

CHAPTER 10
NATURAL AND BUILT
HERITAGE

Chapter 10 Natural and Built Heritage

Aim: To protect, conserve, manage and enhance the natural and built heritage features of the County, to ensure the survival of their intrinsic value for future generations and to ensure they contribute to the future sustainable development of the County.

10.0 Introduction

Heritage is integral to the identity of County Carlow, providing it with a sense of place, character, and distinctiveness, reflecting the life and culture of its people and comprising a tangible representation of the County's past.

In terms of natural heritage, the County supports a range of diverse habitats and species, including mountains, rivers, canals, woodlands, wetlands, grasslands, eskers and hedgerows, all integral to the image of Carlow, providing varied landscapes, and valued physical, social and economic benefits to those living and visiting here.

Carlow is a county with an exceptionally rich spiritual and ecclesiastical heritage, featuring a number of sites of national significance. These include the monastic site at St. Mullins, the medieval Cathedral at Old Leighlin, the eighteenth-century Carlow College, St. Patrick's and the nineteenth-century Catholic Cathedral in Carlow Town, as well as the idyllic Adelaide Memorial Chapel at Myshall.

The County's transport heritage includes a range of eighteenth-century canal structures along the Barrow Navigation, and impressive nineteenth century railway architecture such as the Borris Viaduct.

The significance of Carlow's agricultural production also contributed to substantial farm holdings and large country houses, as well as to a range of farm and stable buildings, and notable mills and warehouses.

The County's rich archaeological heritage ranges from megalithic tombs (e.g. Brownshill Dolmen, Haroldstown Dolmen), to early ecclesiastical enclosures, medieval earthworks and buildings, to rock art in South Carlow and industrial archaeology.

10.1 Policy Context

The key legislative and policy context for natural and built heritage that informed this chapter of the Plan includes (inter alia):

- European Birds Directive (Council Directive 79/409/EEC)
- European Union Natural Habitats Directive (European Directive 92/43/EEC)
- The Wildlife Act 1976 (as amended)
- European (Birds and Natural Habitats) Regulations (2011)
- National Monuments Act 1930 (as amended)
- Planning and Development Act 2000 (as amended)
- Appropriate Assessment of Plans and Projects in Ireland – Guidelines for Planning Authorities 2009
- National Biodiversity Action Plan 2017-2021
- National Inventory of Architectural Heritage
- Architectural Heritage Protection Guidelines for Planning Authorities (DoEHLG 2011).

10.2 Natural Heritage

Natural heritage refers to the natural rather than the man-made features of the county, being the sum total of elements of biodiversity such as plants, animals, birds and their habitats, and the physical and geological formations in the landscape such as rivers and mountains.

The rich and varied natural heritage of County Carlow includes a number of habitats, species and areas of natural interest that are designated for conservation under both European and National Legislation. Protecting and enhancing this natural heritage provides many benefits, including fertile soils, food, and clean water, as well as providing opportunities for economic growth, tourism, and recreation.

At a European level, the European Birds Directive (Council Directive 79/409/EEC) and the European Union Natural Habitats Directive (European Directive 92/43/EEC), also known as the Habitats Directive, underpins biodiversity and conservation. In Ireland the Wildlife Act 1976 (as amended) is the principal national legislation providing for the protection of wildlife and the control of some activities that may adversely affect wildlife.

The Habitats Directive was transposed into Irish law through the European (Birds and Natural Habitats) Regulations (2011). It sets out various procedures and obligations in relation to nature conservation management, primarily aimed at maintaining favourable conservation status for habitats and species that are considered to be at risk.

Sites designated for protection in County Carlow include Special Areas of Conservation (SACs) and proposed Natural Heritage Areas (pNHAs). The Council has a statutory obligation to conserve and protect these designated habitats, species and areas of

natural interest. However, it is also important that the protection of natural heritage is not limited only to designated sites, as they too can also host a diverse and rich variety of protected and vulnerable habitats and species.

The EU Biodiversity Strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030 and contains specific actions and commitments.

The *National Biodiversity Action Plan 2017-2021*, Ireland's third such plan, sets out actions to be undertaken by government, civil and private sectors to achieve a 'Vision for Biodiversity'. It includes 119 targets that are underpinned by 7 strategic objectives. The objectives provide the framework for the national approach to biodiversity

Further information on natural heritage and a protected sites map viewer, can be accessed at www.npws.ie

General: Natural Heritage - Policies

It is the policy of the Council to:

NH P1: Protect, manage and enhance the natural heritage, biodiversity, landscape and environment of County Carlow in recognition of its importance as a non-renewable resource, a unique identifier, and as a natural resource asset.

NH P2: Ensure, as far as is practicable, that development does not adversely impact on wildlife habitats and species, and that biodiversity is conserved for the benefit of future generations in the interests of sustainability. This will include moving towards no net loss of

biodiversity from plans adopted by and projects granted permission/authorised by the Council.

NH P3: Support and co-operate with statutory authorities such as the National Parks and Wildlife Service (NPWS) and others on measures to manage designated nature conservation sites in order to achieve their conservation objectives. Specific regard shall be had to conservation objectives and conservation management plans where they exist for designated nature conservation sites.

NH P4: Promote increased understanding and awareness of the natural heritage and biodiversity of the county.

NH P5: Recognise that nature conservation is not just confined to designated sites and acknowledge the need to protect non-designated biodiversity, habitats and species not otherwise protected by legislation.

NH P6: Protect and enhance the natural environment of County Carlow and recognise the important role of the natural heritage through its diversity, quality and integrity, in terms of enhancing the image of the County and contributing to quality of life, economic growth, tourism and recreation.

NH P7: Promote development for recreation and educational purposes that does not conflict with maintaining the favourable conservation status of designated natural heritage sites, including the achievement of their conservation objectives.

NH P8: Promote, protect and enhance sustainable and appropriate access to the natural heritage of the county.

NH P9: To promote the carrying out of ecological/habitat assessments to inform the layout and design of development proposals and ensure they integrate the protection and enhancement of biodiversity and landscape features wherever possible, by minimising adverse impacts on existing habitats (whether designated or not) and by including mitigation and/or compensation measures, as appropriate.

General Natural Heritage - Objectives

It is an objective of the Council to:

NHO 1: Implement relevant actions from the National Biodiversity Action Plan 2017-2021 (and any superseding plan) and to prepare a County Heritage Plan and Biodiversity Action Plan during the lifetime of this County Development Plan in accordance with RPO 126 in the RSES, to ensure the protection and appreciation of heritage and nature at local level including recognition of rich biodiversity of designation of existing special areas of conservation i.e. Blackstairs Mountains, Slaney River Valley and River Barrow and River Nore SAC.

10.3 NATURA 2000 Sites

The European Union Birds Directive (1979) and the European Union Natural Habitats Directive (1992) provides for the establishment of the Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), also known as

‘European Sites’, collectively form part of the Natura 2000 network of sites across Europe. These European Sites are legally protected under the Habitats Directive and the European (Birds and Natural Habitats) Regulations (2011).

Development within the County, which can intensify the demand for land, has the potential to have a detrimental effect on the integrity of European Sites. It is a requirement of the Planning and Development Act 2000 (as amended) that the County Development Plan incorporates objectives for the conservation and protection of European Sites.

When making a decision in relation to a plan or a project, the Planning Authority must have regard to European Sites. Under the Habitats Directive, a plan or project with potential to have a likely significant effect on a European Site, either individually or in combination with other plans or projects, must be assessed by the Planning Authority through a process known as ‘Appropriate Assessment’, unless they are directly connected with or necessary to the management of the European Site.

The key steps in the Appropriate Assessment process include Stage 1 Screening, which establishes whether a plan or project could have a significant effect on a European Site. Where potential effects on a European Site have been identified a Stage 2 Appropriate Assessment is required, that includes the preparation of a Natura Impact Statement to assist in the decision-making process. A plan or project can only be consented to where the Planning Authority is satisfied that they would not adversely affect the integrity of a European Site. However, notwithstanding a finding of negative implications for a European Site, the Habitats Directive (Article 6(4)) also includes provisions for the carrying out of plans or projects where it has been

determined that there are imperative reasons of overriding public interest to do so.

There is a total of three Natura 2000 sites in County Carlow (See Table 10.1 and <https://www.npws.ie/maps-and-data>).

Site Code	Site Name
002162	River Barrow and River Nore SAC
000781	Slaney River Valley SAC
000770	Blackstairs Mountains SAC

Table 10.1: Natura 2000 sites

Natura 2000 Sites - Policies

It is the policy of the Council to:

- NS P1: Support the conservation and enhancement of Natura 2000 Sites, and to protect the Natura 2000 network from any plans and projects that are likely to have a significant effect on the coherence or integrity of a Natura 2000 Site, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines.
- NS P2: Screening for Appropriate Assessment and if required Appropriate Assessment is undertaken for all plans to be adopted and projects to be granted permission/authorised by the Council. Where likely significant effects have been identified in respect of any plan or project not directly connected with or necessary to the management of a Natura 2000 site, either individually or in combination with other plans or projects, ensure appropriate assessment, in accordance with Article 6(3) of the Habitats Directive. The Council shall only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site concerned, unless the plan or

project is subject to the provisions of Article 6(4) of the Habitats Directive.

NS P3: Consider impacts within a plan or project’s zone of influence, which may include Natura 2000 sites outside the County, when assessing whether a plan or project is likely to have significant effects on Natura 2000 sites.

NS P4: Maintain or restore the favourable conservation status of County’s Natura 2000 sites qualifying interest habitats and species.

Natura 2000 Sites - Objectives

It is an objective of the Council to:

NS O1: Strictly protect areas designated or proposed to be designated as Natura 2000 sites, including any areas that may be proposed for designation or designated during the period of this Plan.

10.4 Natural Heritage Areas (NHAs)

Natural Heritage Areas (NHAs) are designated sites of national importance for habitats, species, and for geological interest. Under the Wildlife Act 1976 (as amended), NHAs are legally protected from damage from the date they are formally proposed for designation. The designation of NHAs is the responsibility of the National Parks and Wildlife Service (NPWS), who are the Heritage Division of the Department of Housing, Local Government and Heritage.

Sites that have been identified but not yet designated as NHAs, are known as proposed Natural Heritage Areas (pNHAs). There is a total of eight proposed Natural Heritage Areas (pNHAs) in County Carlow (Table 10.2 and Map 10.2 refer). Proposed Natural Heritage Areas were published on a non-

statutory basis in 1995 and are sites of significance for wildlife and habitats but have not since been statutorily proposed or designated.

Site Code	Site Name
000770	Blackstairs Mountains
000781	Slaney River Valley
000788	Ardristan Fen
000792	Baggots Wood
000797	Ballymoon Esker
000806	Cloghristick Wood
000808	Johns Hill
000810	Oak Park

Table 10.2: Proposed Natural Heritage Areas

Natural Heritage Areas - Policies

It is the policy of the Council to:

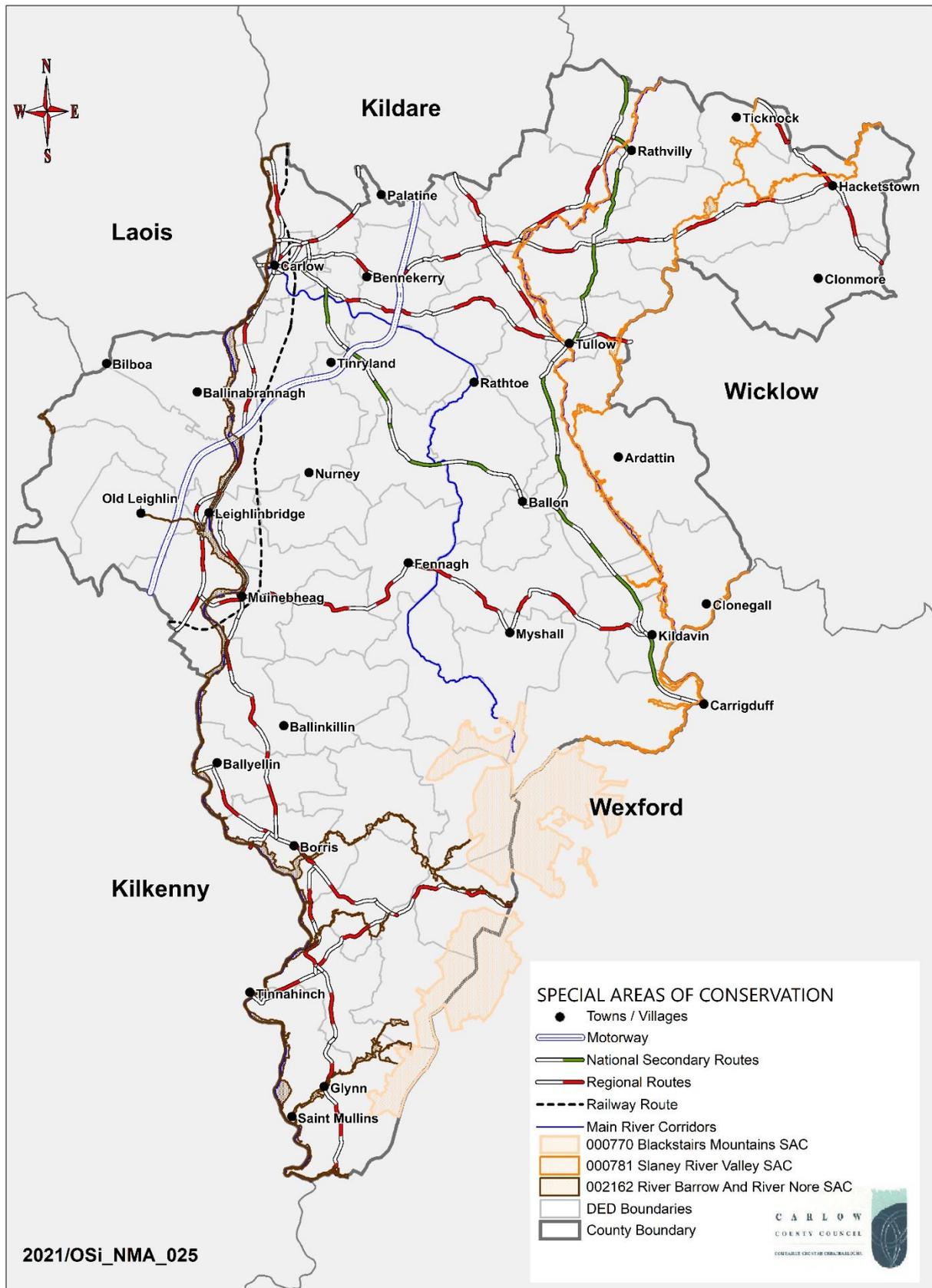
NHA P1: Contribute towards the protection, from significant adverse effects, of the ecological integrity and the visual, recreational, environmental and amenity value of the County’s proposed Natural Heritage Areas (pNHAs) and associated habitats, including any designated Natural Heritage Areas (NHAs) during the lifetime of this Plan.

NHA P2: Ensure that development proposals within or adjacent to a proposed Natural Heritage Area (pNHA) or Natural Heritage Area (NHA) are designed and sited to minimise significant impacts on the biodiversity (including net loss) and ecological, geological and landscape value of the site, particularly plant and animal species listed under the Wildlife Act 1976 (as amended), the Habitats Directive and the Birds Directive, including their habitats.

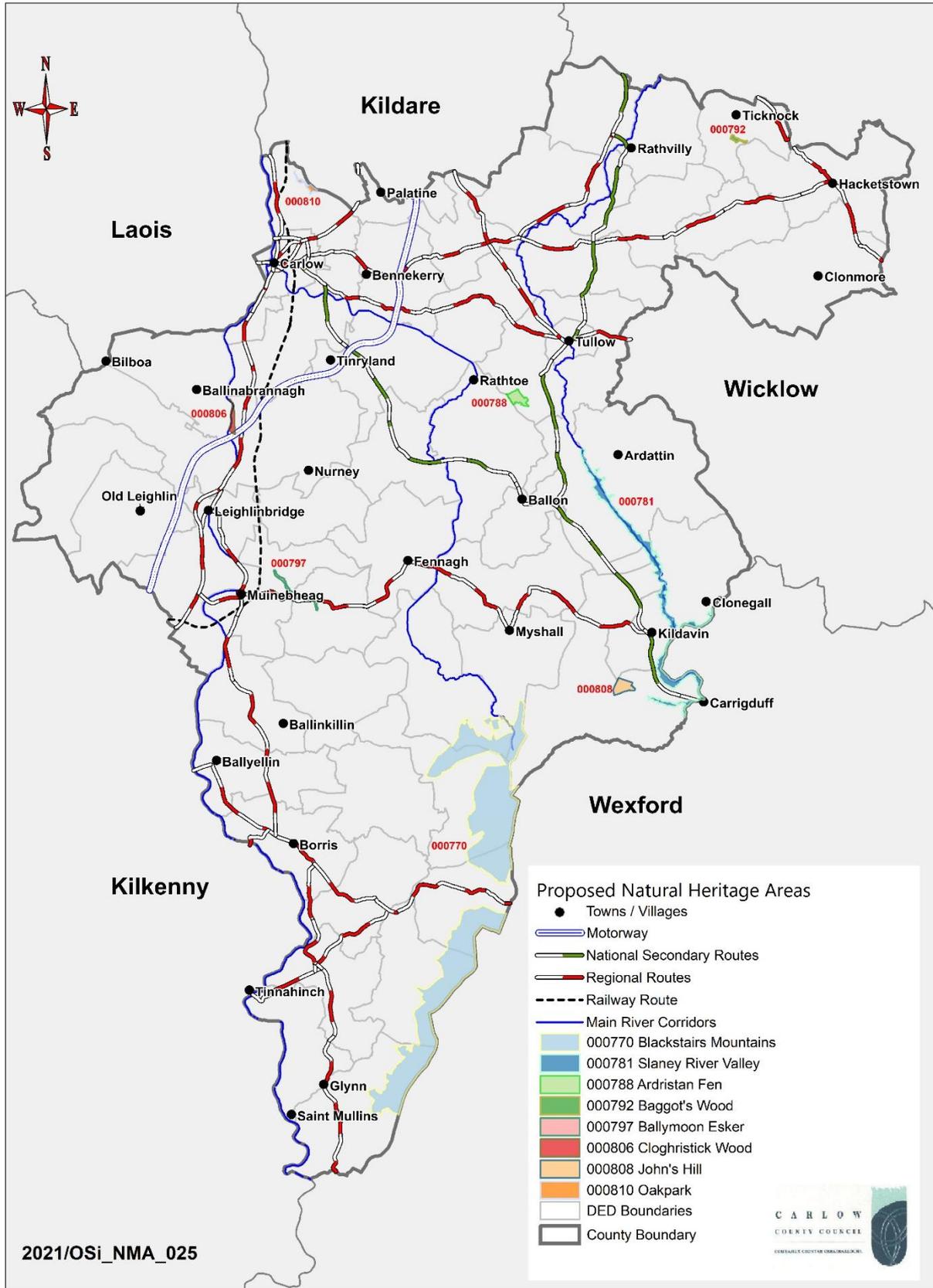
NHA P3: Restrict development within a proposed Natural Heritage Area (pNHA) or Natural Heritage Area (NHA)

to development that is directly related to the area's amenity potential or development that is required for the conservation management of these sites, subject to the protection and enhancement of natural heritage and visual amenities including biodiversity and landscapes.

NHA P4: To consult with the National Parks and Wildlife Service (NPWS) and other appropriate prescribed bodies when assessing development proposals affecting proposed Natural Heritage Areas (pNHAs) and Natural Heritage Areas (NHA).



Map 10.1: Special Areas of Conservation (SACs)



Map 10.2: Proposed Natural Heritage Areas (pNHAs)

10.5 Non-Designated Areas, Habitats and Species

There are wildlife habitats in County Carlow that are important on a county and local basis, acting as stepping stones in a wider ecological network. These wildlife habitats can include rivers and riverbanks, ponds, wetlands, peatlands, small woods and hedgerows, which are essential to the migration, dispersal and genetic exchange of wild species. Article 10 of the Habitats Directive states that Member States shall endeavour in their land use planning and development policies, to encourage the management of features of the landscape which are of major importance for wild flora and fauna.

The protection of habitats and species in County Carlow is not confined to areas designated for nature conservation, such as Natura 2000 sites or Natural Heritage Areas (NHAs). The protection afforded by law to certain plant, animal, and bird species also applies wherever they are found. This includes animals and birds listed in the Wildlife Act 1976 (as amended), the Birds Directive 1979, and the Habitats Directive 1992, as well as plant species listed in the Flora (Protection) Order 2015 (or other such Orders). The Council recognises that certain plant, animal and bird species are becoming rare and threatened.

The assessment of potential impacts on biodiversity in non-designated areas (and in areas designated for nature conservation) can be facilitated through the preparation of Ecological Impact Assessment (EclA). Where development proposals are not subject to Environmental Impact Assessment (EIA) or Appropriate Assessment (AA), potential impacts on biodiversity can be best assessed through EclA. An EclA will be required for any

development proposal likely to have a significant impact on rare and threatened species including species protected by law and their habitats. The Chartered Institute of Ecology and Environmental Management (CIEEM) published '*Guidelines for Ecological Impact Assessment in the UK and Ireland (2018)*', which can be accessed at www.cieem.net.

Strict protection under the Habitats Directive applies to the species listed in Annex IV of that Directive, including plant and animal species. Annex IV includes all bat species and the European Otter. Where Annex IV species are present, measures to avoid damage and disturbance to them must be taken into account in the formulation of proposals for development. Where the risk of damage or disturbance is unavoidable, an application for a derogation licence may be made to the Minister for Housing, Local Government and Heritage under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 to 2021. It must outline all the alternative solutions considered and indicate which of the reasons listed in the legislation cover the application and also include all suggested mitigation measures. The Council will fulfil its duties in relation to the strict protection afforded to species listed in Annex IV of the Habitats Directive and associated national derogation licencing requirements.

Non-designated areas and habitats and species - Policies

It is the policy of the Council to:

ND P1: Conserve the existing flora, fauna and wildlife habitats in the County, including rare and threatened plant, animal and bird species, through the

preservation of ecological corridors and ecological networks.

- ND P2: Ensure that development does not have a significant adverse effect on rare and threatened species, their breeding places, resting places, habitat or environment, as applicable, including those protected under the Wildlife Acts 1976 to 2021, the Birds Directive (2009/147/EC), the Habitats Directive (92/43/EEC) and including plant species listed on the Flora (Protection) Order 2015 (S.I. No. 356 of 2015).
- ND P3: Require the submission of an Ecological Impact Assessment, where deemed necessary, for any development proposal likely to have a significant impact on existing flora, fauna and wildlife habitats, including rare and threatened plant, animal and bird species.
- ND P4: Ensure that, where evidence exists of species that are protected under the Wildlife Act 1976 (as amended), the Bird Directive 1979, and the Habitats Directive 1992, appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment. In the event of a proposed development impact on a site known to be a breeding or resting site of species listed in the Habitats Regulations or the Wildlife Act 1976 (as amended) a derogation licence, issued by the Department of Housing, Local Government and Heritage, may be required.
- ND P5: Consult with the National Parks and Wildlife Service (NPWS) and take account of any licensing requirements

when undertaking, approving and authorising development which is likely to affect plant, animal or bird species protected by law.

- ND P6: Ensure that the management of the Council's open spaces and parks is pollinator-friendly and provides more opportunities for biodiversity, supporting the objectives of the National Pollinator Plan 2021-2025. Where it is used, herbicide should be certified and applied as per the manufacturer's instructions.
- ND P7: Support the implementation of the All Ireland Pollinator Plan 2021-2025 and to incorporate actions as appropriate into a Biodiversity Plan for County Carlow providing more opportunities for biodiversity in accordance with RPO 128.
- ND P8: That biodiversity data generated during the lifetime of this Development Plan for the preparation of environmental assessment reports, shall be made available to the National Biodiversity Data Centre (NBDC).

10.6 Woodlands, Trees and Hedgerows

Woodlands, trees and hedgerows are an important natural and landscape asset in County Carlow. They inform the landscape character of the county and enhance the movement of wildlife through it, providing a biodiversity function in the provision of food, habitat, and shelter in exposed areas. Woodlands, trees and hedgerows also provide wider environmental benefits, functioning as pollution filters and carbon sinks. There are several notable woodlands throughout the County, such as at Altamont, Ballintemple, Oak Park and Clogrennan.

Trees, either individually as specimen trees or in groups, make a positive contribution to the County's landscape and townscapes. They soften the line of buildings, provide scale to streets, contribute to a sense of place, and act as wildlife habitats and corridors. Trees also filter out noise, dust and pollution, and can contribute to the prevention of flooding by retaining moisture. The retention of trees should be considered at the design stage of any development proposal.

Hedgerows constitute an important natural and historic resource, given their contribution to the landscape quality, their importance as wildlife habitats and ecological corridors, and their historical significance as townland and field boundaries. When planting new hedgerows, species indigenous to the area should be used. In general, the following categories of hedgerows are worthy of protection:

- Ancient hedgerow (field systems dating prior to the mid-17th century).
- Townland boundaries.
- Hedgerows that have a farming, landscape, or cultural function.
- Hedgerows incorporating archaeological features.
- Hedgerows adjacent to roads, green lanes, tracks, and wooded ground.
- Banks and ditches that may have the above characteristics.

Woodland, Trees and Hedgerows - Policies

It is the policy of the Council to:

WT P1: Protect and manage existing woodlands, trees and hedgerow which are of amenity or biodiversity value and/or contribute to landscape character and ensure that proper provision is made for their

consideration, protection and management when undertaking, approving or authorising development.

WT P2: Ensure that hedgerow removal to facilitate development is kept to an absolute minimum and, where unavoidable, a requirement for mitigation planting will be required comprising a hedge of similar length and species composition to the original, established as close as is practicable to the original and where possible linking in to existing adjacent hedges. Native plants of a local provenance should be used for any such planting.

WT P3: Adhere to the provisions of the Wildlife Act 1976 (as amended) in prohibiting the cutting of hedges during the bird nesting season (1st March to 31st August), except in certain legally defined circumstances.

WT P4: Encourage the protection of historic hedgerows or significant hedgerows which serve to link habitat areas to each other and the surrounding countryside.

WT P5: Recognise the biodiversity and archaeological importance of townland boundaries, including hedgerows, and promote their protection and retention.

WT P6: Protect individual or groups of trees which are important for environmental, recreational, historical, biodiversity and/or aesthetic reasons or by reason of contribution to sense of place, and to

discourage the felling of mature trees to facilitate development.

WT P7: To contribute towards the protection where possible of the trees which are considered to be an important component of demesne landscapes.

WT P8: Ensure a Tree Management Plan is provided so as existing tree planting is adequately protected during development and incorporated into the layout and design of new developments.

Woodland, Trees and Hedgerows - Objectives

It is an objective of the Council to:

WT O1: Promote the Native Woodland and Neighbourwood schemes and other initiatives that aim to establish and enhance woodlands for recreational and wildlife benefits.

10.7 Inland Waters and Riparian Zones

The network of inland water systems in the County, including rivers, streams and groundwater, are home to a variety of habitats and species, and contribute significantly to the character and amenity of the County, supporting tourism, recreation and the quality of life for those living and visiting here. These inland waters also fulfil an important function as ecological corridors, for fish and wildlife movement, connecting related habitats and designated sites and enabling the movement of species from place to place. Watercourses may also be of significance in terms of a town's traditional and social history.

The River Barrow and the River Slaney are the main water bodies in the County. The River

Barrow has its source in the Slieve Bloom Mountains and at 192km in length from its source to the sea, is Ireland's second longest river. The source of the River Slaney is the Lugnaquilla Mountain (western Wicklow Mountains), from where it flows for a distance of 117.5km before entering the sea at Wexford Harbour. Both rivers, including their riparian zones, as well as some of their tributaries, are particularly important for the habitats and species they support, and have been afforded protection as Special Areas of Conservation (SACs).

Maintaining inland waters such as rivers and streams in an open, semi-natural condition can provide effective measures to protect and maintain biodiversity, while also helping to manage fluvial and pluvial flooding.

A riparian zone is a vegetated area near a watercourse, which helps shade and partially protect it from the impact of adjacent land uses. It is both discrete in ecological and geographical entity, with flora and fauna that is often distinctly different from those found in neighbouring areas. The riparian zone is the point of contact between the land (i.e. the terrestrial ecosystem) and the freshwater body (i.e. the aquatic ecosystem) and plays a key role in protecting/improving water quality in watercourses, thus providing environmental benefits.

Inland Waters and Riparian Zones - Policies

It is the policy of the Council to:

IW P1: Protect the biodiversity of rivers, streams and other watercourses, to maintain them in an open state, to discourage culverting or realignment, and where possible, uncover existing culverts and restore the watercourses

- to acceptable ecological standards and for the passage of fish.
- IW P2: Ensure that the County's watercourses are retained for their biodiversity and flood protection values and to conserve and enhance where possible, the wildlife habitats of the County's rivers, streams and riparian zones, including those which occur outside of designated areas, in order to provide a network of habitats and biodiversity corridors throughout the County.
- IW P3: Control the encroachment of development on watercourses and riparian zones and provide for protection measures to watercourses and their banks, including but not limited to: the prevention of pollution of the watercourse, the protection of the river bank from erosion, the retention and/or provision of wildlife corridors and the protection from light spill in sensitive locations, including during construction of permitted development.
- IW P4: Require the submission of an Ecological Impact Assessment, where deemed necessary (and where necessary an Appropriate Assessment where in relation to Natura 2000 sites), including bat and otter surveys, for development proposals along rivers, streams and canal corridors and areas of ecological importance.
- IW P5: Maintain a biodiversity protection (buffer) zone of not less than 10 metres from the top bank of all watercourses in the County, with the full extent of the protection zone to be determined on a case by case basis by the Planning Authority, based on site specific characteristics and sensitivities and consultation with Inland Fisheries Ireland.
- IW P6: Ensure that lighting proposals along water courses, rivers, streams and canal corridors, are not in conflict with bat species, and to ensure that expert advice is sought on such lighting proposals in order to mitigate the impacts of lighting on bats and other species.
- IW P7: Require that runoff from a development area will not result in deterioration of downstream watercourses or habitats, and that pollution generated by a development is treated within the developed area prior to discharge to local watercourses.
- IW P8: Ensure the protection, improvement or restoration of riverine floodplains and to promote strategic measures to accommodate flooding at appropriate locations, to protect ground and surface water quality and build resilience to climate change.
- IW P9: Ensure that development proposals do not adversely affect groundwater resources and groundwater dependent habitats and species.
- IW P10: Consult with Inland Fisheries Ireland, as appropriate, in relation to any works or development that could have potential impacts on watercourses, aquatic habitats, species, and associated riparian habitats, and to take full account of any Guidance documents issued by Inland Fisheries Ireland in this regard,

including *'Planning for Watercourses in the Urban Environment, A Guide to the Protection of Watercourses through the use of Buffer Zones, Sustainable Drainage Systems, Instream Rehabilitation, Climate/Flood Risk and Recreational Planning'* (2020).

IW P11: Promote the use of watercourses for the pursuit of angling, through working with Inland Fisheries Ireland to improve water quality, to improve fish stocks and to provide safe access to fishing, where appropriate, taking full account of the requirements of the Habitats Directive and other relevant legislation.

IW P12: Promote the natural, historical and amenity value of the County's watercourses, including public access where feasible and appropriate, in partnership with the National Parks and Wildlife Services, Waterways Ireland, Inland Fisheries Ireland, and other relevant stakeholders, while maintaining the watercourses free from inappropriate development.

10.8 Wetlands

The term wetland refers to an area of land that is saturated with water, either permanently or seasonally, and where the water table is at or near surface level. They can include watercourses and water bodies, as well as freshwater springs, reed beds, marshes, fens, bogs and wet woodlands.

Wetlands tend to have a high biodiversity value, hosting a variety of habitats and species specifically adapted to coping with wet conditions. In addition to biodiversity, wetlands can fulfil a number of equally

important functions, they can provide open space and recreational opportunities, improve water quality by removing and sequestering pollutants, maintain water tables, provide natural floodwater storage, and can contribute to reducing the effects of climate change by acting as carbon storage.

Increased land reclamation and land drainage works can cause significant change to the natural hydraulic patterns of wetlands. This can have implications for their habitat value, species diversity, and how they contribute to flood alleviation, water quality etc.

At an international level, wetlands are protected by the Ramsar Convention, an intergovernmental treaty established in 1971 by UNESCO. Ireland is a signatory of this convention and currently has 45 wetland sites listed (see www.ramsar.org). There are currently no Ramsar Sites in the County.

The ecological importance of wetland habitats has been recognised by the European Union, with several wetland types listed under Annex I of the EU Habitats Directive. Two protected areas in the County that include wetlands are the River Barrow and River Nore SAC and the Slaney River Valley SAC. However, while many protected areas include wetlands, most wetland areas occur outside of protected sites.

The Council will Implement the relevant parts of the Planning and Development (Amendment) (No. 2) Regulations 2011 and the European Communities (Amendment to Planning and Development) Regulations 2011, which require planning permission to be applied for where the area impacted by works relating to the drainage or reclamation of a wetland which exceeds 0.1 hectares or where such works may have a significant effect on the environment. Such applications for

permission would need to be supported by an Appropriate Assessment where necessary. Further information on wetlands can be accessed at www.npws.ie, www.wetlandssurveysireland.com, and www.irishwetlands.ie. The Irish Ramsar Wetland Committee (IRWC), which was set up in 2010 by the then Department of the Environment, Heritage and Local Government, prepared the *'Irish Wetlands Types – An Identification Guide and Field Survey Manual'* (EPA, 2018 (see www.epa.ie)).

In 2011 the Department of Environment, Community and Local Government also published Draft *'Guidelines for Planning Authorities on Drainage and Reclamation of Wetlands'*.

Wetlands - Policies

It is the policy of the Council to:

- WT P1: Protect, manage, and enhance wetlands in the County, and resist development that would remove, fragment, or degrade wetlands.
- WT P2: Protect the biodiversity and flood protection value of wetlands and floodplains in the County.
- WT P3: Ensure that ecological impact assessment is carried out, where appropriate, for development proposals involving, drainage, reclamation, or infill of wetland areas.
- WT P4: To promote voluntary construction of new wet lands where deemed in accordance with proper planning and environmental considerations and where same maybe facilitated by ecological schemes.

Wetlands - Objectives

It is an objective of the Council to:

- IW O1: Carry out a Wetlands Survey of the County during the lifetime of this Plan.

10.9 Geological Heritage

Geological heritage has influenced the landscapes, soils, and habitats of the County, as well as economic activities such as quarrying. The significant occurrence and availability of granite and limestone in the physical landscape is evident in its abundant historic use in buildings throughout the County, and in features of local cultural interest such as stone walls, stone fences (The Carlow Fence), limekilns etc.

An audit of the County's geological heritage was carried out in 2004 in partnership with Carlow County Council and the Irish Geological Heritage Programme in the Geological Survey of Ireland (GSI). The report that resulted identified a list of 6 County Geological Sites (CGS) of local geological or geomorphological interest. Some of these CGSs that are of national significance, may in the future be proposed as geological National Heritage Areas (NHAs) by the GSI and the National Parks and Wildlife Service. These CGSs play an important part in Carlow's natural heritage and landscape and require protection and preservation from potential over development, pollution, and illegal dumping. The 6 County Geological Sites (CGS) in the County are identified on <https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx>. In addition to their information on geological heritage, the Geological Survey of Ireland also produces a wide range of other publicly available maps and datasets ranging from bedrock and quaternary geology, to geotechnical, minerals,

geophysics, geochemistry and geohazards. These maps and datasets are also accessible through the web link included in the foregoing.

County Geological Sites

Aclare

A number of fields with surface boulders at their margins, overlying the proven deposit below ground. The pegmatites are associated with the intrusion of the Leinster Granite approximately 400 million years ago.

Ballyellin Quarry

A large working quarry with Carboniferous Limestone, includes a 15m solution pipe 15m+ deep, with clays and round quartz gravel probably derived from Tertiary weathering of the Leinster Granite.

Bannagagole Quarry

A very large and deep working quarry with Carboniferous Limestone of the Ballyadams Formation, from the Viséan Series of the Lower Carboniferous.

Ballymoon Esker

An esker ridge of glacial sands and gravels which comprises of a long ridge of water sorted glacial sand and gravel.

Quarry, Clonmelsh

A large working quarry with extensive overburden of glacial till comprising of Carboniferous Limestone.

Clogrennane Quarry

A large and deep working quarry comprising of Carboniferous Limestone; the youngest formation in the region, with an unconformity between it and the younger shales overlying the limestone.

Geological Heritage - Policies

It is the policy of the Council to:

GH P1: Protect and enhance the geological and geomorphological heritage of the County.

GH P2: Protect from inappropriate development the list of County Geological Sites (CGS) included in this Plan.

GH P3: Consult with the Geological Survey of Ireland on development proposals which are likely to impact on County Geological Sites or involve significant ground excavations.

Geological Heritage - Objectives

It an objective of the Council to:

GH O1: Protect geological Natural Heritage Areas (NHAs) as they become designated during the lifetime of this Plan.

10.10 Invasive Alien Species

Invasive non-native (or alien) plant and animal species are a significant threat to national, regional and local biodiversity. The spread of invasive species is a growing problem (see www.invasivespeciesireland.com for further information), and invasive plant and animal species such as Himalayan Balsam, Giant Hogweed, Japanese Knotweed and Zebra Mussel occur in County Carlow. Prohibitions are in place at a European level on the introduction or dispersal of invasive species, as set out in the EC (Birds and Natural Habitats) Regulations, 2011 – 2015. At a national level support to address the threat of invasive species is included in the National Biodiversity Action Plan.

Invasive Alien Species - Policies

It is the policy of the Council to:

- IS P1: Prevent the spread of invasive alien species in the County, and to require landowners and developers to adhere to best practice guidance in relation to the containment and control of invasive alien species, including
- *Invasive Species Ireland guidelines (see www.invasivespeciesireland.com)*
 - TII (2020) The Management of Invasive Alien Plant Species on National Roads – Standard GE-ENV-01104
<https://www.tiipublications.ie/library/GE-ENV-01104-01.pdf>
 - TII (2020) The Management of Invasive Alien Plant Species on National Roads – Technical Guidance
<https://www.tiipublications.ie/library/GE-ENV-01105-01.pdf>
- IS P2: To require, as appropriate, development proposals to address the presence or absence of invasive alien species, and to require the preparation of an Invasive Species Management Plan for their eradication and/or containment and control where identified on a site or in the vicinity of a site, in accordance with the requirements of the European Communities (Birds and Natural Habitats) Regulations 2011-2015.
- IS P3: Prohibit invasive alien plant species from inclusion in landscape design proposals and to require the use of native local plant species.

Invasive Alien Species - Objectives

It an objective of the Council to:

- IS O1: Prepare an Invasive Alien Species Management Strategy, in conjunction with a Hedge and Road Verge Maintenance Strategy, during the lifetime of this Plan.
- IS O2: To raise awareness of the potential threat of invasive alien species in the County, and to inform the public of appropriate management measures for the prevention, containment, and control of invasive alien species.
- IS O3: Undertake a programme of mapping of invasive alien species in the County and initiate control programs with relevant stakeholders and landowners on the prevention, containment and control of invasive alien species.

10.11 Built Heritage

The built heritage of the County, comprising its architectural heritage and its archaeological heritage, has a practical role in shaping a positive future for County Carlow. It should be viewed as one of the many assets that make the County an attractive place in which to live, work and visit.

General: Built Heritage - Policies

It is the policy of the Council to:

- BH P1: Promote the conservation and reuse of early traditional structures, roofscapes of historic centres and the recognition of interrelationships between sites and landscape features in terms of the insertion of new buildings and managing their impact on the historic environment.
- BH P2: Promote the development of heritage-led regeneration, to plan for the reuse and conservation of core-built heritage and archaeological sites within urban centres as an integral part of the evolution of the historic place and its significance.
- BH P3: Promote best conservation practice and to lead by example through the management and safeguarding of historic sites and properties in the ownership of the Local Authority.
- BH P4: Support the development of sustainable infill in town back lands that is appropriate in scale and character to that of the historic centre, that transitions and accommodates surviving structures and retains the historic streetscape form particularly within sensitive

areas of built and archaeological importance.

- BH P5: Co-ordinate significant infrastructural projects such as public realm works, flood relief works and new transport routes to the benefit of surviving historic sites in order to improve their enjoyment, presentation and enhanced accessibility.
- BH P6: Promote awareness and the appropriate adaptation of the County's architectural and archaeological heritage to deal with the effects of climate change.

10.12 Archaeological Heritage

Archaeological heritage is the surviving material remains of human presence in the landscape left by past societies and cultures. Whether situated above or below ground (i.e. terrestrial), or underwater in rivers and streams, it can include known and as yet unidentified sites, monuments, objects, man-made structures or altered natural structures. In many cases archaeology can comprise sites where there are no visible features, but where below surface remains are expected or known to exist. In terms of more formal classifications, archaeological heritage can consist of:

- National Monuments in the ownership/guardianship of the State or Local Authority.
- Archaeological and Architectural monuments/sites in the Record of Monuments and Places (RMP).
- Monuments in the Register of Historic Monuments.
- Zones of Archaeological Potential in Historic Towns.
- Underwater Archaeological Heritage, including Historic Wrecks. Wrecks over 100 years old (whether

previously known or just discovered) and all archaeological objects situated underwater, are protected under section 3 of the National Monuments (Amendment) Act 1987. Wrecks of any date and the potential location of wrecks or archaeological objects may also be protected under Section 3 of the 1987 (Amendment) Act by the making of an underwater heritage order, if considered to be of sufficient historical, archaeological or artistic importance to merit such protection. Information on known wrecks can be found in the Department's Wreck Viewer which holds records of over 18,000 known and potential wreck sites in Irish waters.

- Previously unknown and unrecorded archaeological sites (including subsurface elements with no visible surface remains, both terrestrial and underwater).
- Potential sites located in the vicinity of large complexes of site or monuments.
- Existing or former wetlands, unenclosed land, rivers or lakes.
- Objects or artefacts of known or potential archaeological significance, including into the modern period and recent past (e.g. post-medieval archaeology).

Archaeological heritage is afforded legal protection in one of four ways:

- It is recorded in the Record of Monuments and Places (RMP).
- It is registered in the Register of Historic Monuments (RHM).
- It is a national monument subject to a preservation order.
- It is a national monument in the ownership or guardianship of the

Minister for Culture, Heritage and the Gaeltacht or a local authority.

The National Monuments Act 1930 (as amended) provides for the legal protection of archaeological heritage from unauthorised damage or interference. The Act's most widely applying provision is the RMP, which consists of a statutory audit of all known sites and features in the County of historical and archaeological importance. All sites identified in the RMP are protected under Section 12 of the Act. The establishment of the statutory RMP was informed by a previous Sites and Monuments Record (SMR) issued to all Counties in the State between 1984 to 1992.

Certain monuments in the RMP that are further protected by being in the ownership/guardianship of the State, and therefore are deemed of national importance and designated as National Monuments. Section 14 of the National Monuments Act 1930 (as amended) requires the consent of the Minister for works at or near a national monument in the ownership or guardianship of the State or a local authority or to which a preservation order applies. Monuments in the County in the ownership and guardianship of the State are listed in Tables 10.3 & 10.4, and monuments the subject of preservation orders are listed in Table 10.5.

The Record of Monuments and Places, including an historic environment (map) viewer, can be accessed at www.archaeology.ie

The Framework and Principles for the Protection of the Archaeological Heritage (1999), which was published by the former Department of the Arts, Heritage, Gaeltacht and the Islands, also sets out the key guiding principles for the protection of archaeology in Ireland.

The qualities of archaeological or architectural interest are not mutually exclusive and certain structures can have both qualities. Some archaeological heritage may therefore appear on the Record of Monuments and Places (RMP) and on the Council's Record of Protected Structures (RPS) and be protected by both the National Monuments Act 1930 (as amended) and the Planning and Development Act 2000 (as amended).

An 'Urban Archaeology Survey' of County Carlow was completed in 1990 by the Office of Public Works (OPW). The primary aim of the survey was to identify and delineate the archaeological potential of the County's towns. Areas where significant archaeology was identified are designated under the National Monument Act 1930 (as amended) as recorded monuments and are listed in the RMP.

Archaeological Heritage - Policies

It is the policy of the Council to:

AH P1: Secure the preservation (either in situ or by record) of all archaeological monuments included in the Record of Monuments and Places (RMP) and their settings, and of all sites and features of significant archaeological or historical interest, including potential and previously unknown sites or features, in consultation with the National Monuments Service in the Department of Housing, Local Government and Heritage.

AH P2: Protect and conserve underwater archaeological heritage in the inland waters of the County, including potential and previously unknown sites or features, in consultation with the National Monuments Service in

the Department of Housing, Local Government and Heritage.

AH P3: Protect, conserve and enhance the archaeological heritage of the County, and to manage development in a manner that avoids adverse impacts on sites, monuments, features or objects of significant archaeological or historical interest, including areas and sites of archaeological potential. There will be a presumption in favour of the 'preservation in situ' of archaeological heritage in accordance with the 'Framework and Principles for the Protection of Archaeological Heritage (DAGHI 1999) or any superseding national policy document.

AH P4: Ensure that any development proposal that may, by reason of location, scale, nature, layout or design, have potential implications for archaeological heritage (including areas and sites of archaeological potential), shall be subject to an archaeological assessment. The archaeological assessment will seek to ensure that the development proposal can be sited and designed to avoid impacting on archaeological heritage. Any archaeological excavation shall be carried out in accordance with best practice outlined by the NMS, the National Museum of Ireland and the Institute of Archaeologists of Ireland. In all such cases the Planning Authority shall consult with the National Monuments Service in the Department of Housing, Local Government and Heritage.

AH P5: Have regard to the Record of Monuments (RMP) and Places, the

Urban Archaeology Survey and archaeological sites identified subsequent to the publication of the RMP when assessing planning applications for development. No development shall be permitted in the vicinity of a recorded feature, where it detracts from the setting of the feature or which is injurious to its cultural or educational value.

AH P6: Protect the Zones of Archaeological Potential (Zones of Archaeological Notification) located within both urban and rural areas as identified in the Record of Monuments and Places (RMP).

AH P7: Protect and conserve historic burial grounds within the County, including through the avoidance of extensions to them that would have an inappropriate level of impact on sub-surface archaeological remains or on their setting and amenity, and encourage their management and maintenance in accordance with best practice conservation principles, including 'Guidance for the Care, Conservation and Recording of Historic Graveyards' (The Heritage Council 2011) and 'Ireland's Historic Churches and Graveyards' (The Heritage Council), and in consultation with the National Monuments Service in the Department of Housing, Local Government and Heritage.

AH P8: Promote public awareness of the archaeological heritage of the County, and encourage where appropriate and practicable, the provision of appropriately designed and located signage, interpretative material, and public access (including disabled access) for archaeological sites under the direct ownership, guardianship or control of the Council and/or the state.

AH P 9: Support community initiatives and projects regarding the preservation, presentation and access to archaeological heritage and underwater cultural heritage, provided such are compatible with appropriate conservation policies and standards, having regard to the guidance and advice of the Department of Housing, Local Government and Heritage.

AH P10: Support the incorporation of recorded monuments into designated open spaces and public amenity spaces, provided this is done in a manner compatible with the protection and proper management and conservation of the monument in question. Accordingly, where such incorporation takes place an appropriate and enforceable permanent management and conservation plan will be required.

Table 10.3: Monuments in the Ownership of the State

Monument	Townland	RMP Number
Ballyloughan Castle	Ballyloughan	CW019-018
Ballymoon Castle	Ballymoon	CW016-055001
Burial Mound (Cist)	Baunogenasraid	CW008-031001 & CW008-031002
Browneshill Portal Tomb (Dolmen)	Kernanstown	CW007-010
Rathvilly Moat (Burial Ground)	Knockroe	CW004-014
Lorum (Cross Fragment)	Lorum	CW019-010001 & CW019-0010002
Nurney Cross	Nurney	CW012-048003
St. Mullin's Early Medieval Ecclesiastical Site	St. Mullin's	CW026-011
Medieval Grave Slab	Straboe	CW003-017002

Table 10.4: Monuments in the Guardianship of the State

Monument	Townland	RMP Number
Holed Stone	Aghade	CW013-034
Carlow Castle	Carlow Town	CW007-018002
Motte & Bailey & Cross Slab	Castlemore	CW008-033001 & CW008-033007
Church	Killoughternane	CE019-048001
Leighlinbridge Castle	Leighlinbridge	CW012-070003

Table 10.5: Monuments to which Preservation Orders apply

Monument	Townland	RMP Number
Ardristan Pillar Stone	Ardristan	CW013-013
Portal Dolmen	Ballynasilloge	Cw022-010001
Castlegrace Motte	Castlegrace	CW013-054
Clogrenan Castle	Clogrenan	CW007-033
St. Fochtern's Church of the White Chapel	Killoughternane	CW019-048001
Ogham Stone	Patrickswell	CW004-011

10.13 Architectural Heritage

The term architectural heritage can refer to structures, buildings (or groups of such), their settings, attendant grounds, fixtures and fittings, and sites, which are of a special architectural, historic, archaeological, artistic, cultural, scientific, social or technical interest.

The national commitment to the protection of architectural heritage can be traced to the

'Convention for the Protection of the Architectural Heritage of Europe'. Commonly known as the Granada Convention, it was drawn up and signed by the Council of Europe in 1985 and ratified by Ireland in 1997. It was international initiatives such as the Granada Convention that led to the legislative basis for the protection and enhancement of architectural heritage at a national level in Ireland, as now contained in Part IV the

Planning and Development Act 2000 (as amended).

The Planning and Development Act 2000 (as amended) provides two key statutory mechanisms for the protection of architectural heritage in the County, which consist of the Record of Protected Structures (RPS) and Architectural Conservation Areas (ACAs). Specific guidance on implementing and managing the RPS and ACAs is given in the *'Architectural Heritage Protection: Guidelines for Planning Authorities'* (Department of Arts, Heritage and the Gaeltacht, 2011). The Department also issued a range of publications under its *'Advice Series'*, aimed at providing detailed guidance on the repair and maintenance of historic buildings e.g. in relation to improving access, iron, brickwork, roofs, thatch, ruins, windows and energy efficiency.

The Department of Housing, Local Government and Heritage also administer the National Inventory of Architectural Heritage (NIAH). The role of the NIAH is to survey, record and evaluate post-1700 architectural heritage. The results of the surveys provide a basis for recommendations for the inclusion of particular structures in the Council's Record of Protected Structures (RPS). In 2002 the NIAH published *'An Introduction to the Architectural Heritage of County Carlow'*, the purpose of which was to identify and highlight a representative selection of the extant architectural heritage of the County. The NIAH, including a map viewer, can be accessed at www.buildingsofireland.ie

In many cases in the historic built environment, architectural heritage and archaeological heritage are not mutually exclusive, and therefore certain buildings, structures or features can have both qualities.

This is reflected in the policies contained in this chapter of the Plan.

10.14 Protected Structures

Carlow is a County steeped in a wealth of architectural heritage that spans many centuries, and which provides an important illustration of the economic and social history of the County. This is reflected in the number of structures of architectural, historic, archaeological, artistic, cultural, scientific, social or technical interest, which are listed in the Record of Protected Structures (RPS).

Unless otherwise stated, a protected structure includes the exterior and interior of the structure, the land lying within the curtilage of the structure, any other structures lying within the curtilage and their exterior and interiors, as well as all fixtures and features which form part of the interior or exterior of these structures. Where indicated in the RPS protection may also extend to any specified features within the attendant grounds of a structure. For the purposes of a protected structure, curtilage can refer to the parcel of land immediately associated with a structure, and which is (or was) in use for the purposes of that structure.

The Council's Record of Protected Structures (RPS) functions as a live register. Additions to and deletions from the RPS can be made in accordance with a review (or variation) of a County Development Plan or at any other time, subject to the prescribed procedures set out in Sections 12 and 55 of the Planning and Development Act 2000 (as amended). The RPS for the County, which incorporates the RPS for Greater Carlow Graiguecullen Urban Area, is provided in Appendix VIII of this Plan.

Any works that would materially affect or impact on the character of a Protected

Structure, or any element of the structure which contributes to its special interest, requires planning permission. Section 57 of the Planning and Development Act 2000 (as amended) enables the owner or occupier of a protected structure to make a written request to the planning authority for a declaration as to the type of works it considers would or would not materially affect the character of the protected structure.

Protected Structures - Policies

It is the policy of the Council to:

- PS P1: Ensure the protection of the architectural heritage of County Carlow, through the identification of Protected Structures, the designation of Architectural Conservation Areas, and the recognition of structures and features in the County that make a positive contribution to vernacular and industrial heritage.
- PS P2: Ensure the protection and conservation of the character, setting and special interest of all buildings, structures (or parts of structures) and sites, listed in the Record of Protected Structures, including their curtilage, attendant grounds, and fixtures and fittings.
- PS P3: Ensure that all development proposals that affect a protected structure or a proposed protected structure, including proposals for modifications, alterations, refurbishment or extensions, are sympathetic to and protect, conserve and retain the character, setting and special interest of the protected structure or proposed protected structure, in accordance with the

'Architectural Heritage Protection: Guidelines for Planning Authorities' (Department of Arts, Heritage and the Gaeltacht, 2011).

- PS P4: Require development proposals involving protected structures or proposed protected structures, to be subject to an Architectural Heritage Impact Assessment as described in Appendix B of Department of Arts, Heritage and the Gaeltacht *'Architectural Heritage Protection: Guidelines for Planning Authorities'* (2011).
- PS P5: Support and promote the use of expert conservation advice, best conservation practice, and the use of appropriately skilled and experienced contractors and specialists, for any works to protected structures, in accordance with the Department of Arts, Heritage and the Gaeltacht *'Architectural Heritage Protection: Guidelines for Planning Authorities'* (2011) and their *'Advice Series'* on how best to repair and maintain historic buildings.
- PS P6: Require that development proposals do not obscure views of the principal elevations of protected structures.
- PS P7: Prevent inappropriate alterations to protected structures, and to prohibit the demolition of any protected structure unless the Council is satisfied that exceptional circumstances exist. The demolition of a protected structure with the retention of its façade will likewise not generally be permitted.

- PS P8: Promote the sympathetic maintenance, adaptation and appropriate use and reuse of protected structures, and to actively encourage uses that are compatible with the character of protected structures.
- PS P9: Retain where practicable a protected structure which has been damaged by fire, and to retain those elements of that structure that have survived (either in whole or in part) and that contribute to its special interest.
- PS P10: Promote the retention of any original or early building fabric including for example timber sash windows, stonework, brickwork, joinery, ironwork, traditional mortars, render and decorative or weather finishes and slate and vernacular architectural details. Likewise, the Council will encourage the re-instatement of historically correct traditional features.
- PS P11: Favourably consider the change of use of any structure included on the Record of Protected Structures, provided such a change of use does not adversely impact on the intrinsic character of the structure and is in accordance with the proper planning and sustainable development of the area.
- PS P12: Ensure that in the event of a planning permission being granted for development within the curtilage of a protected structure, the proposed works to the protected structure should occur, where appropriate, in the first phase of the development to prevent endangerment,

abandonment and dereliction of the structure.

- PS P13: Ensure that measures to up-grade the energy efficiency of protected structures and historic buildings are sensitive to traditional construction methods and materials and do not have a detrimental physical, aesthetic or visual impact on such structures or buildings, in line with the guidance provided in the Department of the Environment, Heritage and Local Government Advice Series '*Energy Efficiency in Traditional Buildings*' (2020).

Protected Structures - Objectives

It is an objective of the Council to:

- PS O1: Review and amend on an ongoing basis the Record of Protected Structures, and make additions, deletions or corrections as appropriate over the period of this Plan.
- PS O2: Prepare a Buildings at Risk Register to prevent the endangerment of protected structures, historic or vernacular buildings.

10.15 Architectural Conservation Areas

An architectural conservation area (ACA) is a place, area, group of structures or townscape, that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or that contributes to the appreciation of a protected structure. ACAs represent a complementary statutory provision to the Record of Protected Structures.

In order to retain the overall architectural or historic character of an area, the protection of architectural heritage in ACAs is best achieved by controlling and guiding change on a wider scale than the individual structure. Most structures in an ACA are important in the context of their contribution to the streetscape or character of an area and so the protection status generally relates only to the exterior of the buildings or the streetscape, except for protected structures within ACAs where the protection extends to the interior and curtilage of these properties.

The spatial character of ACAs can be the basis for their designation and development proposals must enhance and support the definition of that space. The carrying out of any works that would have a material effect on the character of an ACA require planning permission.

There are currently 7 ACAs within the Greater Carlow Graiguecullen Urban Area, all located within the functional area of Carlow Town. These ACAs include Montgomery Street, Dublin Street, Granby Row, Little Barrack Street, Brown Street, Maryborough Street and College Street. There is also an ACA designated for Borris. The ACAs are detailed on the maps for Carlow Town and Borris included in Chapter 15.

Architectural Conservation Areas - Policies

It is the policy of the Council to:

ACA P1: Protect and enhance the historic character, heritage value and visual setting of Architectural Conservation Areas and to carefully consider any development proposals that would affect the special interest of such areas.

ACA P2: Ensure that development proposals within or adjacent to an Architectural Conservation Area respect the character of the area and contribute positively to it in terms of design, height, scale, setting and material finishes.

ACA P3: Avoid the removal of structures and distinctive features which make a positive contribution to the character of Architectural Conservation Areas, including buildings, building features, shop fronts, boundary treatments, street furniture, landscaping and paving.

ACA P4: Ensure that all new signage, lighting, advertising and utilities to buildings within an Architectural Conservation Area are designed, constructed and located in a manner that is complementary to the character of the area.

ACA P5: Ensure that external colour schemes in Architectural Conservation Areas enhance the character and amenities of the area and reflect traditional colour schemes.

Architectural Conservation Areas - Objectives

It is an objective of the Council to:

ACA O1: Investigate the designation of further Architectural Conservation Areas at appropriate locations throughout the County.

ACA O2: Address dereliction and promote appropriate and sensitive reuse and rehabilitation of buildings, building features and sites within Architectural Conservation Areas.

10.16 Country Houses, Demesnes & Gardens

County Carlow has a substantial number of large country houses, including demesnes and gardens, all characteristic of a period of settlement in the County. The planned demesne and designed garden landscapes associated with these houses, constitute an intrinsic part of their character, make a significant contribution to the appearance of the County, and are most often the setting for a protected structure.

The National Inventory of Architectural Heritage (NIAH) has carried out a survey of Historic Gardens and Designed Landscapes and produced a national database. This existing database, which is not yet an indication of a site's heritage importance, contains 88 entries for the County. The NIAH is progressing fieldwork to compile more accurate data and site assessments, to be added to their database as it becomes available. The surveys can be found at

www.buildingsofireland.ie

Some notable examples of country houses, demesnes and gardens in the County include Duckett's Grove, Altamont House and Gardens, Huntington Castle, Lisnavagh House, and Borris House.

Country Houses, Demesnes & Gardens - Policies

It is a policy of the Council to:

CH P1: Encourage the protection, conservation, promotion and enhancement of Country Houses, Demesnes and Gardens in the County and support public awareness, enjoyment of and access to these sites where appropriate and in cooperation with owners and other

interested parties, including Government Departments and state agencies.

CH P2: Preserve and protect, where appropriate, historic gardens and designed landscapes identified in the National Inventory of Architectural Heritage.

CH P3: Discourage development that would lead to a loss of, or cause damage to, the character, the principal components of, or the setting of Country Houses, Demesnes and Gardens.

CH P4: Protect and promote heritage and traditional varieties of plants and trees within historic designed landscapes, demesnes and gardens, and to protect, preserve and enhance biodiversity within these places where appropriate.

CH P5: Consider the "Guidance Notes for the Appraisal of Historic Gardens, Demesnes, Estates and their Settings" published by Cork County Council 2006, in the appraisal and description of the impacts of development proposals in County Carlow within or in close proximity to country houses and demesnes on historic designed landscapes, demesnes and gardens.

Country Houses, Demesnes and Gardens - Objectives

It is an objective of the Council to:

CH O1: Assess the demesnes and historic designed garden landscapes and promote the protection and conservation of their special character, both built and natural,

while facilitating reuse where appropriate.

10.17 Industrial and Transport Heritage

County Carlow has an unusually rich industrial heritage, much of it related to agricultural production. Transport heritage has been an important contributing factor to the character of the County. Nineteenth-century railway infrastructure is significant, which redefined the landscape of the County. The railway stations in Carlow reveal a wide variety of styles, from simple to ornate. The other components of the railway infrastructure such as bridges are considerable engineering achievements but are also, particularly in the case of the Borris Viaduct, significant for their aesthetics.

The range of late eighteenth-century canal structures along the Barrow Navigation, includes bridges, locks, retaining walls, and lock keeper houses, as well as river and canal side warehouses. In the absence of a developed road system, the Barrow Navigation provided a comparatively swift route for the agricultural produce of the region to be transferred to large urban centres. The extensive network of rivers is reflected in the number of water-powered mill buildings that were erected across the County.

The bridges that followed from historic improvements to road transport were also an importance factor in facilitating ease of movement around a county crossed by many rivers and tributaries.

Recognition of the importance of industrial and transport heritage in Ireland is reflected in the establishment, in 1996, of the Industrial Heritage Association of Ireland (IHAI), which seeks to foster greater public awareness and

understanding of industrial heritage in Ireland. The role of the IHAI as an expert adviser is recognised in the Department of Arts, Heritage and the Gaeltacht *'Architectural Heritage Protection: Guidelines for Planning Authorities'* (2011). In 2002 the Heritage Council also published *'An Introductory Guide to Recording and Conserving Ireland's Industrial Heritage'*.

Industrial and Transport Heritage - Policies

It is the policy of the Council to:

ITH P1: Protect and conserve buildings, structures and features of industrial and transport heritage, such as historic mills, mill races, weirs, warehouses, bridges, canals and lock gates, railway structures, etc., and to promote their retention, sensitive maintenance, repair, and restoration.

ITH P2: Encourage appropriate change of use and reuse of industrial heritage buildings, provided such a change does not seriously impact on the intrinsic heritage character of the buildings and that all works are carried out in accordance with best conservation practice.

ITH P3: Seek the retention and appropriate maintenance and repair of the historic bridges of the County, whether protected or not.

Industrial and Transport Heritage - Objective

It is an objective of the Council to:

ITH O1: Prepare a survey, inventory, and record of the County's industrial and transport heritage during the lifetime of the Plan.

10.18 Vernacular Architecture

Across the County, in towns and in the countryside, a range of building types are readily accepted as being of significance for architectural heritage, such as churches, courthouses, large country houses, and prominent commercial buildings such as 19th century bank buildings. Supplementing this stock however and not only including buildings or features listed as protected structures or located in ACAs, is more modest vernacular architecture that equally contributes to the distinctive local character of the County.

Vernacular architecture is a term that is generally used to describe local traditional building forms and types that fall into the category of unplanned architecture and that used readily available local building skills and materials. It can include dwellings, shops/shopfronts, farm complexes, outbuildings, factories, warehouses, mills, and forges, and more modest sundry structures and artefacts such as limekilns, culm crushers, stone fences (Carlow fencing), and street furniture such as gates, gate piers, post boxes and water pumps. Carlow fencing, constructed of local granite and used to form boundaries, is a feature that is unique to the County.

Domestic architecture, large and small, is closest to the people and reflects most especially the history of Carlow over the centuries. Damage to the vernacular architecture does not only relate to the loss of whole structures but can also be a result of the gradual attrition of architectural features and detailing such as the replacement of roof coverings and windows with modern materials, the removal of external renders, inappropriate repointing, and the addition of unsuitable extensions. Alterations to

individual structures and features can also have a significant and cumulative effect on landscapes and streetscapes. Therefore, it is important that any changes proposed to vernacular buildings or structures should be sympathetic to their special character and features. The retention and reuse of these buildings and structures exemplifies sustainable development and so the Council will encourage the appropriate re-use of vernacular buildings rather than their replacement or dereliction.

Vernacular Architecture - Policies

It is the policy of the Council to:

- VA P1: Promote the protection, retention, public awareness, and appropriate renewal and regeneration of the vernacular architecture of the County, including the heritage-led revitalisation of the historic built fabric of urban areas.
- VA P2: Protect and conserve vernacular architecture through the use of the RPS, ACAs, and in the normal course of development management, which contributes to the character of areas and/or where it consists of rare or special interest examples of a building or structure type.
- VA P3: Require development proposals affecting vernacular buildings to be accompanied by a detailed measured survey, photographic record and written report carried out by a professional with appropriate conservation expertise and, preferably, an understanding of vernacular buildings. Early consultation with the planning authority is strongly advised.

- VA P4: Facilitate appropriate, high-quality design solutions for adaptations of vernacular buildings that carefully consider their vernacular qualities in terms of design, scale, setting and finishes. While new design can be expressed in contemporary architectural language, consideration should be given to exploring the use of appropriate vernacular features, building techniques and materials.
- VA P5: Ensure proposed extensions to vernacular houses are sympathetic to the design, scale, footprint and materials of the existing building and its setting. Extensions should generally be located to the rear and not obscure the form or layout of the existing building, the substantial removal of walling is not generally recommended, and connecting the existing building and extension should minimize the number of new openings and ideally use existing openings.
- VA P6: Resist and discourage the demolition of vernacular architecture, and promote the sympathetic renewal, maintenance, adaptation and re-use of historic building stock, and encourage the retention and repair of original fabric such as windows, doors, wall renders, roof coverings, shopfronts, pub fronts and other significant features, whether protected or not.
- VA P7: Preserve the character and setting of vernacular architecture (e.g. boundaries, fencing, gates, gate piers, courtyards etc.) where deemed appropriate by the Planning Authority.
- VA P8: Consider the guidance in *'Reusing Farm Buildings, A Kildare Perspective'*, published by Kildare County Council in assessing planning applications in County Carlow relating to traditional farm buildings.
- VA P9: Support proposals to retain, repair and refurbish vernacular buildings or structures that are in a rundown or derelict condition, subject to the use of appropriate traditional building materials and methods and provided that proposals for extensions are of an appropriate design and do not detract from the character of the original building or structure.

Vernacular Architecture - Objective

It is an objective of the Council to:

- VA O1: Identify and retain good examples of vernacular architecture in the County, including historic street furniture (e.g. gateways, gate piers, cast iron post boxes, milestones, water pumps etc.) and other features of historic and architectural interest.