two reservoirs and rivers in this LCA.
- promote and encourage adoption of Countryside Management guidelines so that reservoirs and rivers are not polluted by releases from silage effluent, herbicides, pesticides, fertilisers or sheep dip; ensure that eutrophication does not occur as a result of nutrient-rich surface waters from surrounding farmland.

Selected Settlements: Setting and Significant Landscape Elements



Selected Settlements: Setting and Significant Landscape Elements

When considering landscape policy designations around settlements, outward expansion of settlements or other relevant planning-related matters, it is imperative to consider the setting of a settlement and the landscape elements that contribute to its sense of place. This section seeks to give a general overview of the 'main' landscape considerations around the edge of towns and villages (any town or village included within the preferred option (2a) of Key Issue 2: Settlement Hierarchy in the MEA Preferred Options Paper). This section does not aim to provide a comprehensive list of landscape elements on the edge of settlements, rather it is an overview which seeks to summarise settlement-specific landscape considerations in the context of the review of MEA's Landscape Character Areas (LCAs).

Landscape Character and Setting Considerations

A settlement's identity can be as much as a result of its setting within the surrounding countryside as with the quality of its buildings and pattern of land use. Landscapes around settlements have an important role to play in maintaining the distinction between urban areas and the countryside, in preventing coalescence between adjacent urban areas and in providing a setting for settlements. However, in some locations, development pressure and pressure for outward expansion can result in conflicting stakeholder or individual objectives. In the context of spatial planning, due consideration of landscape elements and their relationship with urban areas and the urban-rural fringe is imperative, so that the quality of the landscape and its aesthetic attributes can be preserved and enhanced.

Ahoghill

This settlement is backed by a steep ridge and is sited at the convergence of several roads. The steep slopes to the west are important for the setting of this settlement.

Ballycarry

This settlement is a prominent feature on the slopes to the west/south-west of Larne Lough. The wooded slopes to the north and south provide a distinctive setting for the settlement when viewed from the east. The settlement's 'perched' setting is significant in the landscape and Red Hall Registered Historic Park, Garden and Demesne abuts the settlement's north/north-eastern edge.

Ballygalley

The setting of this settlement is defined by the coastal shoreline, the prominent headland to the east, woodland to the south and east and the rising slopes to the south and west which contribute to the foreground setting of Knockdhu, Sallagh Braes, and Scawt Hill. All these landscape elements contribute to a unique setting of this settlement which is located on the Coast Road. Cairndhu Golf Club and Carnfunnock Country Park Registered Historic Park, Garden and Demesnes are to the east of this settlement. The proposed East Coast (NI) Marine SPA includes the marine area around Ballygalley up to the mean low water mark.

Ballymena

The Braid River and River Maine provide a floodplain landscape setting to the east and south-west of the settlement. The wooded Galgorm Castle Registered Historic Park, Garden and Demesne and associated golf course is an important local landscape feature associated with the River Maine corridor. The River Maine corridor south of Gracehill is an attractive open landscape which provides a pleasant setting for Gracehill Conservation Area and Galgorm Castle and golf club. The M2 and A26 link define the eastern and south-eastern edge of this settlement creating a hard edge in these areas, however, the ECOS park on the Braid River corridor provides an area of open space which helps soften the landscape.

Ballystrudder

This settlement is located on low-lying land close to Larne Lough. The southern part of Larne Lough and its shoreline are included within Larne Lough ASSI, Ramsar, and Special Protection Area (SPA) conservation designations. The settlement is contained by the B150 (Low Road/Ballystrudder Road) on its western edge and the area west of this road has a relatively undeveloped character which contributes to the setting of Larne Lough and this settlement. Muldersleigh Hill provides a distinctive backdrop for this settlement and the central ridges of Islandmagee also contribute to the settlement's setting.

Broughshane

The attractive Braid River corridor contributes to the setting of this settlement and provides a link for the settlement's elongated settlement pattern. Riverside footpaths, woodland and mature trees add to the strong sense of place of this attractive, well-maintained village. Ribbon development and coalescence between this settlement and industrial land to the south-west (within Ballymena settlement development limits) would represent threats to the integrity and setting of this settlement.

Cargan

This narrow and elongated settlement is located within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB) and Binvore, Cargan Rock, Craignamaddy and Tuftarney Hill are prominent hills that contribute significantly to its setting. The Antrim Hills SPA abuts the eastern edge of this settlement and the western edge of the settlement is predominantly

bounded by the Cargan Water. The attractive southern approach to this settlement is defined by mature roadside trees and woodland.

Carnlough

This elongated coastal settlement is historically clustered around the harbour, with later development following the sweeping Carnlough Bay along the A2 towards the mouth of the Glencloy River. This settlement is located within the Antrim Coast and Glens AONB. The settlement has a scenic and distinctive setting due to the slopes which rise from the coast towards the Garron Plateau, its location at the foot of the Glencloy glen, the enclosure provided by the curve of Carnlough Bay and the headland to the south-east and its coastal location.

The exposed rock faces of the quarries on the slopes of White Hill form a striking backdrop to the settlement and the small-scale, undulating landscape at the foot of White Hill is particularly attractive. The settlement has a Conservation Area which includes the harbour. Any significant outward expansion of this settlement will detract from the stunning landscape setting of this settlement and its distinctive character. The proposed East Coast (NI) Marine SPA includes the marine area around Carnlough up to the mean low water mark.

Carrickfergus

This settlement is located on the shoreline of Belfast Lough and the castle, Kilroot Power Station and St. Nicholas' Church of Ireland Church provide a distinctive focus for the town. This settlement has a Conservation Area which includes Carrickfergus Castle and harbour and extends north-east along the shoreline. The basalt Carrickfergus Escarpment, an Area of Scenic Quality (ASQ), forms a backdrop to this settlement and, along with its undeveloped ridge and Knockagh Monument, creates a strong landscape setting. The lower slopes of this escarpment have a distinctive grid-like pattern of small fields. Outward expansion has predominantly been contained by the B90 which forms a strong boundary, however, built development in the form of single countryside dwellings and some commercial sites are located to the north of this road. Outward expansion of this settlement and development in the countryside represent threats to the character of the lower escarpment slopes and their distinctive grid-like field pattern.

The buffer 'green' area between Greenisland and Carrickfergus is significant as it separates these settlements and ensures they remain visually distinct. This buffer zone should be retained to ensure the visual integrity of these settlements.

To the east of Carrickfergus, Castle Dobbs Registered Historic Park, Garden and Demesne is an attractive landscape element, however, powerlines between this area and Carrickfergus are prominent in the landscape and create a visually cluttered appearance.

Belfast Lough shoreline is included within Belfast Lough Ramsar and SPA designations and the Outer Belfast Lough Areas of Special Scientific Interest (ASSI). Belfast Lough is contained within

the Belfast Lough Open Water SPA (to be subsumed within the proposed East Coast (NI) Marine SPA).

Clough

This is a small ridgetop settlement on cross-roads on the margin of the uplands. There are long views from the edges of the settlement, which has an informal central square with a prominent church. The clustered form and attractive character which is strongly influenced by the informal square and prominent church are key attributes of this settlement.

Cullybackey

The wooded ridge to the west forms a strong landscape setting and backdrop to the settlement and the church spire in the town centre creates a strong focus. The River Maine corridor with its tree-lined/wooded river banks, stone bridges and small-scale riverside pastures contributes to the settlement's distinctive landscape setting.

Glenarm

Glenarm has a stunning landscape setting at the mouth of the Glenarm River and is located on the coast within the Antrim Coast and Glens AONB. The settlement has developed around Glenarm Bay and harbour and has a Conservation Area which includes Glenarm Castle and gardens and quarry sites to east and west. The undeveloped headlands of Straidkilly Point and Lady's Hill and the woodland on the slopes of Glenarm glen are important landscape features for the setting of this settlement.

The wooded slopes of Glenarm glen contribute to the attractive, sheltered character of the glen landscape, much of which is included within the Glenarm Castle Registered Historic Park, Garden and Demesne. Straidkilly National Nature Reserve and wood (part ASSI) is located to the north of the settlement. There is no scope for outward expansion of this settlement without significant adverse impacts on the exceptional character and setting of this settlement. The proposed East Coast (NI) Marine SPA includes the marine area around Glenarm up to the mean low water mark.

Glynn

The wooded slopes around Glynn provide a unique enclosed woodland setting for this settlement. The pleasant setting of this settlement is reinforced by its location beside Larne Lough and strong rural character of the roads leading into the settlement. The wooded Glynn River corridor is an important landscape feature and the flat expanse of Larne Rugby pitches allows views across the Larne Lough to Islandmagee. There are important nature conservation surrounding this settlement such as Larne Lough ASSI, Ramsar, and SPA, the proposed East Coast (NI) Marine SPA and Glynn Woods ASSI.

Greenisland

This settlement extends along the shoreline of Belfast Lough and inland towards the Carrickfergus Escarpment parallel with Station Road. The basalt Carrickfergus Escarpment, an Area of Scenic Quality (ASQ), forms a backdrop to this settlement and, along with its undeveloped ridge and Knockagh Monument, creates a strong landscape setting. The lower slopes of this escarpment have a distinctive grid-like pattern of small fields except for the area within Greenisland Golf Club. Outward expansion has occurred to the north of Upper Road (B90), with development generally running parallel to Upper Road. Further outward expansion of this settlement and development in the countryside represent threats to the character of the lower escarpment slopes and their distinctive grid-like field pattern.

The 'green landscape wedges' between Greenisland and Jordanstown and Greenisland and Carrickfergus are visually significant as they provide a green buffer which separates these settlements and ensures they remain 'visually distinct'. These buffer zones should be retained to ensure the visual integrity of these settlements.

Belfast Lough shoreline is included within Belfast Lough Ramsar and SPA designations and the Outer Belfast Lough Areas of Special Scientific Interest (ASSI). Belfast Lough is contained within the Belfast Lough Open Water SPA (to be subsumed within the proposed East Coast (NI) Marine SPA).

Kells/Connor

The pleasant landscape setting for this 'twin-settlement' is formed by Kells Water river corridor with woodland and trees, its open riverside landscapes and mill. The character of the settlement is also influenced by attractive stone churches (one of which is the site of an early Christian monastery) and stone walls found in places. Playing fields and a cemetery to the east of Station Road (northern edge of the settlement) provide a natural edge to the settlement.

Larne

This settlement has a particularly striking landscape setting with a sheltered harbour at the mouth of Larne Lough. The headland of Carnduff (between Larne and Glynn), Larne Lough and Islandmagee form a significant backdrop for the southern parts of Larne, the B1 Listed Chainé Memorial Tower is an important landmark on the eastern shoreline. The Coast Road running north out of the town is confined by the shoreline and rocky cliffs, and to north the scenic and undulating landscape at the foot of Sallagh Braes within the Antrim Coast and Glens AONB offer a dramatic landscape backdrop to the town. Development has started to spread to the south-west along the northern edge of the Ballymena Road (A8) and the potential for development spreading along this 'corridor' represents a threat to the character and quality of the landscape in an important 'gateway' to the town.

There are sites of significant nature conservation interest around this settlement. Larne Lough ASSI, Ramsar, and SPA are nature conservation sites located to the south-west of the Harbour

Highway. Larne Lough and the eastern shoreline of Larne town are included within the proposed East Coast (NI) Marine SPA and Waterloo ASSI is located along part of the eastern shoreline of the town. Glynn Woods ASSI is located west of Bank Road and the woodland and slopes in this site contribute significantly to the setting of the town in this area.

Martinstown

This setting of this settlement is formed by the Clogh River corridor which runs through, and alongside, this settlement. The prominent hills and undeveloped ridgelines of the northernmost glen of the Central Ballymena Glens (LCA 117) contribute significantly to the wider setting of this settlement, particularly the hills and ridgelines to the south-east, which provide an attractive backdrop.

Portglenone

This settlement is an attractive small market town is located on the banks of the Lower Bann River. The river corridor, the bridge over the Lower Bann River and Portglenone Marina are significant landscape elements in the western part of the settlement. A Cistercian Abbey, Holy Well, listed buildings and Portglenone Forest abut the settlements southern edge and are all included within the Portglenone House supplementary Registered Park, Garden and Demesne. In this area the surrounding woodland and Long Mountain Ridge have a significant influence on the wider landscape setting. Development has tended to expand outwards in a linear fashion along main routes into the settlement, such as along Finlaystown Road, Garvaghy Road, Hiltonstown Road and Townhill Road. Further linear 'ribbon' development would cause further erosion of the rural character in these areas, and in this context, it is desirable to advocate a compact urban form.

Whitehead

Whitehead has a striking landscape setting. The setting of the settlement is framed by Muldersleigh Hill and Black Head to the north-east, Carnbrock hill to the west, the White Head to the south and Larne Lough to the north. Muldersleigh Hill, Black Head and Whitehead Golf Course are within Islandmagee Area of Scenic Quality (ASQ) and contribute to a scenic setting. The Carnbrock - Fort Hill wooded ridge and White Head create a distinctive landscape setting west of the railway line. Bentra Golf Club and the recently planted Diamond Jubilee Wood are notable landscape elements in this area.

Larne Lough ASSI, Ramsar, and SPA are significant nature conservation sites and this area provides a valuable habitat for wildlife. Whitehead has a Conservation Area which follows the Belfast Lough shoreline between Beach Road Nature Reserve and Old Castle Road and extends into a significant part of the settlement. This shoreline (up to the mean low water mark) is included within the proposed East Coast (NI) Marine SPA and candidate North Channel Special Area of Conservation (SAC).

There is a prominent line of ribbon development along Red Brae Road leading steeply up the ridge of Carnbrock to the west of the Larne Road (A2). This ribbon of development is extremely exposed. Such linear outward expansion of development should be avoided in order to respect and preserve the compact urban form of this settlement.

Analysis of the "Main" River Corridors



Analysis of the 'Main' River Corridors

The purpose of this analysis is to indicate the key landscape characteristics, natural heritage assets, historic environment assets and opportunities for access and recreation along the 'main' river corridors in order to consider if these main river corridors warrant additional policy protection. This analysis has been informed by the Environmental Assets Appraisal, Landscape Character Assessment and the Candidate Sensitive Landscape Scoring Matrix Justification.

Lower River Bann (East Bank)

Landscape

- Lough Neagh Fringe Area of Scenic Quality (ASQ) to the south of Portglenone.
- The river corridor has some important woodland, for example Portglenone Forest.
- This area is deeply rural and tranquil.
- South of Portglenone and around the northern edge of Portglenone, parts of the river corridor are open to key public views.
- This river corridor is important for the setting of Portglenone.

Natural Heritage

- Lough Neagh and Lough Beg Ramsar
- Lough Neagh and Lough Beg Special Protection Area (SPA)
- Culnafay and Lough Beg ASSIs
- Various NI Priority Species and NI Priority Habitats associated with Lough Beg
- Areas of peatland (NI Priority Habitat)

Historic Environment and Cultural Significance

- Portglenone House supplementary Historic Park, Garden and Demesne and associated listed buildings and monument sites.
- Shared council boundary with Mid Ulster District Council

Access and Recreation

- Portglenone Marina - boating
- Newferry Water Ski Club and visitor car park
- Lower Bann Canoe Trail
- Fishing occurs along this river.

River Maine

Landscape

- This is a scenic river corridor with small hills and numerous troughs and hollows north of Cullybackey.
- This scenic river corridor has a strong rural character and mature trees along the river banks and at Galgorm Golf Course add to the aesthetic qualities.
- This river corridor contributes to the setting of Galgorm Castle and garden centre and Gracehill Conservation Area.
- This attractive wooded river corridor is important for the setting of Cullybackey.

Natural Heritage

- Frosses Bog ASSI
- Glarryford ASSI
- Mature trees along the river banks add to the aesthetic quality of this river corridor.

Historic Environment and Cultural Significance

- Listed buildings and scheduled raths are found along this river corridor.
- The grounds of Galgorm Castle includes a cluster of listed buildings and significant archaeological sites. For example, there is a scheduled motte and bailey (MCQuillan's Castle) within the grounds of the Castle.
- Gracehill is a historically important Moravian settlement established in 1765 which has a designated Conservation Area and numerous listed buildings.
- There is a scheduled motte north of Whitesides Road.

Access and Recreation

- There are walking paths close to or along the River Maine at Ballymena.
- Galgorm Castle Golf Course is an important recreational, tourist and visitor attraction which hosts the NI Open.
- This river provides an attractive setting for walks around Galgorm Resort and Spa.

Braid River

Landscape

- This scenic river corridor is part of a wide, open and gently undulating river valley. This river corridor has well-maintained productive farmland, the hedgerow network is intact creating a strong landscape pattern. A small area is located within the Antrim Coast and Glens Area of Outstanding Natural Beauty (AONB) and this scenic river corridor contributes to the wider setting of the western edge of the AONB.
- This river corridor contributes to the setting of Ballymena and Galgorm Castle and golf course and Broughshane.

- This scenic river corridor has mature trees along its' length which add to its' aesthetic qualities. For example, along the river banks at Galgorm Golf Course and at Broughshane.

Natural Heritage

- The river itself and associated trees and strong landscape structure create an important habitat for wildlife.
- Wetland habitat associated with the Ecos Park.
- Mature trees along the river banks at Galgorm Castle and golf course.

Historic Environment and Cultural Significance

- The river runs through the settlements of Ballymena and Broughshane and contributes significantly to the setting of these settlements.
- Within Ballymena, Harryville Motte and Bailey is a State Care monument which is located adjacent to this river.
- There are historic mill sites located along this river.

Access and Recreation

- There are cycle and walkways close to, or along, this river at the Ecos Park.
- There is a walkway along the river at Broughshane.
- Brown trout, Dollaghan and Salmon fishing occurs along the Braid River.
- Ballymena Rugby Club and Ballymena Golf Club are located adjacent to the Braid River.
- Galgorm Castle Golf Course is an important recreational, tourist and visitor attraction which hosts the NI Open.

River Kells Water

Landscape

- The Kells Water river corridor is an area which exhibits some scenic quality and is therefore visually sensitive.
- The floodplain is undeveloped along much of this river corridor.
- This river corridor has mature trees and wooded areas along the river banks which contribute to a distinctive riverside landscape.
- Distinctive stone bridges at crossing points contribute to the intimate character of this river corridor. For example, stone bridges over this river located on the Doagh Road and Speerstown Road add visual interest.
- The Kells Water river corridor and associated trees and intimate character contribute significantly to the setting of Kells and Connor.

Natural Heritage

- Mature trees and wooded areas are important landscape features along this river corridor.

- The river itself and associated trees and largely undeveloped floodplain create an important habitat for wildlife.

Historic Environment and Cultural Significance

- In the Shankbridge Road area listed structures such as the Shank Bridge, Kells Water Reformed Presbyterian Church, the listed lodge of Kildrum House and the curtilage of 'New Lodge' listed house contribute significantly to the intimate character in this area.
- The listed stone Kells Bridge on Station Road and curtilage of St. Saviour's Church (the site of an early Christian monastery) abuts the northern edge of Kells and Connor and these are important landscape elements along this river corridor. There are four sites of archaeological interest (2 scheduled monuments) close to St. Saviours Church.
- The bridges crossing this river on the Doagh Road (Rock Bridge) and Speerstown Road (Moorfields Bridge) are Grade B2 listed structures. There is a scheduled rath and souterrain east of the Doagh Road bridge and an unscheduled counterscarp rath east of Speerstown Road.
- There is a B1 listed bridge (Currys Bridge: Kells Water – Magheralane Road - Slaght Road junction).
- There are some historic mill sites located along the river corridor.

Access and Recreation

- Fishing for Brown Trout, Dollaghan, and Salmon occurs on the Kells Water.
- There are opportunities for angling at Kilgad Lake (Riversdale Trout Farm).
- There are playing pitches located adjacent to Station Road.

Photographs



PHOTOS: LCA 52 Lower Bann Valley (MEA)



Lower Bann River corridor - view from Main Street bridge, Portglenone



Lower Bann River corridor (to the north/north-east of Newferry) - view from Largy Road



Wild birds grazing in the Lough Beg fringe area (close to Ballyscullion Road)



Lower Bann River corridor – view from Gortgole Road

PHOTOS: LCA 58 Long Mountain Ridge (MEA)



Peatland and cutting taking place – view from Craigs Road



Slopes of Long Mountain Ridge – view from Crosskeys Road



Looking along the top of Long Mountain Ridge – view from Crosskeys Road



Slopes of Long Mountain Ridge – view from Duneoin Road

PHOTOS: LCA 59 Cullybackey and Clogh Mills Drumlins (MEA)



Tree-lined River Maine corridor – view from Carndonagh Road



Clogh River corridor – view from Drumfin Road/Doury Road junction



View from Hillmount Road



View from Doury Road

PHOTOS: LCA 60 River Maine Valley (MEA)



Kells Water river corridor – view from Slaght Road



River Maine corridor – view from Whitesides Road bridge



Looking towards the River Maine – view from Nursery Road



Trees at Killybegs Moss – view from Straid Road

PHOTOS: LCA 98 Carrickfergus Upland Pastures (MEA)



View looking south along Watch Hill Road



Looking towards Carrickfergus Escarpment – view from Paisley Road



Pylons and wind turbine – viewed from Upper Carneal Road



Looking towards Woodburn Forest and Carrickfergus Escarpment – view from Liberty Road

PHOTOS: LCA 115 Tardree and Six Mile Water Slopes (MEA)



Looking along the Glenwhirry River corridor – view from Moorfields Road



Wind Farm at Big Colin – view from Moorfields Road



Looking south – view from Braepark Road



Looking towards wind farm at Big Colin – view from Speerstown Road

PHOTOS: LCA 116 Ballymena Farmland (MEA)



Kells Water river corridor – view from Station Road



Stone bridge over Kells Water – view from Grove Road/Shankbridge Road junction

PHOTOS: LCA 117 Central Ballymena Glens



Looking towards Slemish from the Kilnacolpagh Road



Looking towards Carncoagh Hill/Elginny Hill from the Kilnacolpagh Road/Burnside Road junction



Looking towards Newtowncrommelin from Glens Brae Road



Looking across the northernmost glen from Glens Brae Road

PHOTOS: LCA 118 Moyle Moorlands and Forest (MEA)



Looking towards the summits of LCA 118 (MEA) from Glens Brae Road

PHOTOS: LCA 122 Garron Plateau (MEA)



Distant views of the undeveloped eastern edge of the Garron Plateau – view from Ballyvaddy Road



Distant views of the undeveloped Garron Plateau – view from Ballyvaddy Road

PHOTOS: LCA 123 Larne Glens



Looking across the Glencloy Glen towards the headland between Carnlough and Glenarm – view from Ballymena Road (outside Carnlough)



View into Glenarm Glen – view from Munie Road



Garron Plateau scarp slopes providing a setting for Carnlough – view from the A2 Coast Road



View of headland east of Glenarm – view from A2 Coast Road

PHOTOS: LCA 124 Larne Basalt Moorland



Looking towards Slemish – view from Shillanavogy Road



Looking east across upland moorland – view from Shillanavogy Road



Looking towards Agnews Hill – view from Mullaghsandall Road



Looking towards Knockdhu – view from Mullaghsandall Road

PHOTOS: LCA 125 Tardree Upland Pastures (MEA)



View across LCA 125 looking towards Slemish and its' setting – view from Collin Road



View across LCA 125 towards the Larne Basalt Upland (LCA 124) – view from Collin Road



Looking towards Big Colin and surrounds – view from Ballynulto Road



View of wind farm at Big Colin – view from Ballynulto Road

PHOTOS: LCA 126 Larne Coast



View of ridgeline from Scawt Hill to Glenarm Headland – view from A2 Coast Road



Sallagh Braes and Knockdhu providing unique setting for Ballygalley – view from A2 Coast Road



View of Ballygalley Head – view from the A2 Coast Road



View along A2 Coast Road towards the Black Arch

PHOTOS: LCA 127 Larne Ridgeland



View across foreground of Sallagh Braes and Knockdhu – view from Brustin Brae Road



Looking across LCA 127 – view from Shanes Hill Road



Looking across LCA 127 towards Agnews Hill – view from Tureagh Road



Looking across Dunisland Water valley – view from Ballywillan Road

PHOTOS: LCA 128 Island Magee



Looking towards the Gobbins cliffs – view from Gobbins Road



Islandmagee ridge and Larne Lough – view from A2 Larne Road



Looking towards Muldersleigh Hill and Whitehead – view from Acreback Road



Looking towards White Head headland – view from McCraes Brae Road

PHOTOS: LCA 129 Carrickfergus Shoreline (MEA)



Looking towards rural landscape wedge between Greenisland and Jordanstown – view from Knockagh Monument



Looking towards rural landscape wedge between Carrickfergus and Greenisland - view from Knockagh Monument



Looking towards Carrickfergus Castle – view from harbour area



Looking towards Seapark and along Belfast Lough shore

PHOTOS: LCA 130 Carrickfergus Farmed Escarpment (MEA)



Looking across Carrickfergus Escarpment Area of Scenic Quality towards Knockagh Monument – view from B90



View of Carrickfergus Escarpment and Knockagh Monument from Greenisland



Looking across wooded scarp slopes – view from Knockagh Monument



View of farmed slopes north of Carrickfergus with prominent electricity pylons – view From B90



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