

Landscape Partnership Scheme



# Landscape Conservation Action Plan 2019

"From sea to summit, celebrating and connecting local people with their unique landscape and heritage to build sustainable and resilient communities"

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# **Chapter 1. Introduction**

This Landscape Conservation Action Plan is the guiding document for the Binevenagh and Coastal Lowlands Landscape Partnership Scheme (LPS). It ties together research, consultation and planning which has taken place under the leadership of Causeway Coast and Glens Heritage Trust (CCGHT) since 2014. This document will guide delivery of an ambitious, realistic and exciting National Lottery Heritage Fund supported scheme which brings together the local community to explore, unearth, celebrate and promote the unique landscape and heritage of this special place in Northern Ireland.

#### 1.1 Location

The Binevenagh and Coastal Lowlands project is located in County Londonderry on the extreme north-west coast of Northern Ireland. It includes 196 km² of specially designated habitats and landscape, including a significant portion of the Binevenagh Area of Outstanding Natural Beauty (AONB). The area has a diverse range of landscapes within a relatively compact area. This translates into dramatically changing scenery and a sense-of-place which is bounded by Lough Foyle on one side and the wild Atlantic Ocean on the other. The project area is dominated by the rugged escarpment and uplands of Binevenagh (385m) but also encompasses the alluvial plain of Lough Foyle, dynamic dune systems in the coastal zone, extensive golden beaches, coastal and upland dwellings and settlements, and iconic buildings such as Mussenden Temple and the Magilligan Martello Tower. The project area has been characterised into six local landscape character areas (LCAs – see map in appendix one), specifically:

- Magilligan Coast and Farmland
- Lough Foyle Alluvial Plain
- Western Binevenagh Slopes
- Binevenagh Uplands
- Eastern Binevenagh Slopes
- Castlerock Coast and Farmland

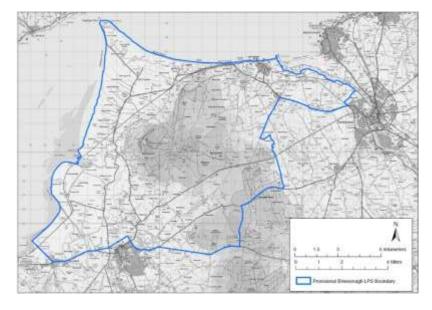
#### 1.2 Partnership

Formal recognition and attempts to maintain the distinct landscape value of the Binevenagh and Coastal Lowlands area first took place when the North Derry AONB was designated by the Parliament of Northern Ireland in 1966. Then largely recognised as an 'award' for areas of natural beauty, the designation received little attention after devolved government ended in 1972. The North Derry AONB was not recognised as a sustainable approach to landscape conservation as it excluded local communities, producing a map resembling a doily.

With the re-establishment of devolved government in in the 2000s the Department of Environment began a systematic process of reviewing AONB designations based on landscape character assessment and community consultation. Within a portion of the LPS area this resulted abolition of the North Derry AONB and establishment of the Binevenagh AONB with an associated Management Forum to guide the actions of partners undertaking activities which could affect landscape character. To-date community buy-in and participation in AONB management has, by the Forum's own admission, been limited.

The first Binevenagh AONB Action Plan was published in 2010 with a core aim to secure an area-based landscape conservation project which could bring the local community together with the public, private and voluntary sectors to undertake partnership activities which conserve and enhance the unique landscape character of the area. Causeway Coast and Glens Heritage Trust (CCGHT) began a process of intense and extensive consultation with partners in 2014, with the goal of applying to the National Lottery Heritage Fund's Landscape Partnership Scheme.

On the basis of research, consultation and a successful Stage One application, CCGHT secured resource for the development of a Landscape Partnership Scheme in 2018. This application was for an area of 196km² which on the basis of public consultation extended beyond the AONB Boundary. The LPS Boundary and AONB boundary are not contiguous; however, 69% of the LPS area is designated as an AONB. On this basis a core LPS Board was established along with four advisory groups relating to the natural environment, defence and historic environment, outdoor recreation and local community. Each Advisory Group is represented on the LPS Board by their respective Chair. The LPS Board is supported by a team of staff who have liaised with, and on behalf of, the LPS Board and Advisory Groups to secure support and financial resources from partners to achieve the outcomes of this LCAP. This LCAP is presented to the National Lottery Heritage Fund by the LPS Board.



1 Map showing the Binevenagh and Coastal Lowlands Landscape Partnership Area in the North West of Northern Ireland

# Chapter 2. Vision, aims and objectives

#### 2.1 Vision

The vision for the Binevenagh and Coastal Lowlands LPS is to:

"Celebrate and connect local people with their unique landscape and heritage to build sustainable and resilient communities"

#### **2.2 Aims**

In order to achieve the vision outlined above the Binevenagh and Coastal Lowlands LPS has three core aims:

- 1) Improve management and resilience of the special landscape, habitats and species of the project area.
- 2) Highlight and promote the vital role the landscape has played and continues to play in defence heritage on a global and national stage from the Napoleonic Period, through WWI, WWII, the Cold War to the present day.
- 3) Establish the area as a top destination in the UK and Ireland to participate in inclusive and sustainable land, sea and air based outdoor activities which complement and add value to the area's unique heritage assets and local community.
- 4) Support and deliver community led heritage initiatives which provide education and training opportunities, and which enhance access to, and interpretation of the area's natural, built and cultural heritage.

All activities delivered through the LPS contribute to achieving one or more of the above aims.

# 2.3 Objectives

All activities delivered through the LPS must deliver outcomes for local people, communities and heritage. All activities delivered through the LPS therefore achieve at least one or more of the following objectives:

- 1) Local people develop new skills
- 2) Local people have a chance to learn about heritage
- 3) Local people volunteer time to delivery of activities
- 4) The environment is improved for local communities
- 5) More people and a broader demographic are engaged with heritage
- 6) The local area is a better place to live, work and visit
- 7) Heritage features are better managed
- 8) Heritage is in better condition
- 9) Heritage is better identified and recorded

# 2.4 Partnership Values

The Binevenagh and Coastal Lowlands LPS has developed over a long period of time, with almost three years (2014 to 2017) taken to consult widely with the local community and partners to prepare a Stage One application (submitted 2017), and a further 18 months for a National Lottery Heritage Fund supported Development Phase to prepare a Stage Two Delivery Phase application for submission in October 2019.

This Landscape Conservation Action Plan is submitted as part of this Stage Two application. During the Development Phase, the LPS Board, Staff and Advisory Groups have become established in the local area and have generated considerable interest in and awareness of the LPS. Extensive and intensive consultation with local community groups and partners has resulted in the development of a strong suite of projects which meet the aims and objectives of the scheme; but more importantly, ensure that the LPS Board achieves its vision of 'celebrating and connecting local people with their unique landscape and heritage to build sustainable and resilient communities'.

The Development Phase of the LPS has operated in an inclusive and transparent manner, ensuring that partners, community groups and individuals have had an opportunity to engage with the LPS staff, Advisory Groups and LPS Board. This has generated a set of specific, measurable, agreed, realistic and timely (SMART) activities. The project has amassed a huge wealth of information, expertise and advice which is recorded in a suite of detailed minutes and appendices included with this application (see appendix two). This resource has ensured that all LPS Board decisions have been taken on the basis of sound research, information and advice. All partners have had an opportunity to scrutinise and shape proposed project activities before submission to the National Lottery Heritage Fund.

There is no 'automatic right' for any individual or organisation to participate in the LPS. Participation is open to anyone with an interest in helping the LPS Board realise its vision, aims and objectives. Whether it is participation on one of the four Advisory Groups, volunteering to help deliver an activity, or active involvement in one of the proposed training programmes, the Binevenagh and Coastal Lowlands LPS welcomes and values all contributions to successful delivery of the scheme. That said, the LPS is bound by a core partnership and associated Partnership Agreement which outlines the roles, responsibilities and commitments of the project partners (see appendix three). The following table lists the core project partners. The detailed roles, responsibilities and commitments of each partner can be consulted in the Partnership Agreement.

# **Binevenagh and Coastal Lowlands LPS Partnership Agreement Signatories**

- Causeway Coast and Glens Heritage Trust
- Causeway Coast and Glens Borough Council
- National Trust
- Loughs Agency
- Woodland Trust
- HMP Magilligan
- Roe Valley Ancestral Researchers
- Aghanloo Community Association
- Magilligan Community Association
- Castlerock Community Association
- Limavady Community Development Initiative
- Causeway Rural and Urban Network
- Ulster Gliding Club
- Queen's University Belfast (School of Natural and Built Environment and Centre for Archaeological Fieldwork)
- Ulster Wildlife
- Royal Society for Protection of Birds (RSPB)
- Northern Ireland Environment Agency
- Ulster Farmers Union
- Magilligan Field Centre (Education Authority)
- Sport NI
- Bannside Ramblers
- Translink
- North West Orienteering
- Carrowmena Activity Centre
- Long Line Surf School
- Ulster Federation of Rambling Clubs
- Mr Gerald Millar

The LPS Board and Advisory Groups operate according to a detailed Terms of Reference (ToR) and Partnership Agreement. The LPS Board is the principle decision making authority for the LPS. It is Chaired independently, with membership comprising the Chairs of each of the four Advisory Groups, along with the Chief Executive and a Board member from CCGHT (the grantee). The detailed partnership agreement and ToR for the LPS Board and Advisory Groups can be viewed in appendix three. Figure Two provides a graphical summary of the LPS Board structure. The entire partnership meets annually to review project performance, progress and agree an annual workplan.



2 Structure of LPS Board

The LPS Board firmly believes that the momentum built towards celebrating and connecting local people with their unique landscape and heritage during the Development Phase will continue to grow throughout the Delivery Phase and beyond, leaving a lasting legacy of sustainable and resilient communities which will be equipped to maintain one of the key project outputs – that of applying for and maintaining recognition for the Binevenagh and Coastal Lowlands as Northern Ireland's first UNESCO Biosphere area, thus joining the internationally celebrated Giant's Causeway and Causeway Coast World Heritage Site and the Marble Arch Caves UNESCO Global Geopark as a 'must experience' landscape.

# 2.5 Development and Consultation

# 2.5.1 Pre-Development Phase

Following an initial concept meeting with National Lottery Heritage Fund in 2014, CCGHT's team led a series of workshops and meetings with local stakeholders to test the appetite for a Landscape Partnership Scheme in the area. These meetings were used to identify the key heritage assets in the Binevenagh and Coastal Lowland area and to identify the main threats to, and issues and opportunities these assets presented. The outcome of the workshops and meetings demonstrated that there was overwhelming support for the development and submission of an LPS application focussed on:

- Conserving and enhancing the areas diverse habitats and species
- Realising the areas potential as a destination for sustainable outdoor recreation on land, sea and in the air
- Exploring and unearthing the area's forgotten defence heritage (Napoleonic through to the present day)

Community and partner consultation and research were fundamental to informing and shaping the Stage One LPS application submitted in 2017. This process confirmed buyin and support from all partners, particularly Causeway Coast and Glens Borough Council.

Concurrently meetings and site visits were conducted with the National Lottery Heritage Fund to refine the project aims and objectives. Crucially the National Lottery Heritage Fund assessments confirmed the priority focus areas (natural environment, defence heritage and outdoor recreation) identified through prior community consultation.

To ensure that the application complemented existing partner strategies and policies the following documents were used to shape the application outcomes:

- Draft Northern Ireland Executive Programme for Government
- Regional Development Strategy for Northern Ireland
- NIEA Strategic Priorities (2012 2022)
- Causeway Coast and Glens Borough Council Local Biodiversity Action Plan
- Binevenagh AONB Management Plan (2010-2020) and Action Plan (2017-2022)
- Tourism NI draft strategy to 2020
- Causeway Coast and Glens Borough Council Tourism and destination management plan (2015-2020)

In addition, CCGHT and its partners invested £30,000 to commission two major pieces of work to inform the development phase application (reports available in appendix four). These included:

- Outdoor Recreation Audit and Action Plan for the Binevenagh and Coastal Lowlands area
- Defence Heritage Audit and Action Plan

# 2.5.2 Development Phase

Upon securing Development Phase funding CCGHT established an LPS Board, four Advisory Groups and recruited LPS Staff in June 2018. A public project initiation meeting was held in the Roe Valley Arts and Cultural Centre to formally adopt the Partnership Agreement and Terms of Reference for the project. This meeting was attended by over 40 representatives from partner organisations and the local community. The four Advisory Groups and LPS Board have met quarterly since June 2018 to direct project activities for the preparation of this LCAP. This LCAP therefore represents a collective effort amounting to over 300 hours of skilled support from LPS Board members alone, with an additional 1010 hours from Advisory Group members and individuals in the local community. This excludes an additional 730 hours contributed to the project through public event participation.

Significantly no major changes have been identified from the Stage One application. Rather the vision, aims and objectives have been refined to reflect new interests and discoveries led by the local community e.g. extending community archaeology beyond simply WWI and WWII sites, and increased demand for art based and oral history projects. Crucially all of the new interests identified serve to strengthen the Stage Two application.

Throughout the Development Phase, LPS staff have coordinated a number of research projects and the preparation of reports and action plans which support the development of project activities outlined in this LCAP. These reports can be viewed in appendix five and include:

- Landscape Character Assessment Report (Fiona Fyfe Associates LTD)
- Invasive Species Survey and Action Plan (Aulino Wann Associates)
- Defence Heritage Mapping and Survey Exercise (Dr James O'Neill)
- 5 x Conservation Management Plans for Key Defence Heritage Assets (Hamilton Architects)
- Outdoor Recreation Spatial Masterplan for Historic Downhill Demesne (Outdoor Recreation Northern Ireland)
- Outdoor Recreation Spatial Masterplan for Binevenagh, Ballycarton and Grange Park Forests, including connections to Castlerock, Benone, Magilligan, Swann's Bridge, Roe Estuary and the Myroe and Ballykelly Bank (Outdoor Recreation Northern Ireland)

All research activities included extensive community consultation. This ensured that activities and actions recommended in each report have the backing of the local community and partner organisations. A list of all community consultation activities conducted during the 18-month development phase can be found in appendix six.



3 Defence Heritage Consultation Event – Aghanloo Community Association September 2018

# 2.6 Structure of the Landscape Conservation Action Plan

This Landscape Conservation Action Plan is the key guiding document for the Binevenagh and Coastal Lowlands Landscape Partnership Scheme (LPS). It is set out as follows:

**Part One** – Chapters One to Three. Introduction and background: providing the story of the Binevenagh and Coastal Lowlands Landscape Partnership including its vision and aims, sense of place and the genesis of its landscape character. It provides a 'statement of significance' for the LPS area and identifies threats and opportunities which this unique landscape faces.

**Part Two** – Chapter Four. The Scheme Plan outlines what the Binevenagh and Coastal Lowlands Landscape Partnership will deliver to protect enhance and celebrate the area's heritage, including non-technical summaries of all proposed activities.

**Part Three** – Full project plans including working documents (Microsoft Excel Workbooks) for each project with detailed key actions, planned outcomes and costs.

**Part Four** – Scheme delivery: outlining how the scheme will be managed, including details about finances, the staffing structure, timetable for scheme activities, legacy plans and risk management.



4 Community Walk in Binevenagh National Nature Reserve to Launch the 18-month Development Phase

# Chapter 3. A Special Landscape – The Binevenagh and Coastal Lowlands

#### 3.1 Introduction

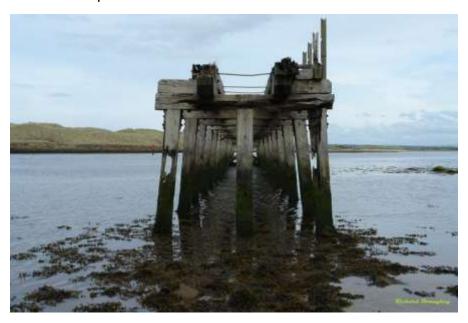
Between the North Atlantic Shore and the summit of Binevenagh Mountain lays some of the UK and Ireland's most stunning landscape. Shaped by geological events of global significance, climate change and human activities, the triangular coastal peninsula and uplands are home to spectacular estuaries, beaches, dunes, alluvial and upland farms, arctic-alpine habitat, ancient woodland and commercial forestry. If one thinks of almost any habitat type in the UK or Ireland, it is likely that a small patch can be found within the Binevenagh and Coastal Lowlands. Located at 55° north of the equator on the exposed Atlantic Coast, the area's geodiversity, biodiversity and moderate climate combine to create a rich and diverse landscape which humans have worked to weave an impressive but often hidden legacy of natural, built and cultural heritage.

Due to its unique geography the Binevenagh and Coastal Lowlands has held huge strategic importance across the ages. As a result, it's flat coastal plains and prominent uplands have been dotted with defence heritage features throughout centuries, particularly the Napoleonic, WWI, WWII and Cold War periods. This association with defence heritage continues today with the coastal lowlands and uplands used for military training. Evidence of historic conflicts and military use abounds in the area; however, little is known about the earlier (pre-Napoleonic) archaeology of the area and there has never been a concerted effort to unearth and interpret archaeology relating to WWI, WWII and the Cold War. In many instances' infrastructure in the Binevenagh area was cutting-edge, helping to establish early practices in trench warfare (WWI Training Trenches), radar (Chain Home Radar) and training simulation (WWII Trainer Dome). Given the security and often secrecy around these structures, local community knowledge and understanding of these features is extremely poor. Consequently, their significant contribution to the landscape value of the area is undervalued. Changing land-use and pressure for development means that there is an urgent need to capture, preserve, understand and value this unique heritage resource before it is lost.

The history and heritage of the 1820s Ordnance Survey of Ireland and the development of ground-breaking cartographic techniques is a very special heritage feature associated with the project area. The extremely flat geomorphology of the Magilligan Coast and Farmland, and Lough Foyle Alluvial Plain provided the perfect setting to establish initial baseline data and techniques along an 8-mile stretch of coastal lowland. Activities pioneered in the project area went on to inform the mapping of huge areas of the world, notably the Ordnance Survey of India, led by Sir George Everest. Features associated with the survey survive to this day (Base Towers); however, like defence heritage features they are little understood, and their significance is undervalued by the local community. It is not known if dispersed landmarks and monuments associated with the survey still survive. It is essential to search for and record extant features before they are forgotten in the history of the development of modern cartography. Exactly 200 years since the commencement of the survey, now is an opportune time to save this unique resource.

The landscape diversity and compact size of the project area means that it has developed as a natural resource base for outdoor recreation. The area is unique in Northern Ireland as the only area that provides for land, water and air-based activities in very close proximity to each other. Surfers, walkers, anglers and cyclists share the spectacular scenery with hang gliders and fixed wing gliders of the Ulster Gliding Club. The LPS provides an ideal chance to develop a unified strategy for all of this activity and to make sure that it enhances and protects the hugely varied landscape and heritage of the area, whilst at the same time facilitating more inclusive access to the area from both the land and water. The Binevenagh and Coastal Lowlands has the potential to become one of the most sustainable areas to access land, sea and air-based activities, with uniquely, direct rail connections to the rest of the island of Ireland.

Overlying the natural and built heritage reflected in the landscape of the area is a rich and deep cultural history. Binevenagh translates in Irish as the 'headland of Fiobhne' the son of a mythological Celtic Chief. This is evidenced from prehistoric settlements along the Bann estuary, through ancient clachans and historic sites and heritage gardens at Downhill and Bellarena, as well as ecclesiastical remains dating from the early Christian period. The famous Broighter Hoard and its golden treasure provides the most spectacular evidence of human appreciation of the landscape. It is likely that the landscape and heritage of the area had a significant influence in the crafting of the now world-famous tune Danny Boy (or 'the Londonderry Air'). Whilst a number of small studies have taken place, the rich variety and history of the area is evidently unexplored and there is an urgent requirement to research, record, value and promote cultural expressions and influences in the landscape.



5 Industrial Heritage – remains of 19<sup>th</sup> Century Railway Viaduct, built to assist in construction of the Barmouth Navigation Scheme

# 3.2 Landscape

In 2018 the LPS Board commissioned an independent Landscape Character Assessment of the Binevenagh and Coastal Lowlands area (see appendix five). This exercise was conducted by Fiona Fyfe Associates LTD to provide an impartial assessment and baseline information about the landscape character and condition of the Binevenagh and Coastal Lowlands LPS area. The study was conducted in line with the best practice guidance for Landscape Character Assessment, as set out in 'An Approach to Landscape Character Assessment' (Natural England, 2014). The Local Planning Team from Causeway Coast and Glens Borough Council participated in all fieldwork for the exercise

The starting point for the study was the Landscape Character Areas (LCAs) identified during the 1999 Local Landscape Assessment for Northern Ireland. The 1999 assessment provided a useful starting point, but a number of inaccuracies and inconsistencies in LCA boundaries were noted and resolved. The methodology for Landscape Character Assessment has developed significantly since the 1999 study was published, and now takes a greater account of the cultural and perceptual characteristics of the landscape as well as its physical characteristics (see landscape wheel below). The importance of consultation with local communities and stakeholders has been formerly recognised within the methodology.

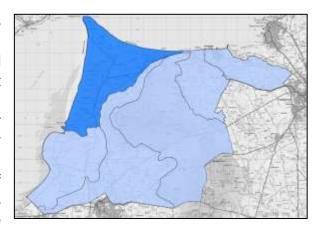


**6** Landscape Character Assessment Wheel (Natural England)

The 2018 Binevenagh and Coastal Lowlands Landscape Character Assessment identified six distinct local landscape character areas. The assessment identified the location and context of each area, along with their key characteristics, natural, cultural, perceptual and aesthetic features. Significantly it identified key threats and forces for change in each area, along with project opportunities to address these challenges. The local community and partners were involved in a weeklong consultation and review exercise to assist in defining the up to date LCAs. The results of the assessment have been used to inform development of project activities. The summary description of each landscape character area is outlined in the following sections. The full report can be found in appendix five.

# 3.2.1. Magilligan Coast and Farmland

The Magilligan Coast and Farmlands is one of most distinctive and unusual landscapes in Northern Ireland and comprises one of the oldest and most stable sand dune systems in the UK. Magilligan Point, with its Martello Tower and ferry terminal, is the most northerly point of the LCA and of the LPS area. From here, the expansive sweep of Benone Strand extends eastwards towards Downhill with views towards the



Mussenden Temple. Behind Benone Strand is the extensive Magilligan dune system which is internationally designated for its nature conservation importance. Within the dune system are two nature reserves, a MOD training area and a prison. There are also numerous defence heritage structures, including well-preserved WWII structures. Much of the dune system is not open to the public, but the accessible areas have a wild and windswept feel, and a strong sense of remoteness.

The sand dunes extend southwards along the coast and form a natural sea defence which protects the adjacent flat, low-lying farmland. This farmland occupies an older system of accreted sand, where peaty soils have developed in the dune slacks. The resulting peaty but free-draining soils are some of the most fertile in Northern Ireland. They are divided by a series of parallel, gently-curving lanes and tracks which reflect the line of the coast and the development of the dune system. Farms dot the landscape, and parallel lanes and field boundaries create a 'layered' effect when seen from within the landscape.

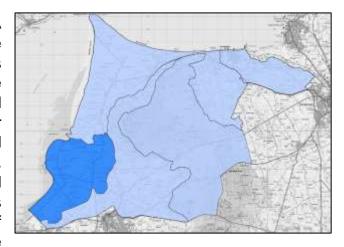
There are magnificent views of Binevenagh and Gortmore Hill to the south and east, and across Lough Foyle to County Donegal. The northern horizon is formed by the outline of the dunes. Spectacular elevated views of the LCA can be seen from the Binevenagh ridge, which show the distinctive landscape pattern of curved parallel lines.



7 Magilligan Coast and Farmlands LCA

# 3.2.2. Lough Foyle Alluvial Plain

The Lough Foyle Alluvial Plain LCA comprises an area of flat, expansive farmland between the western slopes of Binevenagh and Lough Foyle. The western part of the LCA was tidal saltmarsh and slobland (local term for mudflats) until it was enclosed and reclaimed in the mid-19<sup>th</sup> Century. Reclamation created fertile farmland and land for the railway line, and was achieved through the construction of the seawall, and artificial drainage



using pumps and canals. Today's landscape is one of large flat fields and relatively sparse settlement. Houses tend to follow roads, which are often slightly raised above the surrounding land. The WWII Ballykelly Airfield is also within this LCA, with its concrete runways and standings superimposed on the underlying landscape.

The meandering River Roe runs between embankments and emerges into Lough Foyle through its estuary in the north of the LCA. The Roe estuary, and the tidal shore of Lough Foyle, are rich habitats supporting many species of birds. The sight and sounds of birds contribute to the character of this landscape.

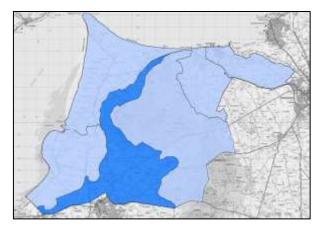
Views inland are dominated by the striking cliffs of Binevenagh and the wooded slopes below. The effects of weather and light on the rock faces create a constantly-changing backdrop to this LCA. To the west, there are views of the hills beyond Lough Foyle.



8 Lough Foyle Alluvial Plain LCA

# 3.2.3. Western Binevenagh Slopes

The Western Binevenagh Slopes LCA comprises the mosaic of farmland, woodland and settlements which cover the western slopes of Binevenagh and Keady Mountain. It extends from the base of the crags or the moorland line, down to the raised beach which adjoins the coastal plain. The LCA has a long history of enclosure and settlement, with an ancient network of winding narrow lanes connecting farms and villages. There are



many historic churches and ritual sites, which add to the sense of place. Extensive areas of deciduous woodland, forestry and parkland estates add to the variety of the landscape, particularly in spring and autumn, when the vibrant colours of deciduous trees contrast with the surrounding forest and farmland.

The cliffs and crags of Binevenagh tower over the landscape below, their mood changing with weather and season from broody and mysterious when shrouded in mist to bright and sparkling in sunshine. In the south of the LCA, the smooth outline of Keady Mountain provides a strong presence as the backdrop.

There are long views over the coastal plain out to sea, and across Lough Foyle towards the hills of County Donegal. The strong linear and geometric patterns of fields on the coastal plain contrasts with the smaller and more irregular field patterns within the Western Binevenagh Slopes LCA.

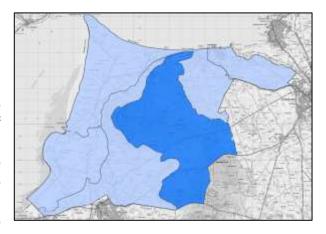
The raised beach which forms the base of the slope is the location of RAF Limavady, a WWII airfield with a fascinating range of surviving buildings.



9 Western Binevenagh Slopes LCA

# 3.2.4. Binevenagh Uplands

The sheer, craggy cliffs of Binevenagh tower over the lowlands to the west, and the coast and sea to the north. Comprised of volcanic basalt overlaying softer limestone, their dramatic profiles are one of the most distinctive features of the region and are visible from a wide area of land and sea. The crags (and the calcareous grasslands at their base) are a very rare habitat within the UK and provide homes for a range of Alpine



species of plants, as well as birds of prey. Less dramatic, but equally important as a horizon feature is the smoother profile of the eastern side of Binevenagh.

This is a large-scale and open upland landscape, comprising extensive areas of heather moorland, grassland, blanket bog and forestry. Away from roads, it has a strong sense of remoteness, wildness and tranquillity, and feels detached from the settled slopes and coastal areas below. The passing seasons are reflected in the changing colours of vegetation, particularly the purple heather and yellow gorse. As well as providing moorland habitats, the Binevenagh Uplands is also very popular for recreation and a number of routes and trails pass through this LCA.

Although the landscape is largely unsettled today, it contains a concentration of archaeological sites including cairns, standing stones, tombs, occupation sites and field systems. It is likely that many more sites await discovery. It is the source of many myths and legends, including the highwayman Cushy Glen and the Red Branch Knights.

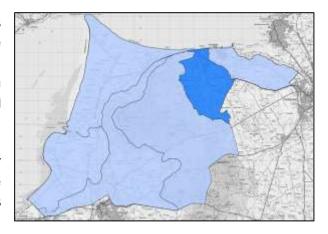
There are outstanding panoramic views from the edges of the LCA over the surrounding lowlands and coasts, and across Lough Foyle to County Donegal.



10 Binevenagh Uplands LCA

# 3.2.5 Eastern Binevenagh Slopes

Binevenagh The Eastern Slopes comprise the basalt slopes between the Binevenagh Uplands and the Bann Estuary. It is a settled landscape of rough farmland, woodland and also has strong estate influences. The smooth. uninterrupted outline of Binevenagh forms the western horizon and is a key component of its sense of place. To the north and north-east there are long views out to sea and along the north coast.



Hedges, field walls, woodland and rough grassland create a patchwork effect. This is a small scale and strongly-textured landscape, with marked seasonal variation in colour, particularly in autumn. The coastal cliffs are rough and craggy and accommodate the dramatically-sited coastal railway line which emerges briefly between two tunnels above Downhill Strand. The Mussenden Temple perched on the clifftop is an iconic landscape feature of the area. It is a focal point within the wider Downhill Estate, which includes the ruins of the dramatically-sited Downhill House, as well as its demesne including follies, gateways, lodges, grazed lawns, woodland, water features and gardens. The estate is owned by the National Trust and is popular with visitors. Downhill Strand beach below is also a popular recreation site.

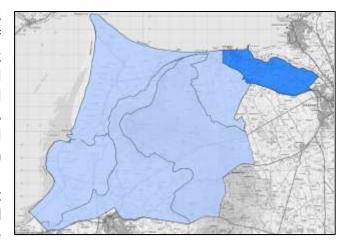
This is an area which has been settled and farmed for millennia, and this is reflected in the range and density of monuments, which include souterrains, raths, cairns, and an Iron-Age promontory fort in Downhill Forest. Sconce Hill prehistoric hillfort overlooks the LCA from the south.



11 Eastern Binevenagh Slopes LCA

#### 3.2.6 Castlerock Coast and Farmlands

The Castlerock Coast and Farmlands LCA comprises the western shore of the Bann Estuary, the Castlerock coast, and the associated farmland and settlements. This fertile and relatively sheltered landscape has been settled for millennia and contains some of the oldest known prehistoric occupation sites in Ireland. It also contains one of its oldest surviving buildings (the low, thatched Hazlet House) and one of the more



recently established settlements: the planned coastal village of Castlerock, which was constructed in the mid-19<sup>th</sup> Century as a genteel tourist destination.

The LCA is dominated by the presence of the sea and the Bann Estuary. Castlerock is located on a rocky coastal outcrop, with a sandy beach sweeping eastward. The eastern end of the beach is marked by the distinctive piers (moles) at the mouth of the River Bann. Views east within the LCA are dominated by the rugged and irregular profiles of the extensive sand dunes at Portstewart, Castlerock Golf Club and Grangemore. Below the dunes, the estuary contains a rich diversity of habitats and historical artefacts, including the remains of a WWII radar station.

Above the estuary is an area of relatively fertile farmland, supporting mixed arable and pastoral agriculture and dotted with farms. The landscape can be particularly well appreciated from the coastal railway line, which runs alongside the River Bann and has attractive views of the estuary, farmland and settlements. Views to the west are dominated by the Downhill Demesne. Downhill House and the cliff top Mussenden Temple are striking features in views from Castlerock and contribute to the strong sense of place.



12 Castlerock Coast and Farmlands LCA

# 3.3 Sea to Summit (Geology)

From sea to summit the topography and landscape of the Binevenagh and Coastal Lowlands is dictated by what lays beneath our feet i.e. geology. The rocks which form the solid geology of the Binevenagh LPS area fall into three geological periods. The lowest (and oldest) rocks (generally at or below sea level) comprise metamorphic rocks from the Dalradian Period which came to an end around 500 million years ago. This period was marked by deposition of sedimentary material and a period of mountain building known as the Caledonian Orogeny when tectonic plates between modern day North America and Europe collided to create a mountain chain, now represented by the Appalachians, Donegal Hills, the Sperrin Mountains and the highlands of Scotland and Norway. At one stage these mountains would have been higher than the modern Himalayas, but the remnant 'roots' of these mountains are now represented in the area by the not too distant hills of the Sperrins. The rocks are mainly highly metamorphosed schists, now underlying the coastal lowlands.

Sitting on top of the schists are carboniferous rocks (mainly sandstones, thin coal seams and conglomerates), which are exposed in only a very few locations e.g. Tircreeven Burn, within the LPS area. These rocks are around 350 million years old and formed under a warm marine and deltaic environment. They contain abundant fossils which are of international importance for dating this sequence of rocks. Examples include shark teeth and plant-based material. They underly a spectacular sequence of Ulster White Limestone which formed during the cretaceous period (around 70 million years ago) and which are found along the coast in the Magilligan and Coastal Lowlands and Eastern Binevenagh Slopes LCAs.

The most impressive geological feature in the LPS area is the northernmost extent of the Basaltic Antrim Plateau. This formed from a huge outpouring of lava during the Palaeogene Period (60 million years ago) and caps the underlying rocks to form the distinctive plateau and the uplands of the LPS area. The sequence (from youngest to oldest) of Basalt, Limestone and Carboniferous rocks give rise to the distinctive stepped profile of Binevenagh, which has subsequently been shaped by glacial activity in the quaternary period, including an extreme rise and fall in sea level. Initially when glaciers retreated around 13,000 years ago, sea level rose quickly, leaving a remnant shore or raised beach along the foothills of Binevenagh; however, as the glaciers melted a huge weight of ice was removed from the area, causing the ground to rise up relative to sea level. This stranded the previous shoreline and subsequent climatic, oceanic and human activity have reworked deposited sands and gravels to create the unique Magilligan Point dune system and the Lough Foyle Alluvial plain.

In summary the geology of the Binevenagh area is best described as 'layers in a cake'. Each layer plays a role in the construction of the landscape. The composition and consistency of each layer dictates the appearance of the landscape and landforms upon it. Upon this diverse canvas a suite of special habitats and species, built and cultural heritage have developed.

#### 3.4 Climate

Due to the influence of the Gulf Stream and North Atlantic Current the Binevenagh and Coastal Lowlands experiences a temperate oceanic climate. Prevailing winds blow off the Atlantic Ocean from the south-west making rainfall a prominent part of life. Within the LPS area average rainfall for the period 1971 to 2000 ranged from a relatively low 700 to 900 mm/year on the Magilligan Coast to a much higher 1100 to 1300 mm/year on the Binevenagh Uplands. Mean annual average temperatures for the period 1971 to 2000 were  $9.2-10^{\circ}\text{C}$  on the Magilligan Coast compared to 5.2-7.6 °C on the Binevenagh Uplands. Minimum average temperatures for winter in the period 1971 to 2000 ranged from 2.5-4.5°C on the Magilligan Coast to a cooler 1-1.5°C on the Binevenagh Uplands. This compares with a maximum average temperature in summer in the period 1971 to 2000 of 17-17.5°C on the Magilligan Coast to a cooler 12-16°C on the Binevenagh Uplands.

It can be seen from the data above that the landscape of Binevenagh and Coastal Lowlands contains and generates a number of microclimate conditions which help to determine the location, type and range of habitats and species found within the LPS area. An excellent example is that of the extremely rare arctic-alpine habitat found within Binevenagh National Nature Reserve on the slopes of Binevenagh Mountain. This area is protected for priority species such as purple saxifrage, mountain avens and moss campion. Similarly, the coastal dune systems are protected for the scarce crimson and gold moth, small eggar moth and seaside centaury.

The microclimatic conditions along with the underlying geology also help to determine the location and type of agricultural activity within the LPS area. The exposed wetter and cooler uplands with poor soils are unsuited to significant pastural or arable farming, whereas the more fertile and relatively mild and drier coastal lowlands are suited to growing arable crops such as oilseed rape, wheat, barley, potatoes and carrots. Agricultural practices and interventions have shaped the landscape of the Binevenagh and Coastal Lowlands for centuries e.g. a striking characteristic of the Lough Foyle Alluvial Plain in spring and summer are the expansive golden fields of oilseed rape, coined and literally bottled locally as the Broighter Gold in reverence to the remarkable Broighter Gold hoard discovered by local ploughmen in the late 19<sup>th</sup> century.

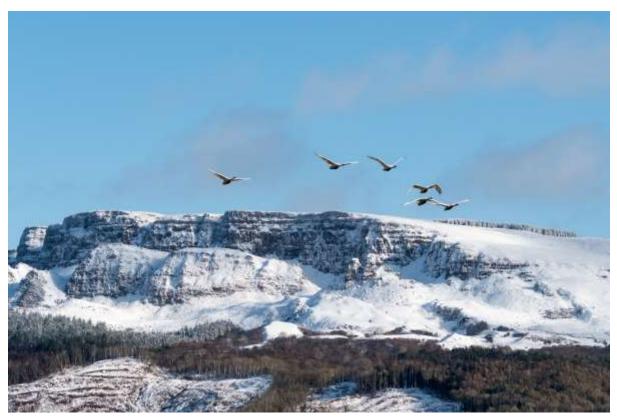
At present there is debate about the threats and challenges which potential climate change could have on the special landscape of the Binevenagh area. Taking the National Trust and Northern Ireland Environment Agency's 'Shifting Shores' (2007) publication as the most up-to-date authority on potential climate scenarios, it is generally assumed the following are likely scenarios for the climate of the Binevenagh area:

- Annual temperatures predicted to increase by between 1 and 2.5°C by the 2080s, with greatest warming in autumn.
- Winter precipitation likely to increase by up to 20% and summer rainfall to decrease by more than 40%.

- Sea level rise of between 85cm and 1m likely by 2100.
- Present day 1 in 50-year extreme surges likely to happen 1 in every 3 years by 2050 with flooding levels of 3-4m above today's mean sea level.

Within the Binevenagh area, impacts which might be expected include increased coastal erosion and flooding, degradation and possible loss of important habitats and wildlife, increased land instability and risk to settlements on or close to coastal areas. Whilst a rise in temperature of between 1 and 2.5°C may not sound like much, a change of even 0.5°C could have a significant impact on more fragile landscape features such as the arctic-alpine habitat of Binevenagh. Increased winter rainfall coupled with sea-level rise and storm surge activity could result in coastal flooding and loss of coastal habitat in the Magilligan Coast and Farmland area.

As with all predictions, it is simply impossible to be sure what the future climatic conditions across the LPS area might be. That said, this does not preclude planning for a range of scenarios and carrying out activities which enhance the resilience of the landscape, its habitats, species and local communities. That is why this LPS places a strong emphasis on ensuring that all project activities contribute to more resilient communities, heritage and landscape features. A key activity involves working with local landowners to review current farming practices and the adoption of 'green infrastructure' and agricultural activities which reduce environmental impacts and enhance farm and landscape resilience under a range of scenarios.



13 Whooper Swans fly past the snow-covered slopes of Binevenagh Mountain

# 3.5 History and Heritage

Landscape would have no value if it were not for the local communities and visitors who ascribe value to and appreciate the natural, built and cultural influences which combine to define a landscape's character. Within the Binevenagh and Coastal Lowlands, people have held a deep affiliation with and affection for the landscape for millennia. From the first known human settlers in Ireland who lived along the River Bann 10,000 years ago, to the global diaspora of people who have lived and worked at the historic airfields and defence sites, the Binevenagh and Coastal Lowlands area is arguably a landscape of international importance.

The pre-historic and historic landscape value of the Binevenagh and Coastal Lowlands can be gleaned from depictions in art, music, oral history and traditions. Unfortunately, little first-hand contemporary evidence is recorded for the area until the 17<sup>th</sup> century when the influence of clerics began a concerted effort to record the history and heritage of the area, providing fascinating insights. Much of this documentation and evidence is held in isolated and often fragmented collections which are in public or private ownership e.g. Public Records Office, Church of Ireland Records, National Museums Northern Ireland or National Museum of Ireland. This makes collecting, documenting, preserving and promoting historical information difficult. When researching material for this LCAP the LPS team found it time-consuming to locate and access historical material and discovered that some had already been lost. There is therefore an urgent need to identify, locate and where possible collate sources of historical material for the project area. All project activities therefore contribute to amassing and sharing resources which local communities can use in future to research, promote and share their collective heritage.



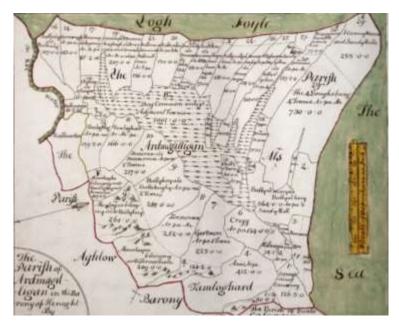
14 Oral history session with Magilligan Community Association. Discovering heritage of importance to the local community

A number of sources have been used to compile the early Christian history of the Binevenagh area. Gerry Bond (2014) wrote that 'over a span of almost 1,500 years facts have become merged with legend and hearsay'. The Binevenagh and Coastal Lowlands area holds a rich heritage associated with Christianity with the earliest references to the Magilligan area date to 584 A.D when it is claimed St Columbkille established a monastic settlement in the area. Later during the 5<sup>th</sup> and 6<sup>th</sup> centuries Tamlaght Church was constructed, coinciding with the rule of Columbkille which prevailed until around 1200 A.D. During the Anglo-Norman period Tamlaght was the Roman Catholic parish church. The reformation is believed to have begun in 1536 A.D when Tamlaght became an Anglican (Church of Ireland) parish. Whilst Christianity developed in the area, pagan customs and traditions survived and became intertwined with those of Christian origin. This manifested itself in considerable respect for the natural world, including sacred springs, wells, rivers, hills and forests (Jim Hunter, 2001). Sacred wells and holy sites remain an important feature in the LPS area e.g. St Aidan's Holy Well and Duncrun Ecclesiastical Site with its "Cross of Lorraine".

The Plantation of Ulster had a significant impact on certain areas of the landscape of the Binevenagh and Coastal Lowlands. The villages of Ballykelly and Articlave were established in the early 1600s by the Fishmongers and Clothworkers companies respectively. These planned settlements retain many of their original features, layout and structures, and contrast with more resent settlements such as Castlerock (19<sup>th</sup> century railway village) and the more dispersed settlement pattern of the Magilligan lowlands. During the Plantation of Ulster, the Magilligan and Downhill areas were little affected. Much of the land belonged to the Diocese of Derry and was leased by the Anglican Gage and Bruce families. The built and cultural heritage associated with these large estates retains a strong influence on the landscape today.

Early modern and first-hand accounts (17th to 19th century) of the landscape focus primarily on the area's fascinating biodiversity and geology. A series of letters, drawings and articles document the development of theories and knowledge about the area's diverse landscape features (at one stage considered 'curiosities'). One of the earliest documents known to the LPS team is a letter recorded in Anthologia Hibernica by the Reverend Robert Innes of Aghanloo in 1725. This letter contains captivating insights such as the view that the parish 'could afford as good a collection of native herbs, as any one place in the three kingdoms' and 'along at the foot of the mountain, and all the coast is the old bank to be seen, to which the sea hath formerly flowed, at the foot of which everywhere is seasand and shells to be dug up'. It was during this period and up until the early 20th century that the Binevenagh area was said to be the 'herb garden of Europe', with a multitude of traditional herbal remedies offered to treat common and not-socommon ailments. The longevity of trust in these remedies is corroborated through an oral history project conducted by Mr Jim Hunter in the 1960s which recorded contemporary and historic traditions and folklore. It is noted by one contributor that a cure for burns is to 'rub the burn with carron oil and apply a healing leaf obtained from the bogs'.

Attempts to map in detail the landforms and natural resources of the Binevenagh area can at present, be traced back to the work of government and military officials, and clerics in the 17<sup>th</sup>, 18<sup>th</sup> and early 19<sup>th</sup> centuries. Extant material includes maps from the 'Down Survey of Ireland' conducted between 1654-6, Sampson's Statistical Survey of the County of Londonderry (1802) and 'a Map of the Parish of Tamlaght-Ard' (1824). In times before modern cartography, these maps and associated notes provide a fascinating insight into the value of landscape features and the activities of the local community. On the 1824 map an area around Binevenagh Mountain (Ben. Yevenagh) is recorded as 'very impervious steep lands' and the dunes of Magilligan Point recorded as 'warren of gray rabbits, small but the fur fine'.



15 Downs Survey of Ireland: Map of the Magilligan Area (c. 1655)

In the 1820s the geography of the Binevenagh and Coastal Lowlands placed the area at the forefront of the development of modern cartographic techniques. The flat lowlands were selected to establish a baseline for the Ordnance Survey mapping of Ireland under the direction of Major-General Thomas Colby. At the time it was the most systematic and detailed mapping exercise carried out anywhere on Earth and accumulated a wealth of information about the socio-economic and environmental conditions of the area. The maps, produced at a scale of 6-inch to the mile, were accompanied by 'memoirs' which now provide a snapshot of the local community in the 1820s and 30s. The success of technologies and techniques developed and refined in the project area went on to inform the mapping of huge areas of the globe, notably the OS Survey of India under the leadership of Sir George Everest. The LPS has planned community activities and events to celebrate the bicentenary of this historic event, including an exploration of surviving physical features of the survey.

In the early to mid-19<sup>th</sup> century the Belfast to Derry~Londonderry Railway was constructed in a number of phases, including the historic 'Great Blast' of 1845 to build the iconic Downhill Tunnels. The development of the railway transformed the landscape in a number of ways. Firstly, its construction required reclamation of huge areas of land from the sea between the Roe Estuary and Ballykelly. This land was subsequently sold off to pay for construction of the railway. The landscapes of the Myroe and Ballykelly Banks (Lough Foyle Alluvial Plain) owe their existence to the development of the railway. Secondly, the railway provided a previously impossible level of access to and through the area. This helped to generate the development of Castlerock as a Victorian Railway Village. Castlerock simply did not exist when the OS Survey of Ireland was underway in the 1820s. As a location it lacks all of the traditional 'pre-requisites' for the development of a settlement e.g. it is not a good defensive location and has no significant freshwater river or harbour. Without the construction of the railway it is questionable whether a settlement would have developed in that location.



16 Castlerock owes its existence to the development of the railway

Throughout the 19<sup>th</sup> and 20<sup>th</sup> centuries, the Binevenagh and Coastal Lowlands found itself at the edge of a number of new frontiers. During the Napoleonic Period (c. 1812) the Magilligan Martello Tower and its partner in Greencastle (County Donegal) were built to protect the entrance to Lough Foyle from invasion by Napoléon Bonaparte. Just over 100 years later from 1914, the area was used in the training of troops before deployment to France in the 'Great War' of 1914 to 1918. Little is recorded of the activities and defence heritage infrastructure in the area dating from the Napoleonic or WWI periods. The LPS has planned a series of activities and projects to help the local community unearth and explore this aspect of their heritage, notably tour guide training, a gun carriage recreation project at the Martello Tower and a community archaeology event with the Ministry of Defence to explore unrecorded WWI training trenches at Magilligan.



17 Potential WWI Training and Communication Trenches in the Magilligan MoD Base

Following WWI, the Binevenagh area found itself at the front of a new international frontier following the partition of Ireland in 1921. This created a border between County Londonderry (United Kingdom) and County Donegal (Republic of Ireland). This affected the previously very close relations between the two sides of Lough Foyle and created new and sometimes illicit personal and economic relationships between the two jurisdictions. Oral histories record tales of smuggling between Counties Donegal and Londonderry from the 1920s to the 1960s, and stories of the 'customs man' are still fondly recalled today. Songs by local man Sam Henry and an early 1970s oral history recording by Gerry Bond (then Warden of Magilligan Field Centre) provide insights into the unique relationship between local communities on both sides of the border. An oral history session held by this project on 5<sup>th</sup> November 2018 confirms that this aspect of the local heritage is still a 'living history' and must be recorded before it is lost. Both the UK and Republic of Ireland lay claim to Lough Foyle in its entirety. It is one of only 19 international boundary disputes amongst UN members in Europe.



18 Magilligan Point, setting for tales of smuggling and emigration

One of the most important periods in the modern history of the Binevenagh and Coastal Lowlands area is WWII (1939 to 1945). During this period the area's extremely flat coastal topography and its location at the extreme north-west of Europe, led to the development of a number of defensive sites. This included two airfields (RAF Limavady and RAF Ballykelly), anti-aircraft and coastal defence batteries at Magilligan, early radar facilities near Gortmore and Castlerock and a range of pillboxes to defend again coastal landings by the axis forces. The Battle of the Atlantic was the longest continuous military campaign of WWII and the facilities established in the Binevenagh area played a key role in the successful of defeat of Nazi Germany in this campaign. Unfortunately, community access to and understanding of these features was limited during and after their operation. Little is therefore known about the extent and importance of the defence heritage features within the local community. This project conducted a detailed mapping and survey exercise of extant WWI, WWII and Cold War features in 2018. It expanded the Defence Heritage Record of the Department of Communities' Historic Environment Division from 85 records to 287 (excluding Ballykelly Airfield). The LPS will deliver a number of activities which improve public awareness of, research into and access to this heritage of international importance.



19 Magilligan Coastal Battery (Imperial War Museum)

The Cold War began almost immediately as WWII finished. It is known to have been 'fought' on a number of largely invisible (to the general public) fronts with technology a key arena. Between the late 1940s and the 1990s NATO and the USSR invested phenomenal resources in developing defensive technologies to counter a possible nuclear attack from the other. RAF Ballykelly (later Shackleton Barracks) was an extremely important site, stationing and supporting the UK's nuclear capable Vulcan Bomber. Due to extreme secrecy around technological developments, little is known about activities at Ballykelly or other defence sites during the Cold War. However, as with WWII, there are still 'living histories' and oral heritage to be recorded. This project proposes a number of arts-based projects involving sound and vision to encourage recording of this unique heritage before it is lost.



20 Cold War Era Royal Observer Corp Bunker (Nuclear Shelter) Cranagh Road

In addition to the written, physical and recorded oral heritage of the Binevenagh and Coastal Lowlands area, there exists an additional layer of local histories and heritage which remain unrecorded and are largely unknown by the local community. To help identify stories and features of importance to the local community, the LPS team consulted widely, using an oral history session in Magilligan Field Centre to record local stories. This identified a huge interest in the more recent history of the LPS area e.g. the entrepreneurial antics of Father Shields in the 1970s which led to the establishment of a cooperative, construction of a zoo and building of affordable residential homes at Drumavalley. Other interests included the history and the influence Sir John Heygate (Bellarena Estate), the Salmon Fishery, Smuggling, Tourism, the Railway and local place names. This project proposes activities which will assist the local community in exploring and developing their interest in the past, present and future of the Binevenagh and Coastal Lowlands area.

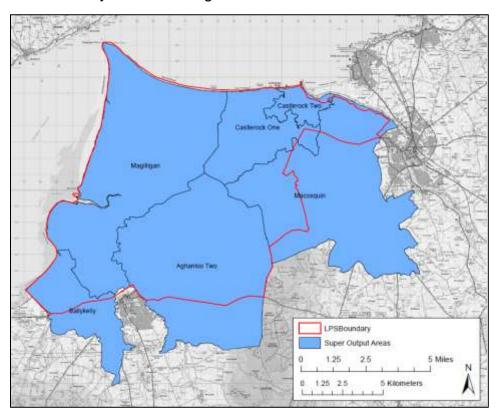


**21** Entrance to Bellarena Estate (once home of Sir John Heygate)

# 3.6 People

The following section provides a 'snapshot' of the socio-economic conditions within the Binevenagh and Coastal Lowlands area, primarily relating to statistics collected during the most recent nationwide census in 2011. Statistics presented in this section have been compiled by the Northern Ireland Statistics and Research Agency (NISRA).

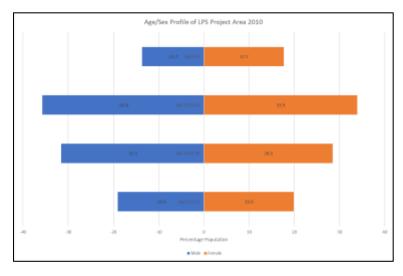
Within Northern Ireland the most appropriate statistical geography to use for this purpose is known as a 'Super Output Area' (or SOA). SOAs were developed NISRA to improve the reporting of small area statistics. They are delineated at the smallest practicable spatial scale for areas with a similar sized population (on average 2,100). Within the Binevenagh and Coastal Lowlands area six SOAs fall entirely or largely within the project area. These include Castlerock One and Two, Magilligan, Ballykelly, Aghanloo Two and Macosquin (see figure 15). The boundaries of the SOAs do not perfectly match those of the LPS area; therefore Macosquin, Aghanloo Two and Ballykelly SOAs have portions which fall outside the study area. The statistics presented in this section therefore come with a health warning, primarily that the population of the area is likely to be exaggerated by the three SOA which extend beyond the study area. The corresponding statistics can therefore only be presented as an estimate of socio-economic conditions in the project area. It should be noted that a number of these statistics are now up to eight years old and conditions are likely to have changed.



22 Super Output Areas (SOAs) within the Binevenagh and Coastal Lowlands LPS

In 2017 NISRA estimated the population of the above SOAs was 11,858. The population of the LPS area is therefore likely to be slightly less than 10,000. Between 2001 and 2017 the average annual increase in population across the six SOAs was c. 0.6%. The population of the study area increased by 10.8% in the 16 years from 2001 to 2017; however, this general trend masks population changes within certain areas of the LPS. For example, the population of the Ballykelly SOA decreased from 1,880 in 2001 to 1,794 in 2017. Additionally, both Castlerock One and Two experienced a peak in population around 2005/2006 with a subsequent decrease in population through to 2017. Whilst the overall population of the area is stable or increasing slightly, areas within the LPS are experiencing population decline.

The age-sex profile for the SOAs in the project area has been prepared by statistics from NISRA for the period 2010 to 2017. This divides age into four ranges, 0-15, 16-39, 40-64, 65+. Overall the population profile for the project area has aged slightly in the seven years from 2010 and 2017, with a decreasing percentage in those aged under 40.



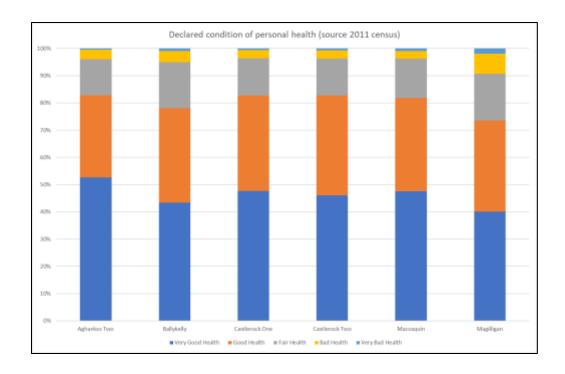


The population of the Binevenagh and Coastal Lowlands can be said to be aging over the relatively short seven years of the available data period. A key aim of the LPS is to ensure that participation in project activities is available to a wide aged based demographic of the local population.

In terms of employment, in 2011 on average 62.4% of the local population was 'economically active' with 37.6% of the local population 'economically inactive'. These average statistics mask the situation in certain areas within the LPS Boundary, for example, the economically active population in Magilligan was 49.6% in 2011, compared with 69.4% in Aghanloo Two. This highlights a difference in employment opportunities across the project area, with those areas furthest from the main settlements of Limavady and Coleraine having a higher proportion of the population identifying as economically inactive.

Interestingly statistical measures for health and access to services mirror those for employment. In 2014 NISRA produced a measure for Northern Ireland known as the Cultural Deprivation Index (CDI) based on distance required to travel to access sport, art and library facilities. The entire project area falls within the top 50% of most culturally deprived areas according to the 2014 index, with Magilligan in the top 20% of most deprived areas. In terms of sport deprivation, the entire project area was within the top 50% of most deprived areas with Magilligan in the top 10%. The entire project area was within the top 50% for arts deprivation with Castlerock in the top 30%. For library deprivation both Magilligan and Castlerock were in the top 10%. It can therefore be said that compared to Northern Ireland as a whole, the Binevenagh and Coastal Lowlands is statistically 'culturally deprived'. The LPS aims to address this deficit in cultural activity by ensuring that all project activities provide access to outdoor recreation and art-based activities.

For health, the 2011 census asked participants to rate their personal health from 'very good' to 'very bad'. The following graphic summarises the results for the project area. It suggests that just under 50% of the population of the project area described their health as 'very good', with between 30% and 37% describing their health as good. A minority of participants described their health as bad or very bad, with Magilligan presenting the greatest percentage of local community in bad or very bad health at 9%.



In 2017 NISRA developed and produced the Northern Ireland Multiple Deprivation Measure in order to rank Northern Ireland's 890 SOAs in order of statistical deprivation based on the following seven weighted measures:

- Income Deprivation Domain (25%)
- Employment Deprivation Domain (25%)
- Health Deprivation & Disability Domain (15%)
- Education, Skills & Training Deprivation Domain (15%)
- Access to Services Domain (10%)
- Living Environment Domain (5%)
- Crime & Disorder Domain (5%)

Summary statistics for the relevant Binevenagh and Coastal Lowlands SOAs are presented in the following table.

	2017								
1 = most deprived 890 = least deprived	Multiple Deprivation Measure Rank	Income Domain Rank	Employment Domain Rank (18-64 years)	Health Deprivation and Disability Domain Rank	Education, Skills and Training Domain Rank	Access to Services Domain Rank	Living Environment Domain Rank	Crime and Disorder Domain Rank	
Aghanloo Two	493	498	544	683	544	77	123	614	
Ballykelly	251	259	205	373	338	234	227	280	
Castlerock One	373	187	518	734	320	177	380	476	
Castlerock Two	450	175	561	715	470	267	708	581	
Macosquin	458	339	440	662	547	145	345	471	
Magilligan	491	598	638	489	613	25	274	587	

The statistics presented in the table above suggest that Ballykelly is the most deprived of the SOAs within the project area with significant outliers in terms of employment opportunities, health and disabilities with an MDM of 251. It is followed by Castlerock One and Two with an MDM of 373 and 450 respectively. Although the Castlerock area appears less deprived in terms of employment opportunities, income is the main factor affecting the deprivation index. Macosquin, Magilligan and Aghanloo Two are the least deprived SOAs within the project area according to the MDM; however, this masks a significant lack of access to services in Magilligan and Aghanloo Two, and lower rank for income in Macosquin. Overall the entire project area is considered to have a moderate to high deprivation index with challenges in terms of employment, income, health, access to services and living environment. The LPS project activities aim to make a positive contribution to addressing these challenges.

#### 3.7 Education and Skills

The 2011 census recorded the qualifications of those usually resident within each Super Output Area (SOA). The following table summarises the educational attainment of those aged 16+ and usually resident within the project area. It must be noted that Aghanloo, Ballykelly and Macosquin SOAs extend beyond the LPS boundary and therefore overestimate the number of residents aged 16 + within the LPS area.

	Number of usual residents over 16 years old	No Qualifications	Level One (equivalent to one to four GCSEs)	Level Two (equivalent to five or more GCSE grade A* to C, one A-Level)	Level Three (equivalent to two or more A-levels)	Level Four (Degree level)	Apprenticeship	Other Qualifications
Aghanloo Two	1438	27%	11%	16%	14%	24%	5%	3%
Ballykelly	1420	38%	12%	16%	12%	15%	4%	4%
Castlerock One	1226	33%	13%	14%	10%	20%	5%	4%
Castlerock Two	1275	26%	10%	15%	11%	30%	5%	3%
Macosquin	1837	32%	12%	15%	11%	23%	4%	4%
Magilligan	2037	40%	11%	13%	9%	15%	5%	6%

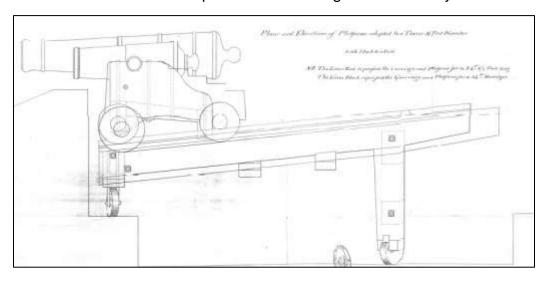
One of the most striking features of the statistics above is the number of people aged 16+ in the LPS area with no qualifications. This ranges from 26% of the population in Castlerock Two to 40% in Magilligan. It should be noted that the statistics for Magilligan are likely to be skewed by data recorded for inmates serving a sentence of six months or more at HMP Magilligan. Those inmates serving a sentence of six months or more were recorded as usually resident in the 2011 census.

Another striking feature of the statistics above is the relatively high percentage of residents with a Level Four qualification i.e. of degree level. The statistics suggest that a significant number of residents stay in education to college and university level, with fewer leaving education with GCSEs (or equivalent) only. The percentage of those usually resident who have completed an apprenticeship qualification (4-6%) is in keeping with the NI average of 4.2%

At the time of submission there are no secondary schools or further education colleges within the project area. North West Regional College maintains a unit for inmates within Magilligan Prison with a focus on literacy, numeracy, IT, woodwork and metalwork qualifications. Nearby secondary schools include Coleraine Grammar School, Loretto College, North Coast Integrated, Coleraine College, Limavady Grammar School, Limavady High School, St Mary's Limavady. There are currently four primary schools within the project area, including Ballykelly, St Aidan's, Hezlett and Ballyhacket.

The LPS has a strong focus on the development of skills in environmental conservation, outdoor recreation and built heritage. Significant training programmes are planned e.g. in invasive species removal, traditional orchard management, heritage tour guiding, storytelling, all ability glider instruction, rescue emergency care, and hill and moorland leadership. All training programmes should be accredited and/or certified by a relevant governing body. Courses such as OCN Level Two Tour Guiding are equivalent to a GCSE at Grade B.

It is hoped that courses delivered in partnership by the LPS have a positive impact on the skills and associated qualifications of the local community. A particular focus will be on offering opportunities to those with no qualifications, to participate in a heritage-based activity which contributes towards gaining a qualification. Equally the project recognises that there is a huge wealth of local skills and knowledge which are not necessarily accredited but are nonetheless important for assisting staff in delivery of the scheme.



23 Re-creation of the Martello Gun Carriage is planned in partnership with HMP Magilligan

# 3.8 Agriculture and the Environment

This section provides a snapshot of the state of agriculture and the environment within the LPS area, with a particular focus on sites designated for their nature conservation value. In total the LPS boundary contains five European protected areas (SACs and SPAs). These areas are considered to have habitat and/or species which are rare in a European context and therefore warrant protection. This protection is underpinned by Area of Special Scientific Interest (ASSI) at a national level. In total there are ten ASSIs within the project area, covering habitat, species and earth science interests. The following table provides a summary of the features of interest within each ASSI. Those marked with a \* are protected as a European Special Area of Conservation (SAC) or Special Protected Area (SPA).

ASSI Name	Other Designations	Habitat Type	Species Type	Earth Science Features
Lough Foyle*	SPA	Saline lagoons, Coastal saltmarsh	Bar-tailed Godwit, Great Cormorant, Curlew, Dunlin, Eider, Golden Plover, Great Crested Grebe, Greylag Goose, Invertebrate assemblage, Knot, Lapwing, Light-bellied Brent Goose, Mallard, Oystercatcher, Red-breasted Merganser, Redshank, Shelduck, Tea	Coastal Processes
Roe and Tributaries*	SAC	River, Oakwood	Atlantic Salmon, Otters	N/A
Aghanloo Wood	N/A	Mixed ashwoods, Wet woodland	N/A	N/A

Binevenagh*	National Nature Reserve	Inland rock, Calcareous grassland	Fungi assemblage, Higher plant assemblage, Lower plant assemblage, Invertebrate assemblage	Tertiary igneous
Ballyrisk More	N/A	Purple Moor- grass and rush pastures	N/A	N/A
Gortcorbies	N/A	Purple Moor- grass and rush pastures	N/A	N/A
Tircreven	N/A	N/A	N/A	Jurassic stratigraphy, Mesozoic palaeontology
Altikeeragh	National Nature Reserve	Blanket bog	N/A	N/A
Magilligan*	SAC	Coastal sand dunes	Petalwort, Marsh Fritillary, Higher plant assemblage, Invertebrate assemblage, Lower plant assemblage	Coastal processes, Sea level history
Bann Estuary*	SAC	Coastal saltmarsh, Coastal sand dunes	Invertebrate assemblage, Breeding bird assemblage	Coastal processes, Sea level history

In addition to SACs, SPAs and ASSIs within the LPS Boundary, there are five National Nature Reserves, designated to protect habitat and species which are considered important at a Northern Ireland level. These include:

- Roe Estuary Coastal Habitat
- Binevenagh Cliffs and Grassland Habitat
- Magilligan Point Coastal Habitat
- Ballymaclary Coastal Habitat
- Altikeeragh Peatland Habitat



**24** Binevenagh National Nature Reserve (SAC and ASSI)

The Northern Ireland Environment Agency assesses the status of designated sites. A site is said to be in 'favourable condition' if the conditions which led to designation continue to be maintained and habitat and species diversity is not reduced. A site is said to be in 'unfavourable condition' if the conditions which led to designation have changed and / or habitat and species diversity is reduced. A key focus for the LPS is improvement in the condition of Atlantic Hazel and Ash Woodland within Aghanloo ASSI. This site has fallen into unfavourable condition as a result of poaching by feral goats and removal of traditional grazing regimes. Significant work is required to re-compartmentalise the woodland with stock-proof fencing and reintroduce grazing with an appropriate cattle breed. It is hoped this will restore the woodland to favourable condition within five years. Additional areas where ASSI enhancement works are planned, include Altikeeragh (bog restoration), Bann Estuary (sustainable trail development), Binevenagh (scrub clearance and stone walling), River Roe and Tributaries (invasive species removal, in channel habitat improvement and sustainable access). These works are not within the gift of any single organisation to deliver; however, the LPS affords an opportunity to bring partners together to improve the condition of sites of international and national importance.



Altikeeragh ASSI (Peatland Habitat)

The most detailed breakdown of the number of farms in the LPS area is provided by the Department of Agriculture, Environment and Rural Affair's Agricultural Census in 2014. This census indicates the number of farms within five wards in the project area. Unfortunately, the boundaries for the Ballykelly, Aghanloo and Macosquin Wards extend beyond the LPS boundary. The following table therefore significantly overestimates of the number of farms within the project area. It is generally believed that there are between 130 and 150 individual farms within the project area.

Farm Census Data (2014)									
Ward	Total Number of Farms	Less Favoured Area Farms	Area farmed (hectares)	Total Crop (hectares)	Total Grass (hectares)	Total Number of Cattle	Total Number of Pigs	Total Number of Sheep	Total Number of Poultry
Ballykelly	19	2	1,185	539	638	1,478	0	2,416	0
Magilligan	62	46	4,811	1,238	3,486	5,339	5	11,579	0
Aghanloo	77	37	4,831	196	4,459	5,734	0	14,694	0
Castlerock	37	25	1,979	142	1,816	2,483	0	5,444	0
Macosquin	91	43	4,891	379	4,476	9,211	2,796	10,225	67,000
Total	286	153	17,697	2,494	14,875	24,245	2,796	44,358	67,000

The farm census data for 2014 indicates that with the exception of Ballykelly and Macosquin Wards, over half of the farms within the project area fell within a 'less favoured area' i.e. those areas with poor land or poor productivity, which is difficult to cultivate and for which productivity cannot be increased except at excessive cost. These areas are mainly suitable for extensive livestock farming. The data indicates that the majority of the LPS area is sown in grass with just 14% of the area under arable crop, primarily within the Magilligan and Ballykelly Wards. This corresponds with the characteristic flat fertile land within the Lough Foyle Alluvial Plain and Magilligan Coast and Farmland LCAs. Sheep and cattle are the primary livestock within the LPS area, with intensive grazing particularly in upland areas e.g. the Eastern and Western Binevenagh Slopes LCAs.

Within the Magilligan Coast and Farmland LCA there are significant areas under arable crops. This primarily takes the form of oilseed rape, barley, wheat, maize, carrots, potatoes and kale. Additionally, there are significant areas used for the production of lawn turf, particularly at Magilligan and Myroe. In general farms around the Lough Foyle Alluvial Plain and Magilligan Coast and Farmlands tend to be quite large with a greater focus on arable farming, with farms in upland areas (Eastern and Western Binevenagh Slopes and Uplands LCAs) somewhat smaller and with a greater focus on beef, lamb and dairy production.

As custodians of the landscape for present and future generations, the LPS project strives to assist farmers to maintain farm productivity whilst generating greater benefits for the local environment and community. Working with Loughs Agency and the Woodland Trust, this project hopes to halt the spread of invasive species, improve woodland and hedgerow cover, reduce nutrient runoff, and improve shelter for stock. This will be achieved through farm resilience planning on a one-to-one and group basis with local landowners.



26 Golden Fields of Oilseed Rape in the Lough Foyle Alluvial Plain LCA

Farm resilience planning along with c. 120 individual landowners will help to ensure that beyond the five-year life of the project, relevant skills and knowledge are generated and kept within the local farming community. A key goal will be to expand farmland habitat and species diversity to make better use of the available land e.g. by moving away from monocultural ryegrass production to more diverse grass and plant assemblages which make better use of the available soil types. Consultation during the Development Phase of the LPS has demonstrated a strong interest from the local farming community to improve farmland and landscape resilience in the face of an uncertain economic and environmental future.



 $27\,\text{Ponies}$  used to maintain arctic-alpine plant assemblages in Binevenagh NNR

#### 3.9 Outdoor Recreation and Tourism

The Binevenagh and Coastal Lowlands area is valued for the range of outdoor activities available on land, sea and in the air. The diversity of the local landscape affords opportunities for walking, running, cycling, mountain biking, orienteering, horse riding, angling, surfing, swimming, paddle boarding, kayaking, blokarting, kite buggying, land yachting, hang gliding and fixed wing gliding. At present these activities take place on a largely informal basis by permission of the property owner(s). There is currently no coordinated approach to the management and promotion of outdoor recreation opportunities within the Binevenagh area. In addition, knowledge about the range of activities on offer in the LPS area is generally thought to be poor amongst both the local community and visitors.

The current uncoordinated and generally informal approach to delivery of outdoor recreation activities in the Binevenagh area creates conflicts between different user groups, notably walkers and mountain bikers. Informal trail development by both walkers and mountain bikers, has created a suite of unsustainable trails throughout the project area. The LPS aims to ensure that existing trails and new trails are built to the highest standards to minimise maintenance and ensure path sustainability.



28 Informal mountain bike trails are damaging habitat and walking trails in Ballycarton Forest

Consultation with the local community and direction from the Binevenagh and Coastal Lowlands Outdoor Recreation Advisory Group has helped develop a range of project activities which will help the local community sustainably enhance outdoor recreation opportunities in the area. Projects have been prepared based on detailed research conducted through the following studies:

- Outdoor Recreation Action Plan for the Binevenagh and Coastal Lowlands area (2017)
- Outdoor Recreation Spatial Masterplan for Historic Downhill Demesne (2019)
- Outdoor Recreation Spatial Masterplan for Binevenagh, Ballycarton and Grangebeg Forests, including connections to Castlerock, Benone, Magilligan, Swann's Bridge, Roe Estuary and the Myroe and Ballykelly Bank (2019)

Signature activities include a coordinated approach to outdoor recreation in the historic Downhill Demesne, an off-road walk connecting Castlerock and Aghanloo with the core Binevenagh area, a LiDAR survey to assist development of modern orienteering maps (and identification of archaeology), community heritage trails in Castlerock, mountain biking opportunities and training in outdoor recreation qualifications for the local community.

Delivery of the project activities will provide the facilities and skills required for the local community to develop the Binevenagh and Coastal Lowlands as an outdoor recreation 'product' which can be marketed locally, nationally and internationally. A key aim of the LPS is to establish the area as a top destination in the UK and Ireland to participate in inclusive and sustainable land, sea and air based outdoor activities which complement and add value to the area's unique heritage assets and local community. It is believed that the momentum developed by the Outdoor Recreation Advisory Group in the Development Phase will continue to grow in the Delivery Phase to ensure an inclusive and coordinated approach to the sustainable development of outdoor recreation.



29 Forest Trails in Ballycarton Forest

The Causeway Coastal Route (CCR) extends from Belfast to the Walled City of Derry, following the A2 Coast Road. The Binevenagh and Coastal Lowlands is located on a key section of the CCR between Derry~Londonderry and the Giant's Causeway. In addition, it has access to the Republic of Ireland's Wild Atlantic Way (WAW) via the Magilligan-Greencastle ferry. Despite being at the intersection of two major tourist trails, consultation with local tourism businesses indicates that the area is generally overlooked by visitors as they travel to/from the Giant's Causeway from either Belfast or Derry~Londonderry. A significant factor affecting the number of visitors who stop and stay in the area is likely to be the limited number of quality B&Bs or hotels. At the time of submission there is no hotel facility within the project area. This has a significant limiting factor on the organisation of events and activities e.g. Castlerock Walkfest is limited to just one day, as there are no serviced accommodation facilities nearby and limited evening and cultural activities to encourage overnight stays which would justify a multiday festival.

Significant opportunities exist for the development of sustainable tourism in the Binevenagh and Coastal Lowlands. The combination of spectacular landscape, diversity of habitats and species, history, built and cultural heritage, and outdoor recreation opportunities represent a high-value tourism asset; however, at present the tourism potential of the Binevenagh is both undervalued and undersold. Consultation indicates that the local community does not seek mass tourism or a simple increase in visitor numbers. Rather, the local community would like to see increased dwell time, with a move away from single or part-day commuter tourists (travelling through the area on the way to the Giant's Causeway or Derry~Londonderry) and towards multiday visits and overnight stays with enhanced spend. The local community seeks to deliver a high quality and sustainable tourism product which aligns perfectly with the aims of the LPS. There is a special opportunity for the local community and tourist businesses to take ownership of, expand and capitalise on the activities delivered through the LPS.



30 Public consultation on the development of Outdoor Recreation at historic Downhill Demesne

#### 3.10 Opportunities and Challenges

Sections 3.1 to 3.9 outline many of the opportunities and challenges which the Binevenagh and Coastal Lowlands LPS specifically aims to address through delivery of project activities which are tailored to celebrate and connect local people with their unique landscape and heritage in order to build sustainable and resilient communities.

For the purposes of a landscape partnership it is essential to demarcate a landscape boundary. The boundary of the Binevenagh and Coastal Lowlands LPS was developed following extensive consultation with the local community, project partners and completion of an independent Landscape Character Assessment of the area. Whilst for the purposes of the project, the Binevenagh and Coastal Lowlands LPS has a clear project boundary, it is acknowledged by all partners that this boundary is permeable in terms of community connections and exposure to wider economic, social and environmental challenges. This section aims to provide an overview of both the wider and more project specific challenges and opportunities facing the Binevenagh and Coastal Lowlands Landscape Partnership area.

#### 3.10.1. Global challenges

#### **Climate Change**

Global challenges are those which have the potential to impact on special landscapes, habitats, species and heritage, and which are beyond the control of any one single nation state. It is now widely acknowledged that the biggest single challenge facing communities on Earth is global climate change. It is widely accepted by most nation states that Earth's climate is changing at previously unrecorded rates, due to a combination of natural and anthropogenic factors. Most notably increasing volumes of global CO<sup>2</sup>, largely as a result of the burning of fossil fuels, are contributing to the greenhouse effect. Scientific observations are increasingly providing evidence that with a few exceptions, Earth's climate is warming. This is having an effect on weather patterns with knock on effects for local communities and the landscapes, habitats and species upon which they depend.

Extreme weather events are becoming increasingly common with the potential for serious natural disasters to impact significantly on both people and heritage. On a global basis UNESCO is acutely aware of the potential for communities and heritage to be negatively impacted by climate change. It is therefore championing programmes to mitigate against climate change through disaster risk management and enhanced habitat and species resilience. These efforts are perhaps best demonstrated through UNESCO's three protected area schemes, which aim to pioneer and implement solutions to identify, protect, conserve, present and transmit natural and cultural heritage of global significance to present and future generations through the UNESCO World Heritage, Global Geoparks and Biosphere Reserve Programmes. Best practice established through these programmes is being adopted by nation states to promote local efforts to mitigate against the risks of climate change at a local level.

The Intergovernmental Panel on Climate Change (IPCC) monitors current and potential climate change scenarios and issues recommendations on a global scale to limit greenhouse emissions. At present the most likely scenario is that Earth's climate will continue to warm at an accelerating rate unless dramatic efforts are made to reduce greenhouse gas emissions by all nation states. An increase in temperature of 2°C by 2100 is highly likely unless substantial action is taken. It is predicted that an increase of even 1.5°C would require "rapid, far-reaching and unprecedented changes in all aspects of society". Given that the most likely scenario is for warming to reach or exceed 1.5°C over the next century, it is incumbent upon everyone to mitigate against the worst impacts of climate change, whilst working to ensure that warming rates are minimised.

In common with the rest of the Earth, global warming is likely to impact on the special landscape, habitats, species and heritage of the Binevenagh and Coastal Lowlands area. It is therefore essential that the local community prepare for and develop bespoke solutions to protect their local landscape and heritage by promoting adaptation, enhancing resilience of features and striving to increase the sustainability of all aspects of environmental, social and economic activities.

The likely impacts of climate change on the Binevenagh and Coastal Lowlands area are recorded in section 3.4.

#### Litter, Pollution and Pesticides

Litter and pollution are widely acknowledged to be a local, national and global problem. During the Development Phase of the Binevenagh and Coastal Lowlands LPS this was perhaps best demonstrated by the "Attenborough Effect" which has seen public consciousness of plastic waste thrust to the forefront of issues which effect special areas across the globe. This has seen society and industry adopt principles to reduce the use of single use plastics, increase rates of recycling and aspire to achieve zero-waste societies. That said, litter and pollution have been persistent threats to landscapes, habitats, species and heritage since the industrial revolution, and present efforts to reduce litter and pollution are unlikely to significantly address the challenges in the short to medium term.

At present agriculture is the most significant contributor to pollution both within and in the immediate vicinity of the Binevenagh and Coastal Lowlands area. Of note are increasing levels of ammonia and nitrates which have a detrimental impact on habitats and species, most significantly in freshwater and bog habitat. Fortunately, due to prevailing weather conditions, coastal currents and limited nearby industrial activity, marine litter and pollution are not currently major challenges in the Binevenagh and Coastal Lowlands area. That said, this hides a much wider challenge where marine litter and pollution originating both within and in the vicinity of the project area are likely having an impact on nearby areas. It is therefore important that efforts are taken to reduce sources of litter and pollution, whilst concentrating clean-up efforts on priority habitats and species within the project area.

#### **Biological Security and Disease**

Biosecurity is a major global challenge with potential to impact on the Binevenagh and Coastal Lowlands area. Due to globalisation materials and people are now routinely transported across almost all areas of the Earth. This means that pests and diseases which were once restricted to smaller areas, can rapidly spread across huge areas of the globe in a relatively short timescale, with little or no time for habitats, species and communities to adapt or develop resistance. On the island of Ireland this is perhaps best demonstrated through the rapid spread of Ash Dieback (*Hymenoscyphus fraxineu*) which has saw the death of ash trees on an unprecedented scale. The spread of plant and animal diseases and pests is exacerbated by the import of specimens from other areas of world. It has also been exacerbated by a move in agriculture towards monocultures where species diversity and resilience are significantly reduced. A key solution is to encourage habitat and species diversity and the sourcing of plant and animal materials from local sources e.g. in the Binevenagh and Coastal Lowlands area emphasis is being placed on the sourcing of local provenance trees and wildflowers rather than imported or non-native varieties.

Agriculture now routinely relies on chemicals to control pests and diseases affecting plants and animals. It is known that many of these chemicals can have an adverse impact on the environment with knock on effects for habitats, species and local communities e.g. the use of neonicotinoids has been shown to have a significant impact on pollinators such as bees and a landmark case in the United States during the Development Phase of the LPS demonstrated a connection between Glyphosate and incidents of cancer in humans. It is difficult if not impossible to determine the long term effect of the use of chemicals in the environment. Adopting a precautionary principle of minimal or no use can significantly mitigate against the known and unknown effects of chemicals.

# 3.10.2. National / Regional Challenges

#### **Devolved Government**

Throughout much of the Development Phase of the LPS, Northern Ireland has been without an elected government. In the absence of a local administration at Stormont, significant policy decisions affecting devolved matters have been stalled. This means major decisions and plans for the environment, local community and economy have not been progressed since January 2017. It is known that the Department for Agriculture, Environment and Rural affairs have a number of draft policies prepared to tackle local environmental issues and it is hoped that upon the reestablishment of local government, these plans will dovetail and assist in the delivery of initiatives outlined in this Landscape Conservation Action Plan. Throughout the Development Phase the LPS Board and partners have met regularly with representatives of the NI Civil Service to discuss project activities and ensure that all proposed activities are in-line with existing and foreseen policies and practices. It is not envisaged that an extended closure of the Northern Ireland Assembly and Executive would have a major impact on delivery of the scheme; however,

reestablishment of the administration could assist in the delivery of project activities. In short, the re-establishment of a local government in Northern Ireland could assist delivery of the Binevenagh and Coastal Lowlands LPS; however, the project is not dependent on this.

# **Brexit**

The UK's withdrawal from the European Union has dominated politics throughout the duration of the Development Phase of the LPS. At present it is not envisaged that the UK's withdrawal from the EU would have a major impact on delivery of the LPS scheme. The UK has committed to maintaining all current environmental regulations and protected area schemes upon its withdrawal from the EU. It is possible that the UK's approach to agriculture and environmental policy could diverge from current practice in the medium to long-term. It is believed that all activities delivered through the LPS will adhere to current and future regulations and practices legislated for in the UK. This project is not reliant on any EU funding for its delivery.

#### Socio-economic factors

A detailed overview of the socio-economic situation of the Binevenagh and Coastal Lowlands area is provided in sections 3.6 and 3.7. In summary the project area (according to the Northern Ireland Statistics and Research Agency):

- Is in top 50% of 'deprived' areas in NI
- Has employment in some areas below 50%
- Has less than 50% of community reporting 'very good health'
- Has up to 40% of community with no qualifications
- Is trending towards population decline

This overall situation is a result of numerous historic and contemporary factors. The current socio-economic circumstances affect the local community's capacity to address challenges facing their landscape and heritage. The Binevenagh and Coastal Lowlands LPS therefore aims to make a positive contribution to addressing these socio-economic challenges by supporting and delivering community led heritage initiatives which provide education and training opportunities, and which enhance access to, and interpretation of the area's natural, built and cultural heritage.

# 3.10.3 Local Challenges and Opportunities for Landscape and Heritage

The following table provides a summary of the local opportunities and challenges for landscape and heritage identified in Chapter Three. These opportunities and challenges have been identified following consultation with the local communities and partners over a five year period from 2014 to 2019.

Challenges	Opportunities
Knowledge and understanding of Napoleonic, WWI, WWII and Cold War features is poor amongst local	New activity-based projects to empower the local community to research and share their unique heritage assets
The significance of the Ordnance Survey of Ireland is undervalued, and it is unknown what of the original physical infrastructure exists The rich cultural history of the area is unexplored and there is an urgent need to research, record, value and promote cultural expressions and influences in	Celebrate the OS Survey of Ireland through series of bi-centenary events to assist the local community to search for and record extant features  Deliver a programme of activities which help the local community research, explore and celebrate the rich cultural heritage of the area
the landscape  Documentation and evidence relating to the history and heritage of the project area is held in isolated and often fragmented collections which are in public or private ownership	Identify, collect and share resources which local communities can use in future to research, promote and share their collective heritage.
Currently no coordinated approach to the development, management and promotion of outdoor recreation opportunities within the Binevenagh area	Establish the area as a top destination in the UK and Ireland to participate in inclusive and sustainable land, sea and air based outdoor activities which complement and add value to the area's unique heritage assets and local community
Potential climate change including drier summers, wetter winters, increased temperature, sea level rise, increased storminess	Work with landowners to review current practices and adopt 'green infrastructure' and activities which reduce environmental impacts and enhance farm and landscape resilience under a range of scenarios
A number of Areas of Special Scientific Interest (ASSIs) are currently in unfavourable condition	Work with property owners to encourage activities which contribute to ASSIs achieving 'favourable condition status'

Compared to Northern Ireland as a whole, the Binevenagh and Coastal Lowlands is statistically 'culturally deprived' in terms of access to arts and sports facilities	Address this deficit in cultural activity by ensuring that all project activities provide access to outdoor recreation and art-based activities.
High percentage of the local community and HMP Magilligan inmates with no qualifications	Offer opportunities to those with no qualifications, to participate in a heritage-based activity which contributes towards gaining a qualification.
The area's spectacular landscape, diversity of habitats and species, history, built and cultural heritage, and outdoor recreation opportunities represent a high-value tourism asset that is both undervalued and undersold	Deliver activities and empower the local community to take ownership of activities which contribute to enhanced dwell time and greater spend within the LPS area.



 $31 {\it Challenge-unsanctioned scrambling on Binevenagh Mountain}$ 



32 Lough Foyle Base Survey Monument – Unknown and undervalued by Local Community

# 3.11 Statement of Significance

# **Background**

The Binevenagh and Coastal Lowlands is a very special place. There are perhaps few, if any other landscapes on the island of Ireland which can be explored, read and interpreted to document the shared natural and human history of the island of Ireland from its place on the Proterozoic (pre-life) Globe to the present day. This statement of significance aims to 'paint' a portrait of the LPS area's landscape and heritage from the point of view of the local community who assisted with the development of this Landscape Conservation Action Plan.

#### Natural roots and a continental commute

The rocks which provide the foundations for the landscape of the Binevenagh and Coastal Lowlands began their journey over 1.7 billion years ago in the present-day latitudes and longitudes of modern-day Antarctica. Throughout the last 1.7 billion years, these rocks have journeyed on Earth's tectonic conveyor belt from deep southern latitudes, through temperate, tropical, desert and equatorial climates, to their present position at 55°N and 7°W. Along this journey layers of material have been added and removed. Periods of ocean building have been interspersed with periods of mountain building and periods of biodiversity expansion have been balanced with mass extinctions and the development of new life forms.

At each stage, evidence of this global journey has been preserved in the rocks and landscape of the project area. At the surface today, four main periods of Earth history can be explored, from 200 million year old Jurassic fossils at Tircreven Burn ASSI, 70 million year old Cretaceous limestones at Downhill Strand, 65 million year old Paleogene basalts capping Binevenagh Mountain, to quaternary deposits which form the unique spit of land at Magilligan Point and several miles of golden beach.

The natural properties of each rock type within the project area dictate the underlying profile and topography of the landscape. They also determine the type and variety of the soils upon which biodiversity thrives. Climate changes throughout millennia coupled with human interactions with the natural environment over c. 6,000 years, have produced a landscape which today contains some of the most westerly designated habitats, species and landscapes in Europe. These include habitats and species which are considered rare and / or threatened in a European context e.g. coastal dunelands, upland bogs, arcticalpine assemblages, coastal mudflats and estuarine habitat. These contemporary habitats, species and landscapes exist in a delicate balance between geology, soils, climate, weather and human interaction.

The beach and dune systems of Benone, Downhill and Magilligan are some of the most extensive in Europe and support special plants and animals, many of which are not recorded anywhere else in Ireland. Examples include the scarce crimson and gold moth, small eggar moth, seaside centaury and pettlewort.

To the east the beaches and dunes are framed by the almost vertical cliffs and spectacular waterfalls of the basaltic Antrim Plateau. To the west they are framed by the more gently sloping native broad leafed and commercial conifer plantations which mantle Binevenagh mountain. The contrasting broad leafed and conifer plantations present a striped appearance known locally as the 'pyjama stripes'. Throughout the seasons the constantly changing weather, light, vegetation coverage and colouration present a rich patchwork of colour and texture. The falls of Binevenagh are home to an unknown variety of bryophytes and 'lower plants' which thrive in the harsh coastal conditions. The native broad-leafed and conifer woodlands are home to pine martens, red deer, birds nest orchid and fungi such as the blushing waxcap and olive earth tongue.

Squeezed between the coastal lowlands and uplands is a unique area of arctic-alpine habitat known as the Binevenagh National Nature Reserve. The underlying geology and climate have created grasslands rich in arctic-alpine assemblages with special plants such as purple saxifrage, mountain avens and moss-champion. Today these assemblages are maintained through sensitive conservation grazing by cattle and ponies. They have been made famous internationally through their featuring as the Dothraki Grasslands on the hit HBO TV series Game of Thrones.

The upland habitats (primarily peatland) on the basaltic Antrim Plateau stand in contrast to the rich patchwork of the coastal lowlands and lower slopes of Binevenagh. They transmit a more isolated atmosphere with extensive blanket bog broken only by the boundaries of commercial forestry and dispersed wind turbines from two significant windfarms, which divide public opinion. The area is home to hen harriers, Irish Hare, red grouse, common butterwort and round-leaved sundew. The views from the upland areas extend in all directions to the Glens of Antrim, Mid Ulster, the Sperrin Mountains, County Donegal and the islands of Scotland, notably the Paps of Jura and the island of Islay.

The coastal mudflats which extend into Lough Foyle present a landscape which changes daily in line with the tides, varying from extensive mudflats to a mirror like or 'angry' Lough depending on the weather conditions and light. On days when conditions on the Lough are stormy, local people can be heard saying 'Manannan is angry today' in reference to the Lough being home to the ancient sea god 'Manannan Mac Lir'. Lough Foyle is one of the largest sea loughs in the UK and Ireland and is recognised as a RAMSAR site for breeding waders and over-wintering birds such as the whooper swans, light bellied brent goose and bar-tailed godwit.

# At least 6,000 years of settlement

At present the oldest known evidence of human occupation on the island of Ireland is recorded at Mountsandel Fort on the River Bann outside Coleraine. In 1973 this site yielded evidence of human settlement and activity dating back 10,000 years. Whilst not directly within the project area; early human activity at Mountsandel provides tantilising insights into life in the Binevenagh and Coastal Lowlands area at a time when the island of Ireland was emerging from the latest ice age and transitioned to the warmer climate known today.

At the end of the last glaciation in Ireland (c. 13,000 years ago) ice melt resulted in a rapid rise in global sea levels. Geological, geomorphological and fossil evidence, particularly around the Magilligan area, records a raised beach (or ancient shoreline) significantly above present-day sea level. As the weight of ice was removed, the land slowly began to rebound relative to sea level in a process known as isostatic rebound (a process which continues today). When the level of the land began to rise relative to sea level the process of beach and dune formation was supported. Grangemore Dunes outside Castlerock present evidence of the oldest sand dune system on the island of Ireland, dating back 6,000 years. Due to continued isostatic rebound these sand dunes are now land-locked and have exposed the earliest direct evidence of Mesolithic human activity and habitation within the Binevenagh and Coastal Lowlands project area. Finds at Grangemore have included a dug-out canoe, pottery, beads and bronze age pins.



The dunes at Grangemore have yielded some of the earliest evidence of human settlement in the Binevenagh and Coastal Lowlands area

Other prehistoric sites include Ballywildrick standing stone and Bronze Age cairns on Binevenagh Mountain and at Ballyhanna. The most spectacular find was made in 1896 close to the River Roe and became known as the 'Broighter hoard'. This produced several gold objects including a large golden torc, two necklaces, a bowl and a gold model boat complete with oars. There is also evidence for early iron working and a midden at Magilligan has produced pottery, lignite bracelets and part of a bone comb.

The 'Giant's Sconce' near Sconce Hill was originally an iron age hilltop enclosure similar to Granian in Donegal and reputedly associated with 'Cethern son of Finton' one of the 'Red Branch Knights'. Craigbolie Fort is a similar enclosure close to Binevenagh. Other prominent earthworks include Stradreagh, a fine early Christian period rath, and a fortified hilltop at Dungannon Hill at Downhill. The word 'Binevenagh' translates in Irish as the 'mountain of Fiobhne', who according to legend was the son of an ancient celtic chief.

Around the foothills of Binevenagh (roughly corresponding to the ancient raised shoreline) there are several important churches including St Aidans, Aghanloo, Dunboe and Tamlaghtard. The remains of an older church at Tamlaghtard, close to St Aidans, date from the 13th century. St Aidans is reputedly the final resting place for St Aidan whose remains were returned here from Lindisfarne but also has associations with St Patrick. A holy well within the grounds is said to have healing powers and several mass rocks in the woods nearby possibly date from 1695 the time of the Penal Laws.



Evidence of the Mesolithic and early Christian periods is abundant the Magilligan area

Evidence of the Mesolithic and early Christian heritage in the landscape of the Binevenagh and Coastal Lowlands is outstanding. That said, there is still a lot which remains unknown about the activities of early human settlers throughout the area. The local community have expressed a desire to learn more about this shared heritage and have volunteered support for archaeological investigations and community led research initiatives which will be delivered through the Landscape Partnership. This includes unearthing, collating and debating early written accounts of 'life and landscape', many compiled by religious clerics and government officials beginning in the 16th century.

#### Land improvement and industry

Written evidence and oral history within the Binevenagh and Coastal Lowlands area is richest from the early 16<sup>th</sup> Century onwards. Firsthand accounts of life and landscape in the latter half of the 2<sup>nd</sup> millennium is recorded in a diverse range of written surveys, paintings, drawings and music. Collectively these records suggest a rural subsistence economy and community which practiced a mixture of pagan and Christian traditions. The earliest accounts describe an impoverished community, living very much within the local means at their disposal i.e. the natural resources of the coastal and upland areas. These resources are described as 'poor' in the context of agriculture and farming, with the result that the local community largely relied on small scale subsistence farming and fishing, supplemented with small scale cottage industries with the supply of rabbit furs being of note. Transport connections are known to have been poor, with areas of 'impenetrable bog' and 'poor roads'. The earliest maps indicate transport was many based around the coastal plane, with transport signage marked along the beaches.

The Church of Ireland and Plantation of Ulster had a significant impact on the lives and landscape of the local community. Much of the project area was designated as 'church land' owned and managed by the Church of Ireland and / or its clerics. In contrast to other areas in County Londonderry, Church land was not given to or managed by the Livery Companies of London during the Plantation period. This resulted in a patchwork of different land management styles and practices. For example, plantation villages and modern industry were established by the Livery Companies at land within their portfolios at Ballykelly (Fishmongers) and Articlave (Clothworkers), whereas subsistence agriculture continued within church lands associated with estates at Downhill Demesne and Bellarena Estate. The Livery Companies and the Church of Ireland invested in improving aspects of local life, from education and health, to enhancements in transport and agriculture. It is generally considered that the lives of the local community were improved throughout this period; however, there is some resentment recalled amongst members of the local community regarding the rents and conditions charged to tenants during this period.

The coastal lowland landscape changed dramatically during the 18<sup>th</sup> and 19<sup>th</sup> centuries. Drainage and land improvement schemes resulted in increased agricultural output and better transport connections. The single biggest change came as a result of the development of the Coleraine and Londonderry railway line in the early 1800s. This scheme is perhaps unrivalled in Ireland in terms of the proposed scope of land reclamation to both create and fund the new railway. Ultimately the full plans were not realised because a landmark court case in Dublin established that private individuals who owned land adjacent to the existing shoreline would hold entitlement to any adjacent land reclaimed from the sea. In its built form, the Coleraine and Londonderry Railway resulted in the creation of expansive reclaimed and highly fertile 'slob lands' in the Ballykelly and Myroe areas. Today these artificial slob lands contrast dramatically with the natural Magilligan and Coastal Lowlands spit, which from the high vantage point at Gortmore

displays the natural development of the spit through relict dune and beach ridges which form natural arced field boundaries.



The extremely regular field patterns of the 'slob lands' of Myroe and Ballykelly area contrast dramatically with the natural field boundaries of Magilligan Point in the distance

The development of the railway also led to the creation of one of Ireland's most unique settlements – the Victorian railway village of Castlerock. Castlerock is unusual as it has none of the natural pre-requisites of a coastal settlement e.g. it has no river or natural source of freshwater, it is not a good defensive site and it is not located near a harbour or safe anchorage. In fact, Castlerock did not exist at all when Colonel Thomas Colby selected the flat coastal lowlands of Magilligan to establish baseline measurements for the six inches to the mile Ordnance Survey of Ireland during the 1820s. Castlerock owes its existence entirely to construction of the Coleraine to Londonderry railway which facilitated its development as a Victorian holiday and commuter settlement with close connections to the Church of Ireland and nearby Downhill Demesne. This is reflected in the character of the modern village which demonstrates a planned street form and numerous Victorian era red brick and black basalt dwellings and structures.



The arrival of the railway opened the Binevenagh and Coastal Lowlands with better transport for communities and industries. This had a dramatic effect on the lives and landscape of the local community. It remains a vital transport connection today.

Colonel Thomas Colby's survey now provides the most comprehensive detail about the life and landscape of the Binevenagh and Coastal Lowlands area in the early 1820s and 30s. A series of memoirs accompany maps at a scale of six inches to the mile. These memoirs provide statistics about the socio-economic conditions of the area and provide insights into earlier life and traditional practices as recounted by the community at that time. The cartographic techniques and technologies developed by Colby went on to inform modern mapping of huge areas of the Earth, notably the OS Survey of India by Sir George Everest. The coastal lowlands of the Binevenagh area are therefore of international significance for the part they played in the development of modern cartography.

#### **International Conflict and War**

The unique geography of the Foyle estuary and the surrounding landscape has led to the area frequently playing a central role in the tumultuous events of Irish and international history. Throughout the sixteenth and seventeenth centuries, military activity focused on the haven provided by Lough Foyle and the protective narrows at Magilligan. It was landing on the Foyle by English troops which proved a key turning point during the Nine Years War (1593-1603) and the siege of Derry in 1689 was pivotal during the Williamite Wars (1689-1701). Unsurprisingly the region continued to play a role in military events and still does to the present day.

When the threat of invasion from Napoleonic France menaced the shores of Britain and Ireland, a network of stone Martello towers was built to protect vulnerable sections of the coast, one of which (and the only one in Northern Ireland) was constructed at Magilligan Point. Completed in 1817 (two years after Napoleon was finally defeated), the position was armed with a 24-pounder smoothbore cannon which swiveled around a central pivot. The tower complimented a similar fortification of the Donegal shore opposite.



Magilligan Martello Tower

More peaceful times followed, and the Board of Ordnance was tasked with mapping the whole of Ireland, which was the first ever large-scale mapping of a country. All their measurement were founded on the Lough Foyle Baseline. The near-eight-mile line running from Mountsandy in the north (now lost to the sea) to Ballykelly in the south exploited the unusually flat terrain and used specialist instruments to achieve a remarkable degree of accuracy. A resurvey in 1960 with modern electronic equipment found the measurement was off by only one inch.



Ballykelly Base Tower - Used in the original base survey of Ireland

A rifle range was first established at Magilligan in 1898, and in 1909 the army set up a tented camp. In 1912 the army built two ranges and the start of World War I in 1914 saw increased use of the site as troops were trained before dispatch overseas. However, the strategic values of the Foyle did not warrant protection as the much more important Royal Navy anchorage at Lough Swilly was the focus of defence structures in the region during World War I.

The momentous events of World War II saw the region thrust into the centre of world military events as never before. With access to the treaty ports in the Republic of Ireland cut off and supply convoys from the USA routed north of Ireland, the naval facilities on the Foyle and the airfields around it became vital. They were instrumental in winning the Battle of the Atlantic by neutralising the threat posed by German U-boats in their area of operations in the North Atlantic. The protected anchorage on the Foyle and the flat landscape made the area ideal for naval operations and the construction of airbases for maritime patrols and training of flight crews. RAF Limavady was the first of four new airfields to be constructed along the north coast during World War II. It opened late in 1940 and was assigned to Coastal Command. Initially, long-range anti-submarine patrols were flown out of Limavady, which continued until early 1942, when it became an operational training unit. RAF Ballykelly opened at the start of June 1941 when the RAF established a Coastal Command Development Unit. Throughout the war, Coastal Command flew anti-submarine patrols and air-sea rescue flights.



Period WWII Graffiti at Limavady Airfield, likely drawn by Canadian Service Personnel

The vital strategic position of the Foyle saw a rapid expansion of coastal and anti-aircraft defences. With the fall of France in 1940 steps were taken to fortify commercial ports and secure vulnerable beaches from the threat of German landings. A 12-pounder gun was installed at Ebrington Barracks during June 1940, but this was insufficient to engage all but the lightest craft or submarines. Therefore, a new emergency battery was established on Magilligan Point during July. Two 6-inch guns were sited on either side of the Martello tower, which was fitted with a concrete observation post. The 12-pounder was moved to supplement the two guns at Magilligan in August 1940.

After the fall of France, the invasion of the United Kingdom became a distinct possibility. Though the weight of the German attack was expected to land on the south-east of England, preparations were made to resist landings along the coast of N. Ireland. From June 1940 the government instituted a programme to extend fixed defences into a national system which included Northern Ireland. The long sandy beaches, beloved of holidaymakers, meant the north-west was particularly vulnerable to amphibious landings. Moreover, the concentration of naval facilities and aerodromes engaged in the Battle of the Atlantic and supporting radar sites made the area an important hub for Allied activity in the region. Consequently, a 'coastal crust' of defences consisting of concrete pillboxes (both along the beaches and holding the beach exits), barbed wire and roadblocks were erected to defend the expansive beaches along the north coast.

Further defences were installed as the strategic importance of Londonderry increased, and five more heavy anti-aircraft sites were established, one of which was at Magilligan. This anti-aircraft site was positioned to protect ships coming through the narrows. As the Allies gained the upper hand in the war, the threat of German attack receded. Gun defences around the city were reduced, and the battery at Magilligan was finally closed in February 1944.



The WWII Anti-Aircraft Battery at Magilligan is now in poor condition but has potential to be reimagined as a recreation, interpretation and amenity area for the local community and visitors

The area sat at the western extremities of an electronic barrier which circumscribed the United Kingdom. The Binevenagh area played an active part of the first electronic war, as radars guided allied ships and aircraft while searching for enemy targets. A Chain Home radar site monitored the airspace from Castlerock from November 1940 and a Chain Home Low radar at Downhill closed the gaps in the Chain Home system by scanning for low-level aircraft and the tracking the movements of coastal shipping.

World War II ended only to be replaced by the Cold War and still the landscape changed and modified to find its place on what was potentially a global battlefield which threatened the very survival of humanity. The radar station at Castlerock remained operational when it was briefly used as a readiness Chain Home station the UK's response to the threat from the Soviet Union. At RAF Ballykelly, crews trained to counter Soviet submarines, and provide fall-back facilities to four Avro Vulcans from the RAF V-bomber force, while small Royal Observer Corps bunkers sat prepared to record and report the impact of Soviet nuclear warheads.

During the 'Troubles' period in Northern Ireland (1969-98) Ballykelly came under the auspices of the Army and was renamed Shackleton Barracks. The base closed in 2008. Magilligan Camp continued to train troops at its ranges, but specialist facilities were developed, such as the Foyle Patrol Base and the Patrol village which was used to prepare troops for anti-riot and crowd control duties. The camp is still an active training unit for the British Army and frequently conducts live firing training. A red flag is flown around the site on days when the ranges are in use.

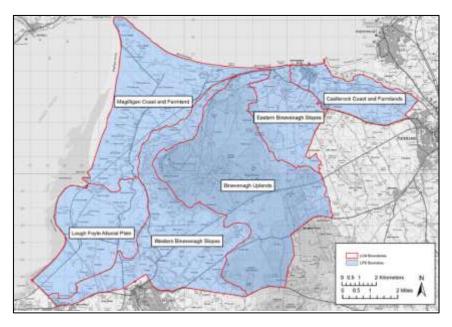
# Chapter Four - Scheme Plan

#### 4.1 Introduction

Part One (Chapters One to Three) outlines the primary aims and objectives of the Binevenagh and Coastal Lowlands Landscape Partnership Scheme, along with an overview of what gives the landscape and heritage its special character. It concludes with key challenges and opportunities which the LPS will address through the delivery of partnership activities. This Chapter focuses on what the Binevenagh and Coastal Lowlands Landscape Partnership will deliver to protect, enhance and celebrate the area's heritage, including non-technical summaries of all proposed activities. It provides an overview of the policy context for the project activities.

The full suite of project activities summarised in this chapter are accompanied by detailed project plans in Part Three (Microsoft Excel Workbooks). The activities presented in this chapter have been prepared with intense consultation with the local community and project partners. They represent almost five years of preparatory work (pre-development and Development Phase) and will address the challenges and opportunities outlined in section 3.10. All activities achieve one or more of the aims and objectives of the scheme outlined in Chapter Two.

Proposed activities have been benchmarked against the independent Landscape Character Assessment (Fiona Fyfe, 2018), to ensure that they contribute to maintaining and enhancing the unique characteristics of each Landscape Character Area (LCA). This section presents the activities which will take place in each LCA, along with those which will be delivered on a scheme-wide basis. It also identifies the aims, objectives, policy context and relevant challenges which will be addressed by successful delivery of the activity.



33 Map showing the location of Landscape Character Areas within the Binevenagh and Coastal Lowlands LPS

# 4.2 Structure of Project Activities

Projects are divided into the following three themes which align with the overall scheme aims:

Theme	Scheme Aim
Natural Heritage     (NH)	Improve management and resilience of the special landscape, habitats and species of the project area.
Defence and     Historic     Environment (HE)	<ol> <li>Highlight and promote the vital role the landscape has played and continues to play in defence heritage on a global and national stage from the Napoleonic Period, through WWI, WWII, the Cold War to the present day.</li> </ol>
3. Outdoor Recreation Projects (OR)	3. Establish the area as a top destination in the UK and Ireland to participate in inclusive and sustainable land, sea and air based outdoor activities which complement and add value to the area's unique heritage assets and local community.
Community     Heritage Initiatives	<ol> <li>Support and deliver community led heritage initiatives which provide education and training opportunities, and which enhance access to, and interpretation of the area's natural, built and cultural heritage.</li> </ol>

Within each theme there are a suite of projects which will assist the local community to achieve the associated aim. Projects listed within a particular theme do not necessarily only deliver on the corresponding aim e.g. a project listed under Outdoor Recreation, could contribute to scheme aims 1, 2, 3 and 4; however the primary role of an Outdoor Recreation project is to help establish the area as a top destination in the UK and Ireland to participate in inclusive and sustainable land, sea and air based outdoor activities which complement and add value to the area's unique heritage assets and local community. In short, any project activity can contribute to one or all three, of the scheme aims.

# **4.3 Policy Context**

All activities delivered through this Landscape Conservation Action Plan, help to meet objectives outlined in a range of international, national and local policy statements, conventions and programmes. The Development Phase of the Binevenagh and Coastal Lowlands LPS took place at a time of significant political uncertainty at all levels of government affecting Northern Ireland. Throughout the Development Phase the Northern Ireland Executive and Assembly did not sit. Consequently, the most significant government document pertaining to activities delivered through the LPS was only available in draft form i.e. draft Programme for Government (dPfG). It is uncertain when or if the dPfG will be formally adopted; however, following precedent, the draft outcomes of the dPfG are currently recognised by the NI Civil Service as 'guiding current policy'. Of the 14 outcomes listed in the dPfG the Binevenagh and Coastal Lowlands LPS helps contribute to the following seven outcomes:

- 1. We live and work sustainably protecting the environment
- 2. We enjoy long, healthy, active lives
- 3. We are an innovative, creative society, where people can fulfil their potential
- 4. We are a shared society that respects diversity
- 5. We are a confident, welcoming, outward-looking society
- 6. We have created a place where people want to live and work, to visit and invest
- 7. We give our children and young people the best start in life

At a National and International Level, the Development Phase took place entirely within the context of the UK preparing to leave the European Union. This generated significant uncertainty about future agri-environment programmes which have for many years, been delivered in the context of European policy. That said, the UK has stated that all existing EU standards for agriculture and the environment will be maintained post-Brexit. Activity planning for this Landscape Conservation Action Plan has been based on maintenance of the status quo in both national and local government policy. It is not believed that changes in current policies would have a significant impact on the programme of activities outlined in this plan.



**34** the current and future agri- environment policy context is uncertain; however, project activities are resilient enough to cover envisaged outcomes (illustration: Ratna Sagar)

# 4.3.1 International Landscape and Conservation Designation Policies

The European Union's 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". The convention states that:

- Landscape is everywhere, and provides a setting to people's lives, both physically and through memories and associations.
- Landscape is the product of human history and is the meeting ground between natural and cultural influences. It is constantly changing in response to a myriad of different decisions.
- Landscape defines identity and sense of place and is central to defining, national, regional, local and personal identity. Differences in landscape character play on all our senses – sight, hearing, smell and taste – day and night and through the seasons.
- Landscape is imbued with personal values and inspires and can take on spiritual values. These values change and evolve.
- Landscape provides a sense of continuity and despite change it provides continuity in people's lives, linking the past with the present and the future and
- Landscape provides a wide range of benefits and goods and services essential for human survival and well-being

At a global level the United Nations (UN) recognises the significance of landscape through a number of conventions and ongoing programmes. Of significance are the **World Heritage Convention** (1972), UNESCO's **Man and the Biosphere Programme** (1971) and UNESCO's **Global Geopark Programme** (2015). These recognise the significance of special landscapes with a focus on those of Outstanding Universal Value (of importance for all humanity), and those of extreme importance for biodiversity and/or geological diversity. Currently Northern Ireland has one World Heritage Site (the **Giant's Causeway and Causeway Coast**) and shares an international UNESCO Global Geopark with the Republic of Ireland (**Marble Arch Caves**). A key output of the Binevenagh and Coastal Lowlands LPS is to prepare a draft application to the UK's Man and the Biosphere Committee for consideration of the Binevenagh and Coastal Lowlands area as Northern Ireland's first UNESCO Biosphere.

A number of European Level Directives, notably the **EC Habitats Directive**, provide for the designation, protection and management of sites which are important for priority habitat and species at a European level. At a Northern Ireland level, **Conservation Regulations (Northern Ireland)** provides for the designation, protection and management of 'European Sites', the protection of 'European Protected Species' and the adaptation of planning and other controls for the protection of European Sites. **Special Area of Conservation** (SACs) are listed under the EC Habitats Directive and **Special Protected Areas** (SPAs) are classified under the **EC Birds Directive**. Most of the UK's wildlife and environmental legislation is designed to meet commitments made at a European Level.

# 4.3.2 National and Local Landscape and Conservation Designation Policies

The Department of Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland recognises the definition of landscape in the ELC and has incorporated it in its **Strategic Planning Policy Statement** which provides guidance for planning decisions at a regional and local level. In addition, the definition of Landscape in the ELC is recognised in DAERA issued **Planning Policy Statements (PPSs)** which set out the department's policies on particular aspects of land-use planning across Northern Ireland. Their contents must be considered when local authorities create Local Development Plans (LDPs). Within the Binevenagh and Coastal Lowlands, Causeway Coast and Glens Borough Council is responsible for delivery of the **Local Development Plan**. This is anticipated to be complete in 2023 and will replace the current **Northern Area Plan (2016)**, developed in the early 2000s but not adopted until 2016. In 2018 Causeway Coast and Glens Borough Council published its **Preferred Options Paper** (POP), outlining possible local planning policy changes which could be implemented in the new Local Development Plan.

The Wildlife and Natural Environment Act (Northern Ireland) 2011 places a statutory duty on every public body to further the conservation of biodiversity. The Northern Ireland Biodiversity Strategy 2002 sets the framework for biodiversity action and a new biodiversity strategy is being prepared to help halt the loss of biodiversity and degradation of ecosystems beyond 2020. The most common form of conserving biodiversity is designation, protection and management of the best sites of nature conservation importance.

The **Environment (Northern Ireland) Order 2002** provides DAERA with the power to declare an area of land as an **Area of Special Scientific Interest** where the land is of special interest by reason of its flora, fauna, geological, physiographical or other features and needs to be protected.

The Wildlife (Northern Ireland) Order 1985 makes provision related to the protection of wild birds with penalties for offences related to birds listed on Schedule 1, for which there are additional offences for disturbing these birds or their nests, or their dependent young. The Wildlife and Natural Environment Act (Northern Ireland) 2011 amended the Wildlife Order by giving protection to a wider range of plants, animals and birds, and providing additional enforcement powers and increased penalties for wildlife related offences. The Act also introduced a statutory duty on all public bodies to further the conservation of biodiversity.

The Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 provides the Department of Agriculture, Environment and Rural Affairs (DAERA), with the power to designate Areas of Outstanding Natural Beauty (AONBs), and at its discretion, make provisions for the protection of landscape character in these areas. There is currently no statutory duty on DAERA to make resources available for the protection of landscape character in AONBs.

#### 4.4 Public Consultation on Activities

Upon submission of this LCAP the LPS staff had held over 300 consultation meetings and events with members of the public and project partners. This amounts to over 2,100 hours (300 days) of volunteer and in-kind time dedicated to ensuring that project activities meet the objectives of the National Lottery Heritage Fund, relevant international, national and local policies and the aims and objectives of delivery partners. The suite of projects presented in this LCAP has therefore been rigorously reviewed by the local community, project partners and have been unanimously agreed by the LPS Board. Their delivery in partnership with the local community and partner organisations will meet the clear aims and objectives outlined in Chapter Two. As none of these activities fall within the remit of any single organisation or management body, without the support of the National Lottery Heritage Fund the delivery of these activities would be impossible and the special value of the landscape and heritage of the area would be at risk of degradation.

The following case studies, whilst not exhaustive, demonstrate the range and type of consultation events which have been held to inform the delivery of this Landscape Conservation Action Plan. A full list of meetings and events can be found in appendix six.

# **Case Study One: Public Consultation Events**

To inform the development of project activities public consultations were held to identify project priorities under the themes of Natural Heritage, Outdoor Recreation and the Historic Environment and Defence Heritage. Additionally, public consultation was conducted to inform the project's independent Landscape Character Assessment.

Public consultation events relating to the outdoor recreation spatial masterplans for Downhill Demesne and Binevenagh, Ballycarton and Grange Park Forests were conducted at the Peter Thompson Hall (54 attendees) Castlerock and St Aidan's Chapel Hall (28 attendees) Magilligan. Additionally, online surveys for both spatial masterplans attracted 672 responses. Participants had an opportunity put forward proposals for the delivery of sustainable outdoor recreation activities at each location. The results of the consultations were invaluable in shaping proposed project activities.

# Case Study Two: Public events and activities







Selection of images from public events held throughout the Development Phase of the LPS (clockwise from top left: Binevenagh Nature Reserve Walk and Talk, Historic Aircraft Event at Ulster Gliding Club, Beach Clean at Magilligan Point, Grangemore Walk and Talk, Altikeeragh Walk and Talk, Traditional Orchard Management Training Course)

Throughout the Development Phase, LPS staff coordinated a series of public events and activities to raise awareness of the aims and objectives of the scheme. These events gave participants an opportunity to contribute ideas and information to the project team. In total 18 public events were held with over 300 participants. Events ranged from walks and talks to boat trips, presentations, litter picks, biodiversity recorder days and landowner training events.

# **Case Study Three: Oral History Session**



Oral History Session with Magilligan Community Association and Causeway Museum Service

The LPS Team hosted a community lunch and oral history session with the over 60s group in Magilligan Community Association to help identify project priorities. This session captured fascinating stories about the local landscape and heritage and contributed over 2 hours of audio to the Northern Ireland Community Archive. Information collected through this event helped shape community led heritage initiatives such as the proposed 'Laughter in the Landscape' project with local primary schools.

# **Case Study Four: Archive Material and Digitisation**



Throughout the development phase a number of individuals contributed archive material to the project, including written material, photographs, video and maps. Some of this material was provided on obsolete digital and analogue media, requiring digitisation to access content. Digital files have been given to the Causeway Museum Service for inclusion in the NI Community Archive.

# Case Study Five: LPS Board, Advisory Groups and Study Visits



LPS Board study visit to Galloway Glens LPS

Throughout the development phase the LPS Board and four LPS Advisory Groups have met quarterly to review project progress and to advise on the development of proposed project activities. In total the LPS Board and over 40 members of the LPS Advisory Groups have contributed over 500 hours of volunteer and in-kind time to the Development Phase of the project.

In October 2018 the entire LPS Board undertook a study visit to the Galloway Glens Landscape Partnership with the purpose of reviewing the scheme's successful stage one application and development and delivery phase transition. In May 2019 members of the LPS Board and Staff travelled to the Up on the Downs LPS to discuss in detail the successful delivery phase of their scheme, including defence heritage projects.



LPS Staff and Board Members study visit to the Up on the Downs LPS Scheme

#### 4.4 Project Activities / Summaries

Project Theme	Natural Heritage
Project Name	NH1 Curly Burn Catchment Care
Lead Partner(s)	Loughs Agency, Woodland Trust and LPS
Activity:	

Programme of physical conservation work(s) and training with Loughs Agency, Woodland Trust, DAERA, local landowners, the community and partners to:

- Eradicate non-native invasive plant species from the Curly Burn Catchment (relates to project NH3)
- Undertake in-channel work(s) to improve habitat for Brown Trout and Atlantic Salmon
- Reduce sedimentation and slow the flow from upland water catchment areas (relates to project NH2)
- Riparian planting and restricting livestock access to the river and banks
- Improved access for anglers and training to enable local maintenance and monitoring of freshwater habitat

**Total Cost:** £83,400 (inc. VAT, inflation and contingency)

Match Funding: Match Funding Secured

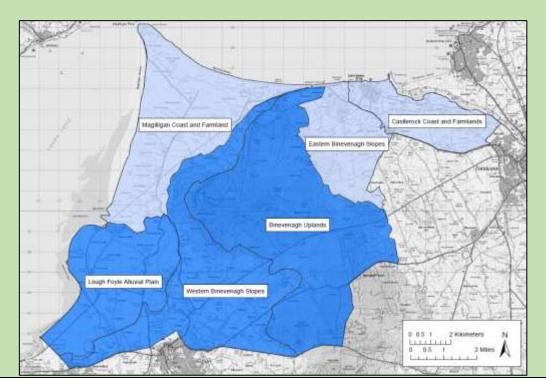
Years of Activity: Years 1 to 5

**Project Location:** Curly Burn River Catchment (Binevenagh Uplands, Western Binevenagh Slopes and Lough Foyle Alluvial Plain LCAs)

**Landscape Implications:** Improved riparian and freshwater habitat, increase in native tree and hedgerow cover, eradication of non-native invasive plant species and upland habitat improvement.

Status: Ready to start, pending HLF award

#### Included LCAs



Project Theme	Natural Heritage
Project Name	NH2 Freshwater Quality and Access Enhancement
Lead Partner(s)	LPS
A 41 14	

Programme of physical conservation work(s) and training with local landowners, the community and partners to:

improve upland water management

• encourage the development of ponds, pools and wetlands

**Total Cost:** £36,510 (inc. VAT, inflation and contingency)

Match Funding: Match Funding Secured

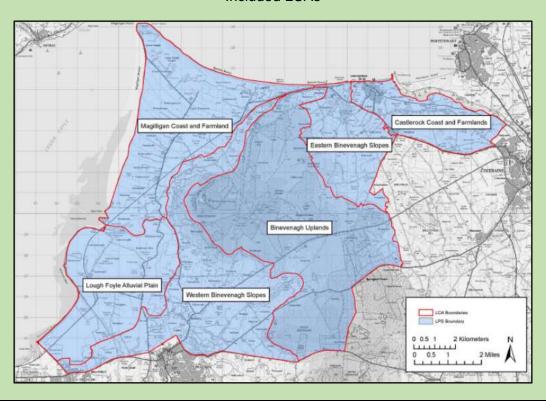
Years of Activity: Years 1 to 5

Project Location: Various locations throughout LPS

Landscape Implications: Bog restoration and improved wetland habitat for declining species e.g. smooth newts, common frog, breeding waders. Identified as an opportunity particularly in the Binevenagh Uplands LCA at and around Altikeeragh ASSI. Greater awareness of the importance of freshwater habitat and waterflows

Status: Ready to start, pending HLF award

#### Included LCAs



Project Theme	Natural Heritage
Project Name	NH3 Farm resilience, woodland and land-use change
Lead Partner(s)	Loughs Agency, Woodland Trust and LPS
Activity:	

Partnership with Woodland Trust and Loughs Agency to develop individual and group farm resilience plans which improve woodland and hedgerow cover (increased habitat and shelter for stock), reduced fertiliser, sediment and chemical runoff to fresh and marine water habitat, increased farmland biodiversity, sustainable maintenance and possible enhancement of farm productivity. The LPS will source and grow local provenance trees and wildflowers for distribution to farmers, with a particular focus on orchard expansion using heritage varieties. The LPS will role out advice and guidance in the identification and safe removal of non-native invasive plant species. In tandem Causeway Museum Service will lead an environmental textiles project and exhibition to raise community awareness of land-use and climate change issues, and efforts which are being taken to protect the landscape. This project aims to restore Aghanloo ASSI to 'favourable condition' by year five. Queen's University Belfast will operate 360-degree live cameras to monitor and broadcast live landscape changes 24 hours/day 365 days/year throughout the project.

**Total Cost:** £294,075 (inc. VAT, inflation and contingency)

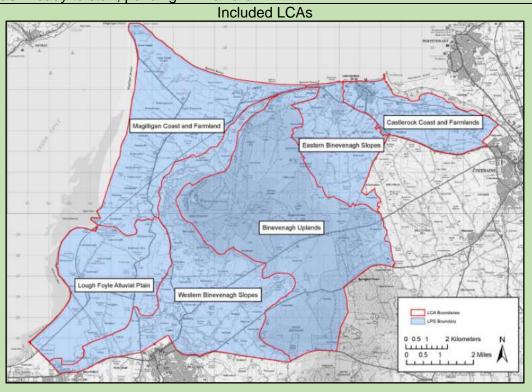
Match Funding: Match Funding Secured

Years of Activity: Years 1 to 5

**Project Location:** Various locations throughout LPS, with focus sites at Aghanloo ASSI, Magilligan Point, Roe Estuary and Altikeeragh NNRs.

**Landscape Implications:** Improved farmland biodiversity with increase in length and diversity of hedgerows, increase in woodland, improvements in fresh and marine water quality and long-term digital record of landscape change at three key sites.

Status: Ready to start, pending HLF award



Project Theme	Natural Heritage
<b>Project Name</b>	NH4 Maritime habitat enhancement and access
Lead Partner(s)	Causeway Coast and Glens Borough Council, Castlerock Community
	Association and RSPB

Programme of conservation work(s) and training with Causeway Coast and Glens Borough Council, the community and partners to improve the condition of, and access to maritime heathland habitat at the Moors of Castlerock. In addition, at Lough Foyle the design and delivery of a community led natural heritage sculpture trail through the guidance of RSPB and Elements Studio. This project will:

- Raise awareness of the special maritime habitat of the LPS area between Ballykelly and Castlerock
- Restore 25 acres of maritime heathland and provide sustainable public access at the Moors of Castlerock
- Deliver a community arts-based education programme to research and explore important marine and bird species in the Lough Foyle area (focus on participation local primary schools and aging population)

Total Cost: £51,185 (inc. VAT, inflation and contingency)

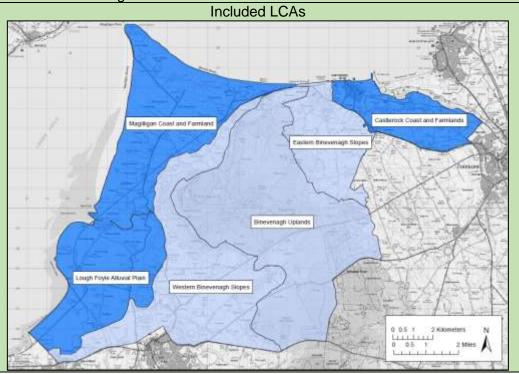
**Match Funding:** RSPB match funding confirmed, awaiting confirmation from Causeway Coast and Glens Borough Council

Years of Activity: Years 2 and 3

**Project Location:** Lough Foyle Alluvial Plain, Magilligan Coast and Farmland, Castlerock Coast and Farmland LCAs

**Landscape Implications:** Improved condition and extent (25 acres) of maritime heathland. Community led interpretive sculpture trail at Lough Foyle.

**Status:** Ready to start, pending HLF award and confirmation of funding from Causeway Coast and Glens Borough Council



Project Theme	Natural Heritage
Project Name	NH5 Landscape Conservation Training and Volunteering
Lead Partner	Ulster Wildlife and Education Authority (Magilligan Field Centre)
Activity:	

Programme of work(s) to provide training and develop local skills in landscape conservation for volunteers and partners. This project has a particular focus on young people and those in the local community. Key activities include:

 Development and delivery of an annual Binevenagh Youth Residential led by Ulster Wildlife, to provide secondary level students with skills and experience in environmental conservation.

Total Cost: £49,940 (inc. VAT, inflation and contingency)

Match Funding: Ulster Wildlife funding secured

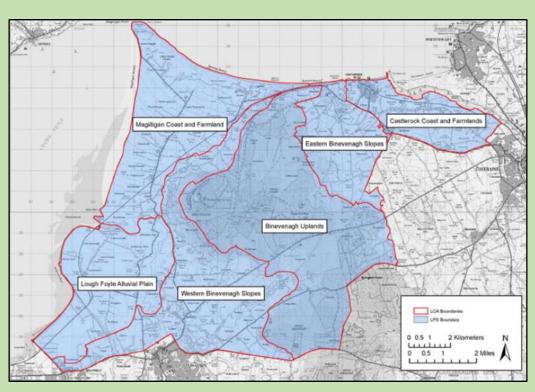
Years of Activity: Years 1 to 5

**Project Location:** Various locations throughout LPS, focus on Magilligan Field Centre as training base.

**Landscape Implications**: Improved condition of local habitat through development of local skills base to enable early intervention if conditions become unfavourable at local sites.

Status: Ready to start, pending HLF award

#### Included LCAs



Project Theme	Outdoor Recreation
Project Name	OR1 Historic Downhill Demesne Spatial Masterplan
Lead Partner(s)	Causeway Coast and Glens Borough Council and National Trust
Activity:	

Coordinated delivery of outdoor recreation within Historic Downhill Demesne (focus on Downhill Forest South and North) through establishment of partnership arrangements between National Trust, Causeway Coast and Glens Borough Council and Forest Service NI. Work(s) to include:

- Expansion of trail network from 2 trails measuring 2.5km to 4 trails measuring 6.5km
- Better connectivity to other LCAs via Ulster Way (see project OR2)
- Development of one all-ability lake trail
- Coordinated and enhanced signage and mapping of outdoor recreation facilities
- Enhanced access furniture (seating, bins, stiles etc)
- Establishment of a 'friends of Downhill' advisory group
- Establishment of maintenance agreement between relevant partners

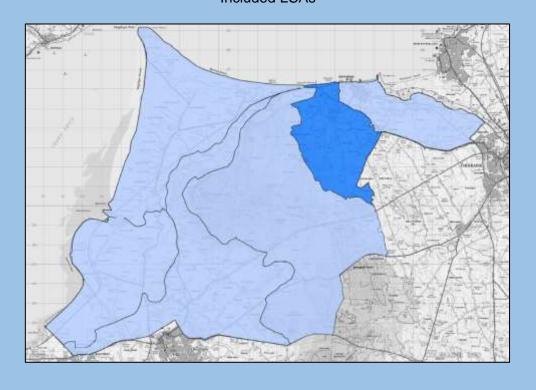
Total Cost: £142,050 (inc. VAT, inflation and contingency)

**Match Funding:** Awaiting confirmation from National Trust and Causeway Coast and Glens Borough Council

Years of Activity: Years 1 to 5

Project Location: Eastern Binevenagh Slopes LCA with a focus on Downhill Forest

**Landscape Implications:** Improved management of outdoor recreation within Downhill Forest, including sustainable access trails – resulting in reduction in damage through unsanctioned trail development. Better connectivity between the LCAs through off-road trail development (connecting with project OR2)



Project Theme	Outdoor Recreation
Project Name	OR2 Binevenagh, Ballycarton and Grange Park Spatial Masterplan
Lead Partner(s)	Causeway Coast and Glens Borough Council and St Aidan's Chapel
Activity:	

Coordinated delivery of outdoor recreation within Binevenagh, Ballycarton and Grange Park Forests (including connections between Castlerock, Aghanloo, Roe Estuary, Benone and Magilligan) through establishment of partnership arrangements between Causeway Coast and Glens Borough Council and relevant partners. Key activities to include:

- Roe Estuary Walk connecting Swann's Bridge to Myroe / Ballykelly (4km)
- Recreation Hub Development at Ballycarton and Grange Park Forests
- Binevenagh upper trail development
- New access and trails connecting Bellarena Train Station and St Aidan's Chapel with core forest area

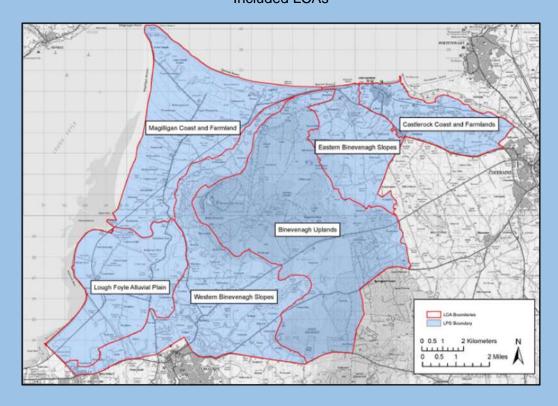
**Total Cost:** £229,330 (inc. VAT, inflation and contingency)

**Match Funding:** Awaiting confirmation from National Trust and Causeway Coast and Glens Borough Council

Years of Activity: Years 1 to 5

**Project Location:** Focus on Binevenagh Uplands and Wester Binevenagh Slopes LCAs, with connectivity to all other LCAs through off-road walking

**Landscape Implications:** Improved management of outdoor recreation within the Binevenagh area, including development of sustainable walking and mountain biking trails and sensitive use of designated sites e.g. Binevenagh NNR



<b>Project Theme</b>	Outdoor Recreation
Project Name	OR3 Castlerock Trails and Tales
Lead Partner	Castlerock Community Association
A	

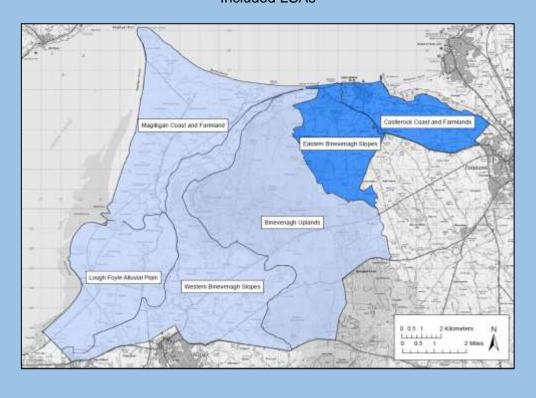
Development of a series of looped community heritage walks in and around Castlerock Village, with a focus on connecting the village with Grangebeg (including WWII Pillbox, see project HE1), inner (shorter) and outer (longer) heritage looped walks exploring the Victorian heritage of Castlerock. Significant links with project HE4, through inclusion of trails and tales in historic map and pamphlet series, and project wide digital heritage map and associated multimedia resource. Also, connection with project OR4 and the delivery of two community outdoor recreation orientation points.

Total Cost: £83,110 (inc. VAT, inflation and contingency)

**Match Funding:** Awaiting confirmation on funding from Causeway Coast and Glens Borough Council

Years of Activity: Years 1 to 5

**Project Location:** Castlerock Coast and Farmland and Eastern Binevenagh Slopes LCAs **Landscape Implications:** Sustainable trail development and enhanced interpretation of landscape and heritage features within and around Castlerock and Historic Downhill Demesne.



Project Theme	Outdoor Recreation
<b>Project Name</b>	OR4 Community Training and Trails
Lead Partner	Ulster Gliding Club, Causeway Coast and Glens Borough Council and
	LPS

This project focuses on providing training for the local community so they can facilitate inclusive access to outdoor recreation opportunities within the Binevenagh and Coastal Lowlands area. Training will focus on providing the skills, qualifications and confidence necessary for individuals and/or organisations to provide access to outdoor recreation opportunities. Activities include delivery of training for inclusive glider instruction, hill and moorland guiding, mountain leader qualification, rescue emergency care, child and vulnerable adult protection etc. A significant activity involves a detailed aerial laser (LiDAR) survey of the entire LPS area to provide elevation data which can be used to produce modern orienteering maps, but which will also contribute to archaeology projects (see project HE2) and farm resilience planning (see Project NH4). This project includes the provision of local community outdoor recreation orientation points (3D relief map showing local routes and activities).

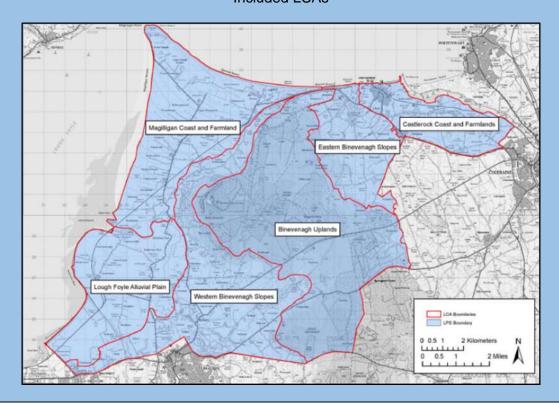
Total Cost: £158,195 (inc. VAT, inflation and contingency)

Match Funding: Awaiting confirmation Causeway Coast and Glens Borough Council

Years of Activity: Years 1 to 5

Project Location: Various locations throughout the LPS

**Landscape Implications:** Sustainable and appropriate use of the natural landscape resources of the Binevenagh and Coastal Lowlands area. All training will instruct on appropriate use of special habitats and sites of built or cultural heritage interest.



Project Theme	Defence and Historic Environment
Project Name	HE1 Built Heritage Conservation and Access Enhancement
Lead Partner(s)	National Trust, Milgrow and LPS
Activity:	

This project aims to research, explore and where possible provide public access (both physical and/or digital) to sites of defence heritage interest in the Binevenagh and Coastal Lowlands area. A number of signature projects are planned in partnership with private property owners, Causeway Coast and Glens Borough Council, National Trust, Ministry of Defence and Department for Communities. These projects will all provide volunteer and heritage skills training opportunities.

- WWII Trainer Dome (RAF Limavady) restoration and repurposing as multi-use events space
- Magilligan Heavy Anti-Aircraft Battery restoration and repurposing as recreation and defence heritage interpretation area
- Grangebeg Pillbox, repurposing as bird hide and small interpretive facility for defence heritage

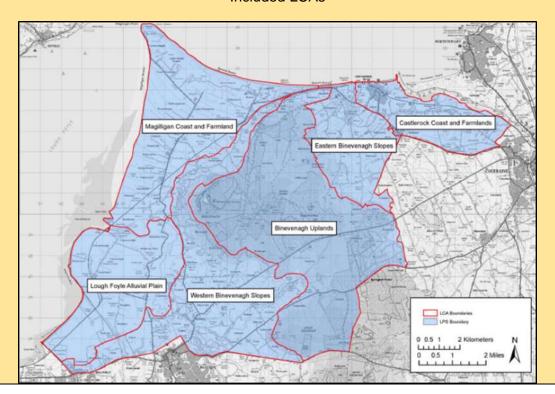
Total Cost: £698,030 (inc. VAT, inflation and contingency)

**Match Funding:** Match funding anticipated from MoD and Department for Communities. Match funding and in-kind contributions secured from National Trust and Milgrow.

Years of Activity: Years 1 to 5

Project Location: Various locations throughout the LPS

**Landscape Implications:** Increased awareness of, and access to internationally important defence heritage features in the landscape of the LPS area. Built heritage structures will be better recorded, preserved, understood and valued by the local community.



Project Theme	Defence and Historic Environment
Project Name	HE2 Community Archaeology and Training
Lead Partner(s)	Queen's University Belfast, Ministry of Defence and LPS
Activity:	

This project aims to research, explore and where possible provide public access to sites of local heritage interest for which little or no public information is available. Community archaeology events will take place at possible WWI training trenches at Magilligan Point and at an upland 'site of interest' (tbc following completion of LiDAR Survey in Year One). Community led conservation training and access projects are planned at Farlow Wood, which contains the listed Sampson's Tower.

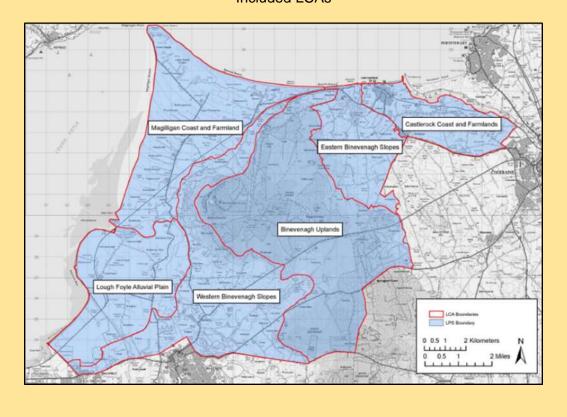
Total Cost: £112,875 (inc. VAT, inflation and contingency)

Match Funding: Match funding secured

Years of Activity: Years 1 to 5

Project Location: Various locations throughout the LPS

**Landscape Implications:** Increased awareness of, and access to significant local heritage sites. Built heritage structures and associated cultural heritage will be better recorded, preserved, understood and valued by the local community.



Project Theme	Defence and Historic Environment
Project Name	HE3 Bi-centenary celebration of the Ordnance Survey of Ireland
Lead Partner	Queen's University Belfast
A ativity.	

This project provides community activities and events to celebrate the bicentenary of the commencement of Colonel Thomas Colby's Ordnance Survey of Ireland in 1822. This project includes a community exploration of surviving physical features of the survey and culminates in a conference which explores the influence of the survey techniques developed in the Binevenagh and Coastal Lowlands area on mapping exercises around the globe – notably the Ordnance Survey of India under the leadership of Sir George Everest.

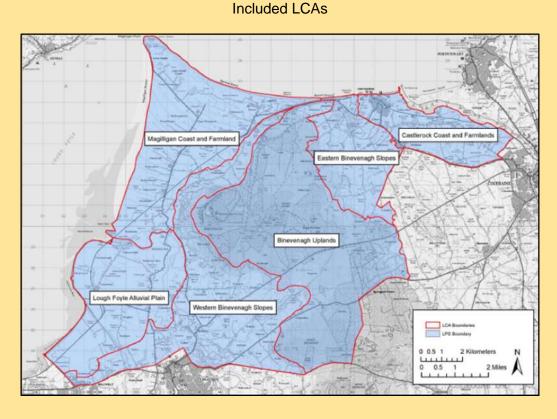
Total Cost: £36,940 (inc. VAT, inflation and contingency)

Match Funding: Match funding confirmed

Years of Activity: Years 1 to 5

Project Location: Various locations throughout the LPS

**Landscape Implications:** Increased awareness of, and access to Ordnance Survey features and history. Built heritage features and associated cultural heritage will be better recorded, preserved, understood and valued by the local community.



Project Theme	Defence and Historic Environment
Project Name	HE4 Community Heritage Initiatives
Lead Partner	Binevenagh and Coastal Lowlands LPS

This project delivers a series of community led heritage initiatives. Activities have been proposed and developed by members of the community consortium and aim to research, explore, promote and share resources developed through the project. Activities include:

- Historic Environment Map and Pamphlet Series (Roe Valley Ancestral Researchers)
- Shipwrecks in the Binevenagh and Coastal Lowlands (Roe Valley Ancestral Researchers)
- Limavady Workhouse enhancement and LPS connectivity
- Service and auxiliary personnel record and resource (Roe Valley Ancestral Researchers)
- Aghanloo Community Centre Heritage Awareness and Enhancement Scheme (Aghanloo Community Association)
- Project wide digital heritage map and multimedia resource (Binevenagh and Coastal Lowlands LPS)
- Storytelling guided process and publication (Roe Valley Writers Group)
- Tour guide training (2 x level two and 1 x level three)
- Brutalist Baby (interpretive visual and sound exhibition based at WWII Trainer Dome)

**Total Cost:** £116,700 (inc. VAT, inflation and contingency)

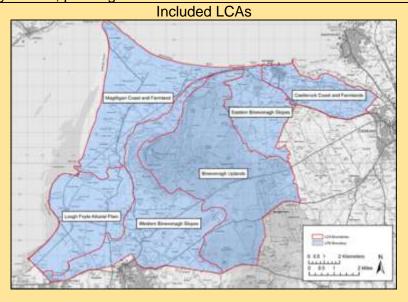
Match Funding: Awaiting confirmation of match funding

Years of Activity: Years 1 to 5

Project Location: Various locations throughout the LPS

**Landscape Implications:** A series of resources (both physical and digital) and community space will be made available to share and promote the natural, built and cultural heritage which has been enhanced through the LPS scheme. This will maintain a number of 'contact points' and facilities which ensure a strong legacy for the LPS Scheme.

Status: Ready to start, pending HLF award



# Part Three - Detailed Project Plans

Detailed project plans for all activities summarised in Part Two are available in Microsoft Excel Spreadsheets (see supporting files)

## Part Four – Scheme Delivery

## **5.1 Project Management**

This chapter outlines how the Binevenagh and Coastal Lowlands LPS will be managed, including details about governance, staffing, finances, a timetable for scheme activities, legacy plans and risk management.

As the Landscape Partnership Scheme moves from 'development' to 'delivery' phase a number of key project management changes will take place. First, the LPS Staff Team will expand through recruitment of two additional project officers to oversee delivery of scheme activities. Secondly, the roles and meeting schedule of the advisory groups will change to better reflect delivery phase activities. It is anticipated that rather than meeting quarterly (as during development), the advisory groups will instead meet twice a year. This reflects a requirement to convene smaller working/focus groups which relate to specific scheme activities throughout the five years of the project. It is proposed that the LPS Board will continue to meet quarterly, with the entire partnership holding an annual meeting to review project progress.

#### 5.1.1 Governance and Partnership Agreement

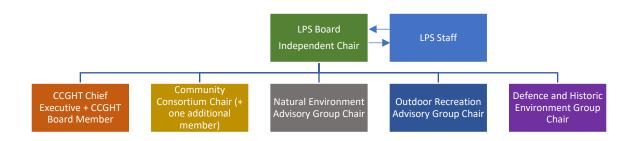
The 'Partnership Agreement' (see appendix three) is the single most important document detailing governance arrangements for the delivery phase of the Binevenagh and Coastal Lowlands Landscape Partnership Scheme. It outlines the agreement entered into by all partners and the functioning of the following entities in the Binevenagh and Coastal Lowlands Landscape Partnership Scheme (LPS):

- LPS Board
- Community Consortium
- Natural Heritage Advisory Group
- Defence Heritage Advisory Group
- Outdoor Recreation Advisory Group

The partnership agreement outlines the purpose and duration of the agreement, project management arrangements, partner relations, the role of the lead partner (CCGHT), contractual obligations of partners, finance and administration arrangements, intellectual property rights, publicity, assignability, partner liability, lead partner liability, default and remedy procedures, settlement of dispute arrangements, insolvency procedures and the role of the terms of reference for the LPS Board and various Advisory Groups. It also identifies the roles, responsibilities and commitments of each project partner.

The detailed provisions of the partnership agreement and terms of reference for the LPS Board and advisory groups are not reprinted within this LCAP document. The full contents of the partnership agreement can be found in appendix three.

The following figure summarises the proposed governance structure for the delivery phase of the LPS. This structure will be subject to regular review by the LPS Board and by all partners at the annual partnership meeting. In addition to the themed advisory groups, it is anticipated that smaller working groups will be established to oversee the delivery of relevant project activities. As a result, the advisory groups will meet twice a year to review project progress towards the overall aims and objectives of the scheme.



35 Governance Structure for Delivery Phase of the LPS

#### 5.1.2 Lead Partner / Accountable Body

It is agreed by all partners that Causeway Coast and Glens Heritage Trust is the host organisation (grantee) and lead partner for the Landscape Partnership Scheme. CCGHT will receive payments for eligible project activities from HLF, ensuring that the necessary match funding is in place to deliver project activities. CCGHT and the LPS Board will be responsible for agreeing match funding arrangements and schedules with project partners. All partners will assist CCGHT is sourcing and seeking match funding for eligible project activities and expenditure. CCGHT will resource the LPS Board and the partners to deliver their activities in full.

#### 5.1.3 Procurement

It is agreed by all partners that work(s) carried out on behalf of the project will be carried out according to the terms of the partnership agreement and will adhere to EU procurement rules for as long as these are applicable. All partners must also adhere to National Lottery Heritage Fund procurement rules. Upon cessation of EU procurement rules (if applicable) national procurement rules will apply. A full outline of the relevant procurement procedure(s) is available in appendix seven.

## 5.1.4 National Lottery Heritage Fund Claims

National Lottery Heritage Fund claims will be timetabled quarterly throughout the delivery phase. Claims will be coordinated by the LPS Staff. It is expected that relevant match funding will be in place before a corresponding claim for a project activity is submitted to the National Lottery Heritage Fund. All partners acknowledge that a final payment (of at least 10% of the total project / activity cost) will only be made for each project / activity upon satisfactory completion of the project / activity. This includes confirmation that the

relevant conditions have been met and that relevant acknowledgments of National Lottery Heritage Fund support have been displayed.

## 5.1.5 Management and Maintenance

It is agreed by all partners that a management and maintenance budget of up to £25,000 (including inflation) will be retained by CCGHT to support projects completed through the LPS which either grow beyond that originally envisaged or unforeseen sustainability issues are encountered. This sum has been identified based on an assessment of the projects under consideration for delivery. The responsibility for management and maintenance for a number of projects is built into the relevant project plan(s) e.g. where projects will be delivered on Council, National Trust, Department of Communities, Prison Service or MoD property, a condition of project funding will be a commitment to management and maintenance in the longer term (minimum 15 years). The £25,000 retained by CCGHT is reserved primarily for community led projects which do not have access to the same level of long-term corporate commitment and specialist support which larger organisations can avail of. Allocation of this budget will be based on a case-bycase assessment by the LPS Board of the needs of each relevant project in year five of the delivery phase.

#### 5.1.6 Risk Management

All project plans contain a detailed risk assessment tab. The LPS Board, LPS Staff and project partners will have a strong focus on managing and reducing any risks associated with delivery phase activities. Risk assessment is undertaken on a scheme wide and project-by-project basis. The scheme risk register can be found in appendix eight. It will be subject to regular review by the LPS Board, forming a standing agenda item at all LPS Board meetings. Project specific risk registers are included as a tab within the detailed project plans (Microsoft Excel Workbooks).

The delivery phase is likely to take place during a period of significant political and policy uncertainty, as the UK continues the process of leaving the European Union. This process is likely to result in some changes to national and regional policies, most significantly for the LPS, in areas of agriculture and the environment. Additionally, it is unclear if the devolved government at Stormont will be restored before or during the delivery phase. The LPS Board is committed to monitoring implications of any political or policy changes at Westminster or Stormont throughout the delivery phase. The LPS Board and LPS Staff will take advantage of any opportunities which arise, whilst protecting against any challenges.

#### 5.1.7 Contingency and Inflation

The majority of the detailed project plans contained within this LCAP are well developed. The requirement for contingency is therefore reduced. That said, given the five-year lifespan of the project, it is prudent to consider contingency funding to account for unforeseen increases in project costs. A number of projects include project level contingency based on the expert advice and experience of project partners e.g. Sport NI has recommended a 10% contingency is applied to project costs for OR4 Community Training and Trails. Inflation has been considered when budgeting staff costs and all projects have been assessed on the basis of likely costs in the relevant delivery year(s). The inflation costs for staff costs across the five years of the scheme have been set at £21,783 and the inflation allowance for project costs has been set at £137,142 (10% over 5 years). In terms of contingency for scheme administration, the LPS Board has determined that an amount of £65,976 is sufficient to cover unforeseen costs in staffing. Contingency for unforeseen project costs has been set at £131,377. Upon conclusion of a project activity, the LPS Board will determine whether any unallocated contingency should be re-allocated to future maintenance (if necessary) or used to fund reserve activities. Reserve activities at time of submission include:

Project Title - Reserve Projects	Total Costs (inc. 5% contingency)		
R1 - Lost Gardens of Dunboe	£80,850		
R2 - Heritage Wood Turning Skills	£21,000		
R3 - Duncrun Old School	£52,500		
R4 - Gortmore / Avish Bothy	£94,500		

#### 5.1.8 Asset Register

The LPS Staff will maintain an asset register to record all assets purchased through the LPS. Assets valued at less that £3,000 will be subject to straight line depreciation over three years. More valuable assets will have bespoke asset management regime in place. This will maximise the long-term benefits of the LPS and will form part of the legacy planning in year five. The default position is that all assets upon conclusion of the scheme will become the property of CCGHT (Lead Partner); however, the LPS Board will advise on the appropriate distribution of assets to partners, where their use may be better maximised in terms of legacy and maintenance of scheme activities.

#### 5.1.9 Full Cost Recovery

To facilitate administration and costs of hosting the Landscape Partnership Scheme CCGHT as the lead partner is requesting a full cost recovery amount of £146,338 at 4.5% of the LPS delivery phase costs. This sum is required to cover costs associated with coordinating the scheme. Alternative arrangements such as apportionment of CCGHT administration costs were examined; however, experience with recent EU projects has demonstrated that a flat rate allowance for administration is much less onerous on the

host organisation and therefore more cost effective for the LPS as a whole. CCGHT's Board of Directors has approved full cost recovery for the scheme at a rate of 4.5%.

#### **5.1.10 Cash Flow**

Cashflow for the LPS is considered in detail in the projected cashflow spreadsheet available in appendix nine. This includes a summary cashflow for years one to five and a detailed cashflow for year one.

#### 5.2. Scheme Budget

At Stage One the delivery phase budget was based on a total scheme cost of £3,393,321, based on five years of activity. The National Lottery Heritage Fund grant request was based on a 79% intervention rate, up to a maximum of £2,683,300.

This LCAP is based on the framework outlined in the Stage One application and is in keeping with the overall budget and 79% intervention rate. The LPS Board and partners are confident that the projects and project activities outlined in this LCAP will result in benefits and new projects which extend beyond the core work of the scheme. These benefits are not costed at this stage but forms a key item for evaluation of the scheme.

## **5.2.1 Delivery Phase Budget**

The following table provides a summary of the overall scheme budget on a year-by-year basis, broken down by programme of activity. This is a summary of the cashflow forecast included in appendix nine.

Expenditure	Year One	Year Two	Year Three	Year Four	Year Five	Total
Project Costs (NH1 to HE4)	£329,733	£531,731	£345,618	£273,006	£89,569	£1,569,657
Project Activity Costs (inc. Staff)	£162,604	£163,139	£163,474	£163,413	£131,826	£784,455
Other Costs (Inc. contingency, inflation and maintenance)	£167,393	£289,016	£189,726	£249,309	£143,764	£1,039,209
Total	£659,730	£983,887	£698,818	£685,727	£365,159	£3,393,321
Income						
HLF	£521,687	£778,017	£552,596	£542,245	£288,752	£2,683,300
Other	£149,190	£153,764	£206,655	£124,680	£56,380	£690,669
Total	£669,866.72	£935,707.95	£763,448.98	£667,204.04	£337,639.54	£3,373,867.23
Income Vs Expenditure	£11,147	-£52,105	£60,433	-£18,802	-£20,026	-£19,324.83
Balance	£11,147	-£40,957	£19,476	£674	-£19,351	-£19,324.83

#### 5.3 Administration

In order to deliver the Binevenagh and Coastal Lowlands Landscape Partnership Scheme, it is planned to recruit a core team to coordinate and drive the scheme through to successful completion. A primary objective of every team member will be to ensure that the scheme achieves its core aims and objects, thus ensuring that the landscape scale benefits of the scheme are realised.

#### 5.3.1 Core Team (Staff)

The proposed structure of the core team is outlined in the following table:

Role	FTE	Years in Post
Project Manager*	1	5
Natural Heritage Project Officer*	1	5
Outdoor Recreation Project Officer	1	4 (possible 1 year extension)
Historic Environment and Volunteer Coordinator	0.5	5
Finance and Administration Assistant*	0.5	5
Total:	4 FTE	

<sup>\*</sup> It is expected that current staff performing the roles of Project Manager, Project Officer and Finance and Administration Assistant will continue in post during the Delivery Phase. CCGHT is planning for these staff to continue in employment in the six-months (up to) assessment phase.

Pending the outcome of the LCAP assessment and a letter of offer from the National Lottery Heritage Fund, it is anticipated that an Outdoor Recreation Project Officer and Historic Environment and Volunteer Coordinator will be appointed prior to commencement of the Delivery Phase. The full staff compliment will therefore be in place for the five years of the scheme, with a number of functions primarily relating to legacy activities transferring to partner organisations towards the end of year five.

All staff will report to the Project Manager. The Project Manager will be primarily responsible to the LPS Board but will be line-managed by the Chief Executive of Causeway Coast and Glens Heritage Trust (the Lead Partner and Grantee). The core team will be based at Magilligan Field Centre in the heart of the LPS area.

#### 5.3.2 Staff Roles

Full job descriptions for each new member of the core team are available in appendix ten. The key responsibilities for each member of the core team are as follows:

# **Project Manager (SCP 34 to 38)**

- Responsibility for motivation of core team, line management and ensuring the successful delivery of scheme outputs
- Ensure that maximum benefits and outcomes are achieved from the scheme and that all activities are aligned with this Landscape Conservation Action Plan (LCAP)
- Management of the scheme budget, monitoring of income and expenditure and the reporting of activities and financial reports to the LPS Board and Funders.
- Coordination, monitoring and evaluation of individual projects and delivery of the overall scheme.

# Natural Heritage Project Officer (SCP 19 to 25)

- Work with project partners and the local community to deliver all Natural Heritage (NH) projects set out in the LCAP
- Work with other Project Officers and the Project Manager to seek out and maximise connectivity between scheme activities, ensuring maximum benefits for outdoor recreation projects and the natural, built and cultural heritage of the area
- Seek to maximise the legacy of project activities
- Support efforts to secure necessary match funding
- Work with the entire LPS Team to ensure that broader scheme activities and events compliment and support the scheme's aims
- Manage any potential variations from planned delivery activities, and where necessary seek relevant approvals for variation
- Explore and develop additional opportunities which might arise throughout delivery of the scheme
- Ensure all projects are undertaken in accordance with all statutory requirements
- Work with other Project Officers to maintain a GIS database of all project activities and outputs

## **Outdoor Recreation Project Officer (SCP 19 to 25)**

- Work with project partners and the local community to deliver all Outdoor Recreation (OR) projects set out in the LCAP
- Work with other Project Officers and the Project Manager to seek out and maximise connectivity between scheme activities, ensuring maximum benefits for the natural, built and cultural heritage of the area and outdoor recreation projects
- Seek to maximise the legacy of project activities
- Develop a strong working relationship with Causeway Coast and Glens Borough Council Coast and Countryside Team
- Support efforts to secure necessary match funding

- Work with the entire LPS Team to ensure that broader scheme activities and events compliment and support the scheme's aims
- Manage any potential variations from planned delivery activities, and where necessary seek relevant approvals for variation
- Explore and develop additional opportunities which might arise throughout delivery of the scheme
- Ensure all projects are undertaken in accordance with all statutory requirements
- Work with other Project Officers to maintain a GIS database of all project activities and outputs

## **Historic Environment and Volunteer Coordinator (SCP 19 to 25)**

- Work with project partners and the local community to deliver all Defence and Historic Environment (HE) projects set out in the LCAP
- Work with other Project Officers and the Project Manager to seek out and maximise connectivity between scheme activities, ensuring maximum benefits for the natural, built and cultural heritage of the area and outdoor recreation projects
- Coordinate volunteer, outreach and community engagement activities in partnership with the Natural Heritage and Outdoor Recreation Project Officers
- Seek to maximise the legacy of project activities
- Develop a strong working relationship with Causeway Coast and Glens Borough Council Museum Service
- Support efforts to secure necessary match funding
- Work with the entire LPS Team to ensure that broader scheme activities and events compliment and support the scheme's aims
- Manage any potential variations from planned delivery activities, and where necessary seek relevant approvals for variation
- Explore and develop additional opportunities which might arise throughout delivery of the scheme
- Ensure all projects are undertaken in accordance with all statutory requirements

#### Finance and Administration Assistant (SCP 8 to 11)

- Establish and manage a financial management and reporting system for the LPS, covering cash, in-kind and volunteer contributions
- Maintain paper and electronic records and evidence for all scheme activities
- Liaise with partners to agree financial reporting arrangements
- Prepare financial reports and summaries in line with requirements from the LPS Board, Project Manager and Project Officers
- Ensure all project activities adhere to the project procurement requirements
- Manage invoices and grant claims
- General scheme administration as necessary

#### 5.3.3 Staff Responsibilities

All projects and project activities under consideration require core staff time. The LPS recognises the need for dedicated project staff, with specialist skillsets. It is critical that staff employed by the LPS Board recognise their involvement in the overall scheme. Each job description therefore specifies:

- 1. The need to attend monthly core staff meetings
- 2. The need, if required, to support other project staff and project activities
- 3. The requirement that each project acknowledges its inclusion as part of the broader LPS
- 4. The acknowledgement and inclusion of the scheme branding and input in any media contact or promotion

On occasion it will be necessary to procure external expertise, specialist skills and services to deliver project activities e.g. archaeologists, building surveyors, trail designers, heritage skills trainers, tour guide trainers etc. Where external expertise and services are required, these are detailed in the detailed project plans (see Microsoft Excel Workbooks in Part Three). Relevant procurement rules must be adhered to at all times. Where external expertise and services are contracted, the contract will specify:

- 1. The requirement that each project acknowledges its inclusion as part of the broader LPS
- 2. The acknowledgement and inclusion of the scheme branding and input in any media contact or promotion

#### 5.3.4 Recruitment

Recruitment of the LPS Staff will adhere to CCGHT's recruitment policies, ensuring that National Lottery Heritage Fund requirements are met at all times. All roles\* will be publicly advertised and subject to formal interview under the direction of the LPS Board. Core LPS staff will work with and support partners in the recruitment of new project staff. It is expected that an LPS Board member, CCGHT representative and the LPS Project Manager will sit on interview / appointment panels in each case. The successful staffing of roles is essential to the successful delivery of the scheme. All new staff will be introduced to the aims and objectives of the scheme and be expected to act as advocates for the scheme within their focus area.

#### Part Five - Legacy and Sustainability

#### 6.1 Overview

The Binevenagh and Coastal Lowlands Landscape Partnership will deliver five years of concentrated activity focused on 'celebrating and connecting local people with their unique landscape and heritage to build sustainable and resilient communities'. The scheme by its very nature is transient when compared to the heritage assets and community in which it invests. Throughout the pre-development and development phases of the partnership, a primary focus has been on ensuring that delivery of the scheme leaves a powerful and positive lasting legacy which empowers the local community to take ownership and lead management of natural, built and cultural heritage assets moving forward. This section of the LCAP outlines the schemes approach to legacy and sustainability of scheme activities.

# **6.2 Measuring Success**

Throughout the pre-development and development phases, reference data and information has been collected for all project activities. This information will enable the delivery team to measure achievements and evaluate success throughout the delivery phase. Outputs and outcomes for each project activity are detailed in the detailed project plans (available in Part Three). Quantitative and qualitative data and information will be used to measure the success of project activities, both on an activity and scheme-wide basis. On a scheme wide basis, evaluation will be based on whether or not a scheme activity has contributed to maintaining the unique landscape character of the area – as baselined by Fiona Fyfe Associates (2018). It will also be based on how well the project has met the National Lottery Heritage Funds outcomes for heritage, people and communities. Each project activity details how it will achieve these outcomes throughout the delivery phase. Crucially, all project activities are interrelated, ensuring that delivery as a whole, achieve all nine outcomes on a project wide basis.

An independent evaluation of the achievements and likely legacy impacts of the scheme will be commissioned by the LPS Board upon commencement of the delivery phase. This independent assessment will take place on an annual basis and will provide the LPS Board, Staff and National Lottery Heritage Fund to get an honest, non-partisan position report upon which to further plan delivery phase activities. This will allow all partners to guide and adjust the project through to successful achievement of all nine Landscape Partnership Scheme outcomes (see Chapter Two). Throughout the delivery phase independent evaluation will enable the LPS Board to plan appropriate legacy and maintenance activities as the project winds down to conclusion. Independent evaluation will also be key to prioritising activities required to draft and apply for UNESCO Biosphere Reserve status in the project area. The following templates will be used to evaluation project performance.

Copies of the project evaluation templates (including a worked example), participant testimonials, data location records and draft brief for independent evaluation of the Binevenagh and Coastal Lowlands Landscape Partnership Scheme can be found in Appendix Eleven.

## **6.3 UNESCO Biosphere Reserve Status**

A key output of the Binevenagh and Coastal Lowlands Landscape Partnership is to prepare a draft application for UNESCO Biosphere Reserve Status within the project area. All projects and project activities will contribute to development of a 'de facto' Biosphere Reserve management model where designated sites (ASSIs, SACs, SPAs, NNRs) function as the core area, surrounded by a 1 km buffer and transition zone out to the boundary of the aspiring Biosphere Reserve. In practice this means that 'core areas' that are already designated benefit from coordinated management between public, private and voluntary sector partners. Voluntary arrangements are then made for the surrounding buffer area, where private property owners are supported to carry out conservation activities which support biodiversity and geodiversity in the core areas.

Designated landscapes and sites in Northern Ireland are a contentious issue. For some time, landowners and property owners have not looked favourably on the designation of sites or landscapes, on the basis that designation may limit future development.

The approach of a Biosphere Reserve is not one of designation or strict protection of sites or landscapes. Rather, like UNESCO World Heritage Sites or UNESCO Global Geoparks, a UNESCO Biosphere Reserve can be considered an award or accolade, bestowed upon those areas where property owners and the local community demonstrate and share best practice in conservation of outstanding landscapes, and special habitats and species. Throughout years three to five of the Landscape Partnership, Causeway Coast and Glens Heritage Trust (the lead partner and grantee) will work with the local community and public/private/voluntary sector partners to develop a draft application for UNESCO Biosphere Reserve Status. The following table summarises the activities which CCGHT will deliver.

Binevenagh Application)	and	Coastal	Lowlands	UNESCO	Biosphere	Reserve	(Draft
Background		divers and a featur the B Scien basis and th or BF lived	se and spectactivities had send send send send send for the implement of the suitable of the s	ial array of force and consistive environments of the context and array of the context and array for the context array for the context and array for the context array for the context array of the con	Il Lowlands a lora and faut tinue to imponment. UNE MAB) is an la aims to esta relationships ethos and of for manage te continued sidents and	na. Humar act these ESCO's Montergovernablish a so between objectives of response to the safeguare.	action special an and mental cientific people of MAB natural, ding of

	enjoy. Initial research into the viability of BR in this area was undertaken in 2014 by CCGHT, the UK MAB Committee visiting the area and receiving an initial options report for a BR in the Binevenagh area.
Project description	This project will investigate the viability, suitability and appetite for seeking UNESCO Biosphere Reserve status for the area. A skilled working group consisting of approx. 4 x relevant and identified experts and 2 x BACL staff members will lead activity. An expert report will explore the current State of the Environment in line with BR requirements, identifying key actions for the working group (and others to deliver). It is anticipated actions will include co-ordinating mapping, creating mapping for areas where none exists, specific flora and fauna research and suitable ongoing public consultation. The working group will oversee delivery of actions. Engagement with UK MAB, EURO MAB and the international MAB committee will be conducted throughout. If suitable an application for BR will be summitted in Year 5, in line with MAB deadlines.
Beneficiaries	The local community will benefit from an improved and safeguarded environment which would be actively manager to MAB criteria and recommendations. Research will provide enhanced understanding of the ecosystem for public and education sectors as well as ongoing research opportunities. Land managers will be better informed. The environment will benefit from thoughtful and robust management mechanisms and activities.
Outputs	The project will result in an application being submitted to MAB, pending suitability of the area and public appetite. In the lead up to this a greater understanding of best practice management of ecosystems will be gained by the working group, land managers and the public. Improvements to habitat and ecosystem mapping will be made. Other ground works delivered by BACL will be informed and follow MAB BR ethos.
Output indicators and targets	Formation of a working group and meaningful engagement with MAB. Scoping study with robust action plan and subsequent delivery. Application to MAB.

