

Chapter 10

# **Natural Heritage, Biodiversity and Green/Blue Infrastructure**

*To contribute towards the protection, conservation and management of biodiversity and natural heritage including sites designated at national and EU Level and protected species and habitats outside of designated sites and to develop a green/blue infrastructure network in the interests of the proper planning and sustainable development of the county.*

## 10.1 Introduction

The County's rich natural heritage and biodiversity is a very valuable resource that is important to our daily activities and quality of life. This Plan sets out to contribute towards the protection and enhancement of the natural heritage and the biodiversity of designated and non-designated ecological sites within the County and to provide a wide range of environmental, social and economic benefits and services including the provision of attractive towns, villages and countryside for both communities and visitors to enjoy.

Biodiversity forms the basis of our landscapes and amenity areas, provides for food and clean water supplies, opportunities for waste disposal, nutrient recycling, coastal protection, flood storage and attenuation. Biodiversity is the sum of all the species and habitats working together to generate and sustain life. The county has a rich natural heritage and biodiversity including a number of diverse and distinctive habitats which are rare in Ireland and the rest of the world.

Green/Blue Infrastructure is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation and climate mitigation and adaptation. This network of green (land) and blue (water) spaces can improve environmental conditions and therefore citizens' health and quality of life. It also supports a green economy, creates job opportunities and enhances biodiversity. The Natura 2000 network constitutes the backbone of the EU green infrastructure. Green Infrastructure planning is a successfully tested tool to provide environmental, economic and social benefits through natural solutions. In

many cases, it can reduce dependence on 'grey' infrastructure that can be damaging to the environment and biodiversity and often more expensive to build and maintain.

## 10.2 Strategic Aims

Galway County Council shall work with the appropriate stakeholders and agencies in increasing awareness, participation, enjoyment, knowledge and understanding of our shared heritage in order to lead to its proper conservation, management and protection and safeguarding it for future generations. This will accord with the following strategic aims:

- Conserve, manage, protect and enhance the special character of the County as defined by its natural heritage, biodiversity and green infrastructure;
- To ensure compliance with the requirements of relevant International, European Directives and National Legislation in relation to Natural Heritage, Biodiversity, Green/Blue Infrastructure and Climate Change;
- Ensure climate change considerations are taken into account in the Natural Heritage, Biodiversity and Green/Blue Infrastructure;
- Continue to implement actions of the National Heritage Plan and the National Biodiversity Plan and the current *Galway County Heritage and Biodiversity Plan 2017-2022* in partnership with all relevant stakeholders and any successor to these documents;
- To promote the creation of an integrated and coherent green infrastructure network throughout County Galway in order to enhance connectivity, social inclusion, sense of place and the creation of wildlife corridors.

## 10.3 Strategic Context

This chapter has been prepared in the context of the following European, National and Regional Plans, Policies and Guidelines:

EU Birds Directive (2009/147/EC)
EU Habitats Directive (92/43/EEC)
EU Water Framework Directive (2000/60/EC)
Wildlife Acts 1976-2000
National Planning Framework – Ireland 2040
National Development Plan 2018-2027
Climate Action Plan 2019
Planning and Development Act 2000 (as amended)
National Heritage Plan (2002) and Draft National Heritage Plan (2019) – Heritage 2030
National Biodiversity Action Plan 2017– Actions for Biodiversity 2017-2021
Appropriate Assessment of Plans and Projects in Ireland – Guidelines for Planning Authorities 2009
Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DoECLG 2013)
Creating a Green Infrastructure for Ireland – Enhancing Natural Capital for Human Wellbeing (2010)
Strategy for the Future Development of National and Regional Greenways, 2018
Regional Spatial and Economic Strategy for the Northern and Western Region 2020-2032
The National Peatlands Strategy 2016

Galway County Heritage and Biodiversity Plan 2017 – 2022
The 'All Ireland Pollinator Plan 2015'
Local Economic and Community Plan 2016 – 2022

### **10.3.1 National Planning Framework**

The National Planning Framework (NPF) sets out to protect and value our important and vulnerable habitats, landscapes, natural heritage and green spaces. It identifies the importance of the interrelationships between biodiversity, natural heritage, landscape and our green spaces. The NPF states that integrated planning for green infrastructure and ecosystem services will be incorporated into the statutory land use plans. It also refers to the importance of biodiversity, environmental challenges and all relevant environmental legislation. National Strategic Objective 7 relates to enhanced amenity and heritage, the primary aim of this objective is to ensure that our towns and villages are attractive and can offer a good quality of life. It will require investment in well-designed public realm, which includes public spaces, parks and streets, as well as recreational infrastructure. It also includes amenities in rural areas, such as national and forest parks, activity-based tourism and trails such as greenways, blueways and peatways which is linked to and must integrate with our built, cultural and natural heritage.

The natural assets of the county are also valuable for carbon capture, which will assist in meeting climate mitigation and adaptation goals and national biodiversity targets. Therefore, NSO 8 Transition to a Low Carbon and Climate Resilient Society is also of particular relevant to this chapter.

The following relevant National Policy Objectives are noted including NPO 59 which aims to enhance the conservation status and improve the management of protected areas and protected species by implementing relevant EU Directives. NPO 58 stipulates that integrated planning for Green Infrastructure and ecosystem services should be incorporated into the preparation of statutory land use plans. NPO 60 aims to conserve and enhance the rich qualities of natural and cultural heritage of Ireland

while NPO 61 aims to facilitate landscape protection, management and change. NPO 22 aims to facilitate tourism development including national and regional connectivity via a National Greenways, Blueways and Peatways Strategy. NPO 23 aims to facilitate rural development, green spaces and parks while protecting the natural landscape and built heritage which are vital to rural tourism.

### **10.3.2 Regional Spatial and Economic Strategy**

The Regional Spatial and Economic Strategy (RSES) recognises the need to conserve and enhance the biodiversity of our protected habitats and species including landscape and heritage protection, to identify, protect and enhance our green infrastructure, to ensure the sustainable management of our natural resources, to build climate resilience, to support the transition to a low carbon economy and the protection of the healthy natural environment to ensure clean air and water.

The following RPO 5.4, RPO 5.5, RPO 5.7, RPO 5.22 promotes the conservation and protection of designated and non-designated sites for reasons of biodiversity and ecosystem services including environmental assessment. The RPO 4.6 supports investment in facilities that will encourage the sustainable development of our natural and built heritage and RPO 4.12 encourages water-based leisure that is sensitive to the natural and cultural heritage resources. RPO 4.14 promotes the development of integrated walking, cycling and bridle routes throughout the region as an activity for both international visitors and local tourists. The RPO 4.15 aims to protect and preserve our Coastal Heritage, archaeological and built heritage. The RPO 5.23 aims to establish an audit of worked out bogs and peatlands within the region and to identify strategic sites and propositions of regional value such as renewable energy, tourism, biodiversity, climate mitigation, education, recreation and amenity.

The RSES supports the delivery of a strategic Greenway Network for the Galway Transport Strategy to include National Dublin to Galway Cycleway, Oranmore to Bearna Coastal Greenway and the Galway to Clifden Greenway.

## 10.4 Climate Action

In 2019, Ireland declared a climate and biodiversity emergency. It is acknowledged that Healthy ecosystems and Habitats are key for both climate mitigation and adaptation measures. Sustainable land management will ensure that land use changes do not impact negatively on the ability of the natural environment to absorb climate impacts including flood risk mitigation measures. It will also improve water quality, nature conservation/ biodiversity. The integration of Green/Blue Infrastructure and ecosystems services into the preparation of statutory land use plans will result in many benefits including, but not limited to, combating climate change, protection of water resources, flood management and improvements to water quality, reducing fossil fuels emissions and the development of sustainable transport, active travel corridors and ecological corridors.

## 10.5 Heritage Ireland 2030

Heritage Ireland 2030 is a new National Heritage Plan which will set out key principles and policies for conserving and managing Ireland's heritage over the next decade and more. Heritage Ireland 2030 will provide further policy backing for the mitigation of climate-change impacts and the protection of biodiversity.

*National Biodiversity Action Plan 2017– Actions for Biodiversity 2017-2021* was developed in line with EU and International Biodiversity strategies and policies. It recognised that locally led action is crucial in protecting biodiversity and ecosystem services and sets out the measures Ireland should take to ensure its conservation. The Plan also identifies the important role of Green Infrastructure in helping to achieve biodiversity targets and developing ecological corridors that allow the movement of species through their entire natural habitat.

Both the *National Heritage Plan (2002)*, the *Draft National Heritage Plan (2019)* identify and recognise that heritage is a communal and mutually shared asset to be protected by the actions of all. The National Heritage Plan (2002) and the National Biodiversity Plan (2011) state national policy and identify national priorities in relation to the protection and management of our national heritage. These plans

recognises that heritage is communal, and we all share a responsibility to protect it starting at the local level.

### **Galway County Heritage and Biodiversity Plan 2017 – 2022**

*Galway County Heritage and Biodiversity Plan 2017 – 2022* is a strategic 6 year plan that sets out a number of actions which aim to raise awareness and understanding, while at the same time conserving and managing the heritage and biodiversity of the County. It is the policy objective of the Council to support the implementation of the *Galway County Heritage and Biodiversity Plan 2017 – 2022* and any subsequent plan in partnership with relevant stakeholders subject to available resources.

## **10.6 Natural Heritage and Biodiversity**

### **10.6.1 Context**

The natural heritage and biodiversity of County Galway is a unique resource scattered over the County. The great diversity of landscape and seascape, coupled with location and climate, has resulted in a diversity of natural and semi-natural habitats in County Galway. These include woodland, grassland, wetland, marine, coastal, upland, river and lake habitats. This varied landscape supports a range of biodiversity, habitats and wildlife.

This biodiversity is under pressure from development and human activity. A sustainable approach is needed to protect and conserve the natural heritage. While it is inevitable that our landscape will continue to change in response to the needs of our society, it is essential that a balance is reached between development and ensuring that there are no detrimental impacts to the natural heritage and biodiversity of the County through environmental considerations including Environmental Justice.

Environmental Justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, ethnicity, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means no group of people should bear a



disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

Socioeconomic justice is central to the issue of Environmental Justice. At its core, Environmental Justice guarantees that all people have equal access to a healthy, safe, and sustainable environment, as well as equal protection from environmental harm.

Natural capital is the earth's stock of natural assets which include geology, soil, air, water and all living things. It is from this natural capital that people derive a wide range of services often called ecosystem services which make human life possible. Biodiversity is the sum of all the species and habitats working together to generate and sustain life.

The various habitats in the County form part of an "ecological network" that facilitates the movement of species between areas and ensures the effective functioning and survival of the diverse range of habitats and species in the County. Ecological networks provide a spatial, network-based approach to the conservation of biodiversity, which differs from the site-based approach of environmental designations, by using 'corridors' or 'stepping stones' that support species migration, dispersal and daily movements between the 'core areas' and thereby contribute to a more integrated and functional ecological system.

Under Section 9 of the Wildlife (Amendment) Act, 2000, a statutory responsibility is outlined to 'promote the conservation of biological diversity'. The primary mechanism for achieving this is the National Biodiversity Plan, of which a key concept is that local authorities (and other agencies) will share responsibility for the conservation and sustainable use of biodiversity.

The National Parks and Wildlife Service under the auspices of the Department of Housing, Local Government and Heritage is responsible for the designation of the Natural Heritage Areas (NHA), Special Areas of Conservation (SAC) and Special Protection Areas (SPA). The designation of sites is a continuing process as boundaries are revised and adjusted and new sites are added. Galway County Council will take cognisance of any revisions and adjustments as furnished by the

National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

In line with higher national and regional policy and in accordance with policies outlined throughout this document, the protection and enhancement of the Quality of Life of County Galway is an underlying theme of the County Development Plan, of which a high-quality environment is an essential indicator. The maintenance and enhancement of biodiversity is fundamental in the achievement of sustainable development.

### **10.6.2 Natural Heritage and Legislation**

The European Commission has adopted the new EU Biodiversity Strategy for 2030 and associated Action Plan – a comprehensive, ambitious, long-term plan for protecting nature and reversing the degradation of ecosystems.

The Heritage Act, 1995 is ‘an act to promote public interest in and knowledge and appreciation and protection of the national heritage’. The Planning and Development Act 2000 (as amended) requires that all development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed.

The EU Birds (1979) and Habitats (1992) Directives (The Habitats Directive), Birds and Habitats Regulations 2011 provides legal protection for habitats and species of European importance. It protects habitats and species of community interest through the establishment and conservation of an EU-wide network of sites, known as Natura 2000; Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). The Habitats Directive sets out decision-making tests for plans and projects likely to affect European Sites and establishes the requirement for Appropriate Assessment (AA).

The Wildlife Act 1976, as amended is the principal national legislation providing for the protection of wildlife and the control of some activities which may adversely affect wildlife. The Flora (Protection) Order, 2015 sets out the current list of plant species protected by Section 21 of the Wildlife Act, 1976, as amended. In addition, there are

a number of international convention and agreements relating to our heritage which Ireland has ratified.

### **10.6.3 Designated Sites**

There is huge diversity of species and habitats within County Galway, which because of their importance at European and National level require the designation of areas for their protection and conservation. As such European and national legislation protects the important and valuable heritage areas within the County. The three main types of designation are: Special Areas of Conservation (SAC); Special Protection Areas (SPA); and Natural Heritage Areas (NHA).

The responsibility for designating sites lies with the Department of Housing, Local Government and Heritage; however, the Council also aim to ensure their protection into the future. In addition, there are other measures which may be used to designate sites of importance such as Ramsar sites protected under the Convention on Wetlands of International Importance.

### **10.6.4 Candidate Special Areas of Conservation**

Special Areas of Conservation (SACs) - these sites are selected for the conservation and protection of plant and animal species (other than birds) and habitats listed in Annex I and Annex II of the EU Habitats Directive (92/43/EEC) respectively.

### **10.6.5 Special Protection Areas**

The Special Protection Areas (SPAs) and proposed Special Protection Areas (pSPAs) – these sites are selected for the conservation and protection of birds of particular species and their habitats designated under the EU Birds Directive 2009 (2009/147/EC) (first adopted in 1979) and transposed into Irish law by the Conservation of Wild Birds Regulations (SI 291 of 1985).

### **10.6.6 Natural Heritage Areas**

Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs) are designated under the Wildlife (Amendment) Act 2000 and encompass nationally

important semi-natural and natural habitats, landforms and geomorphological features.

### **10.6.7 European Directives, Natura 2000 and Environmental Assessments**

At European level, the Habitats Directive (92/43/EEC) and the Birds Directive (2009/147/EC) mandate the identification and protection of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), which together create a network of protected wildlife areas, known as the Natura 2000 network, across the European Union. The designation of these sites form part of a range of measures aimed at conserving important or threatened habitats and species. The Water Framework Directive Register of Protected Areas also contains an inventory of protected area sites to include areas designated for the protection of habitats and species.

### **10.6.8 Statutory Nature Reserve**

There are eight Statutory Nature Reserves in County Galway. They are areas of importance to wildlife which is protected under Ministerial order and most are owned by the State.

### **10.6.9 Wildfowl Sanctuary**

Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. Shooting of game birds is not allowed in these sanctuaries. There are two wildfowl sanctuaries in the county.

### **10.6.10 Protected Plant and Animal Species**

Certain plant, animal and bird species are protected by law. These includes plant species listed in the Flora Protection Order, 1999 (or other such Orders) and animals and birds listed in the Wildlife Act, 1976 and subsequent statutory instruments, those listed in Annex IV of the Habitats Directive (92/43/EEC), and those listed in Annex I of the Birds Directive.

### **10.6.11 European Sites and Appropriate Assessment**

*Additional Guidance for Planning Authorities - Appropriate Assessment of Plans and Projects in Ireland 2009 (revised 2010)* is guidance intended to assist and guide planning authorities in the application of Article 6(3) and 6(4) of the Habitats Directive as it relates to their roles, functions and responsibilities in undertaking Appropriate Assessment of plans and projects. It applies to plans and projects for which public authorities receive an application for consent, and to plans or projects which a public authority wishes to undertake or adopt. It sets out the different steps and stages that are needed in establishing whether a plan or project can be implemented without adversely affecting the integrity of a European Site.

### **10.6.12 Environmental Impact Assessment**

Environmental Impact Assessment (EIA) is the process of examining the possible environmental effects of a proposed project through the preparation of an Environmental Impact Report (EIAR). An EIAR is a report or statement of the effects, both environmental and social and cultural, which the proposed project would have on the receiving environment. It is prepared by the developer to inform the EIA process.

The projects which require EIA are listed in Annex I and Annex II of the EIA Directive as amended. Projects listed in Annex 1 of the EIA Directive have mandatory EIA requirements. Thresholds have been set for Annex II projects in Irish Legislation. But even projects which do not meet the threshold may require an EIA if the project is likely to have significant effects on the environment. The Annex I and Annex II projects have been transposed into Section 5 (Parts 1 and 2) of the Planning and Development Regulations 2001, as amended.

### **10.6.13 Ecological Impact Assessment**

The EcIA is a mechanism for the protection of sensitive habitats that lie outside designated sites and any proposed development likely to have a significant impact on rare and threatened species including those species protected by law and their habitats. It is important to ensure appropriate avoidance and mitigation measures

are incorporated into development proposals as part of any ecological impact assessment in order to assess the potential impacts on biodiversity.

#### **10.6.14 Biodiversity outside the Protected Sites/Non-Designated Sites**

It is important to recognise that nature conservation is not just confined to designated sites and acknowledge the need to protect non-designated habitats and landscapes and to conserve the biological diversity that occurs in the ordinary landscapes of the County. Rare and protected sites cannot survive independently of their surroundings. Features of our landscape can be of high natural value in their own right and often provide the vital links and corridors to allow the movement of plants and animals between protected sites.

Beyond the boundaries of the previously listed designated sites within the County, there are further areas that provide important habitats for our flora and fauna, and in particular vulnerable species. These make up a wide network of linked spaces that contribute to the County's Natural Heritage.

#### **10.6.15 Ecological Networks**

Inland waterways, which include lakes, rivers, and streams, are living systems of high local biodiversity value due to the habitats associated with them, and function as ecological corridors that connect related habitats/designated sites, enabling species to move between them. Established trees and hedgerows are also of high local biodiversity value and contribute to ecological connectivity. Features that contribute to the creation of an ecological network should be retained and included in the design plans for development proposals.

#### **10.6.16 Bats and Lighting**

The impact of lighting on bats and their roosts and the lighting up of objects of cultural heritage must be adequately assessed in relation to new developments and the upgrading of existing lighting systems.

## Policy Objectives Natural Heritage and Biodiversity

### **NHB 1                      Natural Heritage and Biodiversity of Designated Sites, Habitats and Species**

Protect and where possible enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts) and extend to any additions or alterations to sites that may occur during the lifetime of this plan.

Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI 94 of 1999).

Support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage Areas, proposed Natural Heritage Areas, Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries (and other designated sites including any future designations) and the promotion of the development of a green/ ecological network.

### **NHB 2                      European Sites and Appropriate Assessment**

To implement Article 6 of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011. All such projects and plans will also be required to comply with statutory Environmental Impact Assessment requirements where relevant.

### **NHB 3                      Protection of European Sites**

No plans, programmes, or projects etc. giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects.\*

**NHB 4 Ecological Appraisal of Biodiversity**

Ensure, where appropriate, the protection and conservation of areas, sites, species and ecological/networks of biodiversity value outside designated sites. Where appropriate require an ecological appraisal, for development not directly connected with or necessary to the management of European Sites, or a proposed European Site and which are likely to have significant effects on that site either individually or cumulatively.

**NHB 5 Ecological Connectivity and Corridors**

Support the protection and enhancement of biodiversity and ecological connectivity in non-designated sites, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, stonewalls, geological and geo-morphological systems, other landscape features and associated wildlife areas where these form part of the ecological network and/or may be considered as ecological corridors in the context of Article 10 of the Habitats Directive.

**NHB 6 Implementation of Plans and Strategies**

Support the implementation of any relevant recommendations contained in the National Heritage Plan 2030, the National Biodiversity Plan, the All Ireland Pollinator Plan and the National Peatlands Strategy and any such plans and strategies during the lifetime of this plan.

**NHB 7 Mitigation Measures**

Require mitigating measures in certain cases where it is evident that biodiversity is likely to be affected. These measures may, in association with other specified requirements, include establishment of wildlife areas/corridors/parks, hedgerow, tree planting, wildflower meadows/marshes and other areas. With regard to residential development, in certain cases, these measures may be carried out in conjunction with the provision of open space and/or play areas.

**NHB 8 Increased Awareness of the County's Biodiversity and Natural Heritage**

Facilitate increased awareness of the County's biodiversity and natural heritage through the provision of information to landowners and the community generally, in cooperation with statutory and other partners.



**NHB 9                      Protection of Bats and Bats Habitats**

Seek to protect bats and their roosts, their feeding areas, flight paths and commuting routes. Ensure that development proposals in areas which are potentially important for bats, including areas of woodland, linear features such as hedgerows, stonewalls, watercourses and associated riparian vegetation which may provide migratory/foraging uses shall be subject to suitable assessment for potential impacts on bats. This will include an assessment of the cumulative loss of habitat or the impact on bat populations and activity in the area and may include a specific bat survey. Assessments shall be carried out by a suitably qualified professional and where development is likely to result in significant adverse effects on bat populations or activity in the area, development will be prohibited or require mitigation and/or compensatory measures, as appropriate. The impact of lighting on bats and their roosts and the lighting up of objects of cultural heritage must be adequately assessed in relation to new developments and the upgrading of existing lighting systems.

**NHB 10                      NPWS & Integrated Management Plans**

Article 6(1) of the Habitats Directive requires that Member States establish the necessary conservation measures for European sites involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans. The NPWS's current priority is to identify site specific conservation objectives; management plans may be considered after this is done. Where Integrated Management Plans are being prepared by the NPWS for European sites (or parts thereof), the NPWS shall be engaged with in order to ensure that plans are fully integrated with the Plan and other plans and programmes, with the intention that such plans are practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations, including those of local communities.

**NHB 11                      Increases in Visitor Numbers to Semi-Natural Areas, Visitor and Habitat Management**

Seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance, including ensuring that any new projects, such as greenways, are a suitable distance from ecological sensitivities, such as riparian zones. Where relevant, the Planning Authority and those receiving permission for development under the Plan shall seek to manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant effects, including loss of habitat and disturbance. Management measures may include ensuring that new projects and activities are a suitable distance from ecological sensitivities. Visitor/Habitat Management Plans will be required for proposed projects as relevant and appropriate.

\* Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: (a) no alternative solution available; (b) imperative reasons of overriding public interest for the plan to proceed; and (c) adequate compensatory measures in place.

## 10.7 Water Resources

European directives such as the Water Framework Directive (WFD) and the Nitrates Directive will have implications for County Galway and the preservation of water quality. The WFD deals with water quality in relation to water bodies including rivers, lakes, ground waters, coastal and estuarine waters and wetlands.

The *River Basin Management Plan for Ireland 2018-2021* sets out the actions that Ireland will take to improve water quality and achieve 'good' ecological status in water bodies (rivers, lakes, estuaries and coastal waters) by 2027. Ireland is required to produce a river basin management plan under the WFD. Water quality in Ireland has deteriorated over the past two decades. The Plan identifies the possible sources of pollution and through the mandatory measures of the WFD has identified actions necessary in order to improve the water quality of the region. The Plan provides a more coordinated framework for improving the quality of our waters - to protect public health, the environment, water amenities and to sustain water-intensive industries, including agri-food and tourism, particularly in rural Ireland.

### Policy Objective Water Resources

#### **WR 1 Water Resources**

Protect the water resources in the plan area, including rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland habitats and freshwater and water dependant species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the River Basin District Management Plan 2018 – 2021 and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same) and also have regard to the Freshwater Pearl Mussel Sub-Basin Management Plans.

#### **WR 2 River Basin Management Plans**

It is a policy objective of the Planning Authority to implement the programme of measures developed by the River Basin District Projects under the Water Framework Directive in relation to: Surface and groundwater interaction, Dangerous substances, Hydro-morphology, Forestry, On site wastewater treatment systems, Municipal and industrial discharges, Urban pressures, Abstractions.

## 10.8 Wetlands, Turloughs, Watercourses

A wetland is an area of land that is saturated with water either permanently or seasonally, and where the water table is near or at the surface. The 1971 Ramsar Convention on Wetlands of International Importance defines wetland as: *“areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters”*. While many protected areas include wetlands, most wetland areas occur outside protected sites. “Wetlands” may vary considerably in visual appearance, owing in part to the setting in which they occur and the vegetation type(s) present. There are special suites of plants adapted to cope with wet conditions and, as these wet conditions vary spatially, a mosaic of habitats comprising different plant communities may occur within a single wetland.

Wetlands include our watercourses and water bodies as well as other habitats types including marshes, fens, reed beds, bogs and wet woodlands. These habitats tend to have high biodiversity value, as well as serving other functions relating to the protection of water quality and protection from flooding. While many protected areas include wetlands, most wetland areas occur outside protected sites. There are 5 major wetland types as follows:

- **marine** (coastal wetlands including coastal lagoons, rocky shores, and coral reefs);
- **estuarine** (including deltas, tidal marshes, and mangrove swamps);
- **lacustrine** (wetlands associated with lakes);
- **riverine** (wetlands along rivers and streams); and
- **palustrine** (meaning “marshy” – wet grassland, marshes, swamps and bogs).

As well as naturally occurring wetlands there are artificial wetlands such as fish ponds, farm ponds, irrigated agriculture land, reservoir, gravel pits, sewerage treatment facilities, and drainage ditches.

The wetlands in Galway include a range of wildlife habitats, such as raised and cutover bogs, marshes, swamps, turloughs, wet woodlands, lakes and ponds. In

addition, wetlands provide important ecosystem services such as flood prevention, provision of clean water, and carbon storage. Despite the known importance of wetlands, they continue to be threatened and damaged from activities such as drainage and infilling.

It is important to identify turloughs of local conservation importance and to be aware of the hydrological impacts of development on turloughs. Some Turloughs are located within priority habitats and accordingly are listed on Annex I of the EU Habitats Directive.

## Policy Objective Wetlands, Turloughs, Watercourses and Fens

### WTWF 1

### Wetland Sites

Protect and conserve the ecological and biodiversity heritage of the wetland sites in the County. Ensure that an appropriate level of assessment is completed in relation to wetland habitats that are subject to proposals which would involve drainage or reclamation that might destroy, fragment or degrade any wetland in the county. This includes lakes and ponds, turloughs, watercourses, springs and swamps, marshes, fens, heath, peatlands, some woodlands as well as some coastal and marine habitats. Protect Ramsar sites under The Convention on Wetlands of International Importance (especially as Waterfowl Habitat).

## 10.9 Peatlands

Peatland are wetlands where the substrate is predominantly peat including bogs which are fed by rain and fens which are fed by ground or surface water. Actively growing, intact raised bog is an extremely rare habitat. Irish raised bogs are of international importance representing 50% of all the conservation-worthy raised bogs remaining in Europe. In County Galway, upland blanket bog is found in mountainous regions and lowland/Atlantic blanket bog is found in the Conamara lowlands and coastal areas. Raised bogs are found in the lowlands of north and east County Galway.

Bogs are a unique wetland habitat, rich in wildlife possessing a combination of plants and animals that have evolved particularly to thrive in a bog. Bogs are a living archive as they contain semi fossilised plant remains and artefacts. Archaeologists

have discovered many fascinating structures within and below the peat. Peatlands or Bogs are important controllers of water levels in river catchments, providing a source of water in dry conditions and soaking up excess water during wetter periods; they actively capture and hold carbon and are an important natural resource in combatting climate change.

Active blanket bogs and active raised bogs are considered to be priority habitats, listed on Annex I of the EU Habitats Directive. However, when bogs are drained and harvested, they cannot perform these functions effectively. The drained and degraded bogs go from being carbon sinks to very large carbon sources. The restoration of peatlands to their natural state will have benefits in terms of nature conservation, climate change and flood prevention and alleviation.

National and Regional Policy identifies the strategic importance and value of Peatlands and includes specific guiding principles to be considered for development on peatlands. Peatlands form unique landscapes which can act as amenity areas for locals and visitors and support a variety of outdoor activities such as hill-walking, wildlife watching and fishing which bring economic benefits in remote areas. The use of the bogs for other purposes such as renewable energy can also be achieved in a compatible manner. Bogs are also valuable agricultural, biodiversity, community, education and tourism resource.

The '*National Peatlands Strategy 2016*' contains a comprehensive list of actions, necessary to ensure that Ireland's peatlands are preserved, nurtured and become living assets within the communities that live beside them. A number of these sites in East Galway lie within Bord na Móna's ownership. Whilst the future uses of these sites can be best determined on a site by site basis, some potential uses for worked out bogland are identified in Bord na Móna's publication '*Strategic Framework for the future use of Peatlands*' as follows: Alternative Energy (Wind, Biomass, Solar), Agriculture, Tourism and Amenity uses, Horticulture, Forestry, Biodiversity, and ecosystem related uses. A key consideration for our county is to sustainably harness these potential uses to deliver maximum economic, social and environmental benefit to the county and region.

## Policy Objectives Peatlands

### **P 1 Protection of Peatlands**

Ensure that peatland areas which are designated (or proposed for designation) as NHAs, SACs or SPAs are conserved for their ecological, climate regulation, education and culture, archaeological potential including any ancient walkways (toghers) through bogs.

### **P 2 Best Practice in Peatland conservation and management**

Work in partnership with relevant stakeholders on all suitable peatland sites to demonstrate best practice in sustainable peatland conservation, management and restoration techniques and to promote their heritage and educational value subject to Ecological Impact Assessment and Appropriate Assessment Screening, as appropriate.

### **P 3 Framework Plans**

Seek to support relevant agencies such as Bord na Mona in advancing rehabilitation works for the peatlands and related infrastructure, to provide for the future sustainable and environmentally sensitive use of peatlands sites including for amenity purposes.

## 10.10 Invasive Species

Invasive alien species are animals and plants that are introduced accidentally or deliberately into the wild where they are not normally found, which have adverse impacts on the environment. Invasive species can have significant impacts on conservation and economic interests, and may in some cases pose threats, directly or indirectly, to human safety. Non-native invasive species, both invertebrate and plants, can represent a major threat to local, regional, national and global biodiversity. Terrestrial and aquatic habitats can be negatively affected, resulting in significant damage to ecosystems, conservation and economic interests, such as agriculture, forestry and civil infrastructure. Occasionally public, animal and plant health may also be threatened. There is potential for the spread of invasive species from private gardens, boat users, horticulture etc. e.g. Japanese Knotweed, Giant Rhubarb, and the Zebra mussel in our lakes. Excavation and construction works can lead to the further spread of such invasive species.

The measures for prevention and eradication of invasive species will include the dissemination of information to raise public awareness, the adoption of codes of

practices/standard biosecurity measures in normal Local Authority activities, consultation with relevant stakeholders, the promotion of the use of native species in amenity planting and landscaping and the recording of invasive/non native species as the need arises and resources permit. The Council will also seek to prevent the spread of invasive non-native species through the control of movement of contaminated soil.

### **Policy Objectives Invasive Species**

#### **IS 1 Control of Invasive and Alien Invasive Species**

It is a policy objective of the Planning Authority to support measures for the prevention and eradication of invasive species.

#### **IS 2 Invasive Species Management Plan**

Ensure that proposals for development do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are currently or were previously present, an invasive species management plan will be required. A landscaping plan will be required for developments near water bodies and such plans must not include alien invasive species.

## **10.11 Pollinators**

Galway County Council has adopted the All Ireland Pollinator Plan which is an all island-wide attempt to reverse declines in pollinating insects. Pollinators are impacted by the actions of everyone ranging from the local authorities to community groups, farmers, schools, gardeners and businesses. Primary contributors of decline include habitats loss, pollution, poisoning through chemicals and pesticides, pathogens, parasites and climate change.

## Policy Objective Pollinators

### **PO 1 Delivery of All Ireland Pollinator Plan**

To facilitate the delivery of the All Ireland Pollinator Plan where possible. In the interest of preserving and enhancing biodiversity and working in conjunction with the All Ireland Pollinator Plan -

It shall be the policy objective of the Planning Authority to ensure that at least 20% of the green space on all housing estates being built will have to be dedicated, developed and maintained as a pollinator zone. The area dedicated can be confined to one single lot or various lots around the site providing that the total area of the lots meets the minimum requirement of 20%.

The pollinator zones should be planted with a mix of pollinator friendly-bulbs, self seeding annuals and biennials, perennials, shrubs, trees, fruit trees and fruit bushes and the majority of this planting should consist of native plants.

## **10.12 Trees, Woodlands, Hedgerows and Stone Walls**

Trees, woodlands and hedgerows make a valuable contribution to biodiversity and to the landscape and local visual amenity across County Galway. Particular trees, or more often groups of trees, can be important components of the local landscape/townscape, the setting of buildings, or to the successful integration of new development into the landscape. With an increasing need for greener and more sustainable urban communities, there is also a growing awareness of the value of trees in these urban settlements.

Hedgerows are a very important characteristic feature of the County's landscape and provide an important habitat and wildlife corridors for small mammals, birds and bat species. Under the Wildlife (Amendment) Act, 2000 the cutting of hedges (and uncultivated vegetation) during the bird-nesting season (March 1st to September 1st) is prohibited, except in certain legally defined circumstances.



## Policy Objectives Trees, Woodlands, Hedgerows and Stone Walls

### **TWHS 1                    Trees, Hedgerows, Natural Boundaries and Stone Walls**

Protect and seek to retain important trees, tree clusters and tree boundaries, ancient woodland, natural boundaries including stonewalls, existing hedgerows particularly species rich roadside and townland boundary hedgerows, where possible and replace with a boundary type similar to the existing boundary. Ensure that new development proposals take cognisance of significant trees/tree stands and that all planting schemes developed are suitable for the specific site and use suitable native variety of trees of Irish provenance and hedgerows of native species. Seek Tree Management Plans to ensure that trees are adequately protected during development and incorporated into the design of new developments.

### **TWHS 2                    Planting of Trees and Woodlands**

Encourage and promote in co-operation with Coillte and the Department of Agriculture, Food and the Marine and other organisations, the planting of trees and woodlands, as an important means of contributing to its objective of sustaining, protecting and enhancing the County's biodiversity, natural resources, amenity, landscape and developing tourism product. Encourage community woodlands in urban/urban fringe areas utilising funding available through schemes such as the NeighbourWood and Native Woodland Schemes.

### **TWHS 3                    Protection of Forestry**

Protect all substantial areas of deciduous forest, other than areas of commercial forestry. Proposals for development in these areas should seek to interact with the landscape character of the forested areas and its limits while also enhancing the forested areas so as to increase biodiversity value.

## **10.13 Geology, Eskers**

### **10.13.1 Geological Sites**

County Galway is widely known for its geological heritage, but this is understood or expressed for most people as the landscape or the scenery. Since it is one of the largest of Irish counties, and because bedrock is in many parts generally well exposed, it has an extensive range of geological heritage sites. However, it also has some of the most complex geodiversity in the country leading to many significant geological sites.

The Irish Geological Heritage (IGH) Programme has identified sites of national or local geological heritage importance, which are classed as County Geological Sites (CGS) and have been adopted into the National Heritage Plan. The Geological Survey of Ireland (GSI) in tandem with the National Parks and Wildlife Service of the Dept Housing, Local Government and Heritage has established the Irish Geological Heritage Programme in 1998. The programme aims to identify and select sites of geological heritage within Ireland for future designation as NHAs. To date no geological site has been statutorily designated as an NHA.

Galway County Council recognises the importance of geological heritage and geological features within the County. An audit of Geological Heritage sites in County Galway confirmed 134 no. County Geological Sites (CGS) and the list has been produced in consultation with the Geological Survey of Ireland. Some of the County's oldest rocks are from the Ordovician period and comprise sandstones and shales located in the north of the County. However, most of the bedrock geology of Galway comprises of Carboniferous Limestone. Galway County Council aims to protect, conserve and enhance important geological and geo-morphological systems in the County and seek to promote access to such sites where possible (see appendix 8).

## Policy Objectives Geological Sites

### **PG 1 Geological and Geo-Morphological Systems**

Protect and conserve geological and geo-morphological systems, county geological heritage sites and features from inappropriate development that would detract from their heritage value and interpretation and ensure that any plan or project affecting karst formations, eskers or other important geological and geo-morphological systems are adequately assessed with regard to their potential geophysical, hydrological or ecological impacts on the environment.

### **PG 2 Geological Heritage of County Galway**

Support the implementation of recommendations made in the *Geological Heritage of County Galway – An Audit of County Geological Sites in County Galway (2019)*. Consult with the Geological Survey of Ireland when undertaking, approving or authorising developments which are likely to impact on County Geological Sites or involve significant ground excavations including sites identified as part of the *Geological Heritage of County Galway – An Audit of County Geological Sites in County Galway (2019)*.

**PG 3****Promotion of and Access to Geological Sites**

Encourage greater awareness of the geological heritage sites of the county and promote, where appropriate, public access to geological and geomorphological sites and avoid inappropriate development.

### 10.13.2 Eskers

Eskers are glacial features composed of ridges of sand and gravel deposited at the end of the Ice Age. The Council recognises the unique importance of Galway's esker landscape deriving from its geological, zoological, botanical, scientific and landscape value.

**Policy Objective Eskers****ESK 1 Protection of Eskers Systems**

Protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county. Assess applications for quarrying and other proposed developments with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system.

**ESK 2 Esker Areas**

Have regard to the Landscape Character Assessment of the County of Galway and its recommendations relating to the Esker areas and any other subsequent relevant reports/data.

### 10.14 Inland Lakes, Waterways

The County's inland waterways includes lakes, rivers, canals and streams, are living systems that are home to a wide variety of habitats and species. They function as ecological corridors that connect habitats and designated sites which enable species to travel from place to place. Waterways also contribute significantly to the landscape character, the amenity and quality of life of the County while also helping to support our tourism offer and provide recreational facilities.

A 'Riparian Zone' is an integral part of the protection of a watercourse system and should be sufficiently wide to protect the river or water course. The determined width should be tailored to site specific, river reach or lakeshore characteristics. It is important that the buffer zone is large enough to protect the ecological integrity of the river (including emergent vegetation) and the riparian zone (bank side vegetation including trees) takes into account the human history of the area. It is the Council's policy objective to protect this zone from inappropriate development.

## Policy Objective Inland Lakes, Waterways

### **IW 1                      Inland Waterways**

- (a) Protect and conserve the quality, character and features of inland waterways by controlling developments close to navigable and non-navigable waterways in accordance with best practice guidelines.
- (b) Preserve, protect and enhance Galway's inland lakes and waterways for their amenity and recreational resource amenity.
- (c) Protect the riparian zones of watercourse systems throughout the County, recognising the benefits they provide in relation to flood risk management and their protection of the ecological integrity of watercourse systems and ensure they are considered in the land use zoning in Local Area Plans.
- (d) The Planning Authority will support in principle the development and upgrading of the Inland Waterways and their associated facilities in accordance with legislation, best practice and relevant management strategies, key stakeholders and bodies including Waterways Ireland.
- (e) Ensure all abstractions of water will be subject to assessment for compliance with the requirements of Article 6 of the Habitats Directive.
- (f) Seek to provide additional accesses to lake shores and rivers for public rights of way, parking and layby facilities, where appropriate.
- (g) Developments shall ensure that adequate soil protection measures are undertaken, where appropriate, including investigations into the nature and extent of any soil/groundwater contamination.

## 10.15 Green and Blue Infrastructure

Green Infrastructure (GI) is a generic term that includes the protection, management and enhancement of urban, peri-urban and rural environmental resources (natural and managed) through the provision of multifunctional and interconnected green spaces. Green and blue infrastructure is essentially the green spaces and the water environment. It is referred to as 'infrastructure' as it is as important as other types of infrastructure such as roads, schools and hospitals to the public. It is taken to mean all green space and water of public and natural value.

Green Infrastructure describes the County's interconnecting network of environmental assets in both urban and rural settings, which can deliver a range of environmental and quality of life benefits for communities. It includes natural, semi natural and developed environments, including upland habitats, wetlands, bogs, woodlands, gardens, groundwater, rivers and their floodplains, lakes, canals and coastal areas.

Blue Infrastructure (BI) refers to water bodies and waterways such as rivers, lakes, streams, reservoirs, harbour areas, floodplains, riverbanks, wetlands and ponds. These assets together form Green-Blue Infrastructure and can be both public and private, with or without public accessibility, in urban or rural areas. Green and Blue infrastructure provides environmental, economic, educational, ecological and social benefits through natural based solutions and can halt and reverse biodiversity loss, habitat fragmentation and the degradation of ecosystems.

Green and Blue infrastructure enhances opportunities for recreation and tourism, sustains our food industry and encourages new businesses to invest in the County. It is also increasingly being recognised that green and blue infrastructure is a vital component in building resilient communities capable of adapting to the consequences of climate change.

Within County Galway opportunities exist to expand and strengthen the green infrastructure network and to further explore the integration of green infrastructure into both public and private developments in the future. A key challenge for County Galway is to manage growth so that the County's natural heritage and biodiversity is

maintained in a way which protects the County's green infrastructure resources for the future. The aim is to achieve this through the delivery of the policy objectives interwoven throughout this plan and also via the implementation of the Galway Climate Adaptation Strategy, the Galway Heritage and Biodiversity Plan and other key statutory and non-statutory strategies.

### **Benefits of Green Infrastructure**

The key benefits associated with the development of a green infrastructure policy can be summarised as follows:

- Environmental Benefits.
- Social and Economic Benefits.
- Biodiversity Benefits.
- Improves Quality of Life.
- Productive Environments.
- Climate Change Adaptation and Mitigation Benefits.
- Creates a sense of place in Urban and Rural locations.
- Appreciation of landscapes, architecture, natural heritage and cultural heritage.
- Protects Water Resource, Flood Management and Improves Water Quality
- Integration of basin/catchment management with strategic planning.

### **Policy Objectives Green and Blue Infrastructure**

#### **GBI 1                      New Developments**

Require all proposals for large scale development to contribute to the protection, management and enhancement of the existing green/blue infrastructure of the County and the delivery of new green/blue infrastructure, where appropriate by including a green/ blue infrastructure plan as an integral part of any planning application. This plan should identify environmental and ecological assets, constraints and opportunities and shall include proposals which protect, manage, and enhance the development of green infrastructure resources in a sustainable manner.

**GBI 2****Green/Blue Infrastructure Network**

Facilitate the ongoing development and improvement of a green/blue infrastructure network for urban and rural areas, connecting both natural and semi-natural corridors such as including green spaces, open spaces, green amenities, residual land, rivers and canals. Enhancements along natural features may include the provision of riparian buffers, community food programmes (allotments) and wild areas for pollination thus ensuring the provision of natural areas for the benefit of biodiversity, wildlife and climate adaptation.

## 10.16 County Galway 's Network of Blueways, Greenways and Peatways

Blueways consist of a network of navigable inland waterways such as lakes, canals and rivers. They provide scenic routes by canoe, bike or on foot and connect Galway County with Galway City and with neighbouring counties. In County Galway examples include the River Shannon: Linear Park from Banagher, Co. Offaly to Meelick in Co. Galway, River Corrib and Lough Corrib; Great Western Blueway (River Corrib and Lake Blueway), Clare River Valley, Lough Derg; Lough Derg Blueway from Portumna to Scarriff in Co. Clare. Given the number of rivers and lakes in the county, the Council will endeavour to develop a network of integrated blueways both within the county and to other counties.

Greenways are essentially shared off-road routes designed for cyclists and pedestrians for leisure, recreation, tourism and daily journeys and are reserved exclusively for non-motorised journeys, developed in an integrated manner which enhances both the environment and quality of life of the surrounding area. They provide recreational opportunities for walking, jogging and cycling and can often coincide with river/stream corridors and can promote free passage for wildlife. In County Galway potential opportunities for walking and cycling include the following examples: The National Galway to Dublin Cycleway/ Greenway; Together with proposed greenways from Oranmore to Bearna, Athenry to Tuam, Clifden to Derrygimlagh and Clifden to Letterfrack.

Peatways within the County consists of a number of significant raised peat sites some of which are identified as worthy of protection in East Galway,for example

Kellysgrove Bog and some identified as having potential to connect with other green/blue parkland infrastructure.

The Council recognises the Blueways, Greenways and Peatways and the contribution that they make to the County's overall Green Infrastructure network, in addition to the many valuable economic, social and environmental benefits they provide. The Council identifies the need to both conserve and protect these assets and look to develop them further, as they provide natural defences against flood risk in both urban and rural areas; contribute and offer valuable economic potential in terms of tourism development and associated spin off's; and provide significant quality of life benefits.

The Council is fully committed to developing a network of Greenways, Blueways and Peatways in accordance with the requirements of national policy, including the Department of Transport, Sport and Tourism '*Strategy for the Future Development of National and Regional Greenways*' (2018).

## Policy Objectives Network of Blueways, Greenways and Peatways

### **BGP 1 Strategic Greenways/Blueways**

Support the delivery of sustainable strategic Greenway/Blueway projects in the County in accordance with the *Strategy for the Future Development of National and Regional Greenways*, enabling legislation, best practice in a manner that is compatible with nature conservation and other environmental policies.

### **BGP 2 Development of Strategic Greenway Network**

Support the development of an integrated Strategic Greenway Network of national and regional routes and maximise connectivity to existing greenways through linkages of cycling and walking infrastructure in a manner that is compatible with nature conservation and other environmental policies. This will include the following;

- National Galway to Dublin Cycleway/ Greenway;
- Connemara Greenway i.e., (Clifden to Oughterard, Galway to Oughterard);
- Oranmore to Bearna Coastal Greenway;
- Athenry to Tuam;
- Clifden to Derrygimlagh;
- Clifden to Letterfrack.



**BGP 3****Greenways, Blueways, Peatways and Trails**

a) It is a policy objective to support the extension of greenways, blueways, peatways and trails within the county and the integration and linkage of them with other existing / proposed greenways, blueways, peatways and trails both within and outside the county.

b) It is a policy objective to support where relevant the concept of Greenways to consider local travel infrastructure, and connectivity to local towns and villages in the design of any Greenway route.

## 10.17 Public Rights of Way

Public rights of way have existed over centuries and served as a means for people to travel around various parts of the County. Public rights of way can form a significant recreation and amenity resource and are also an important economic and tourism asset for the County. The Council recognises the importance of maintaining established rights of way and supporting initiatives for establishing walking routes and general accessibility.

### Policy Objective Public Rights of Way

**PRW 1****Public Rights of Way**

a) Where requested, give consideration to the need to preserve public rights of way which give access to seashore, mountain, lakeshore, riverbank or other place of natural beauty or recreational utility.

b) Seek to identify, map and protect verified existing public rights of way as they become available to the Planning Authority over the lifetime of the plan.

c) It is a Policy Objective of the Planning Authority to map and establish, through public engagement, a register of Public Rights of Way in the County as resources permit within the lifetime of the plan. Maps will be drawn up as appropriate.

## 10.18 UNESCO Global Geoparks and World Heritage Sites

UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable economic development. Their bottom-up approach of combining conservation with sustainable development while

involving local communities has become increasingly popular. At present, there are 127 UNESCO Global Geoparks in 35 countries.

Joyce County & Western Lakes aspiring geopark is initially a two-year project (2020-2021), its key aim is to develop a geopark in the area surrounding Joyce Country on the Galway-Mayo border, and Loughs Mask, Carra and Corrib, with the intention of applying for full UNESCO Global Geopark status.

The Burren Lowlands is an area of significant cultural and landscape heritage stretching from the Slieve Aughties to the Burren Uplands and from Kinvarra to Crusheen in Co Clare.

The Burren and Cliffs of Moher UNESCO Global Geopark possesses a robust network of eco-businesses living within its iconic landscape of karst limestone, caves and cliffs. It supports sustainable tourism that develops and promotes the area as a special encounter-rich destination, strengthens the local economy and improves the visitor experience. The Geopark also promotes its geology and sensitive hydrogeological system through educational and outreach activities whilst pursuing strong practices in sustainable tourism.

While the Burren and Cliffs of Moher UNESCO Global Geopark is located in County Clare, this designation has benefited the communities of the Burren Lowlands area of County Galway.

#### **Policy Objective UNESCO Global Geopark Status**

##### **UGG 1 UNESCO Global Geopark Status**

To continue to work in partnership with all relevant stakeholders to facilitate and support the ongoing work of the Joyce Country and Western Lakes aspiring Geopark and its application for full UNESCO Global Geopark status. Support initiatives in relation to the Burren Lowlands, The Burren and Cliffs of Moher UNESCO Global Geopark that relate to the county.

## 10.19 World Heritage Sites

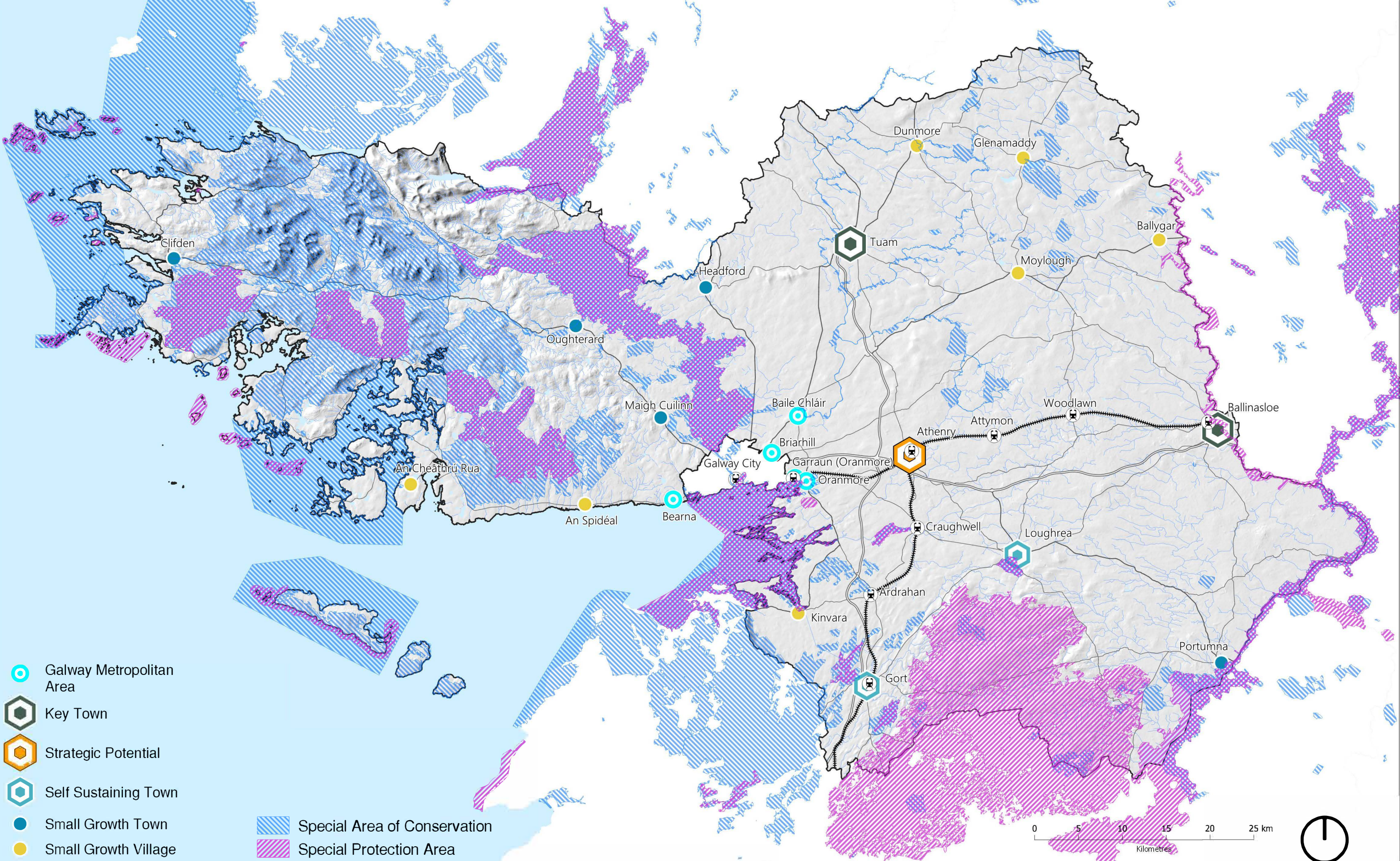
The protection of the world's cultural and natural heritage is of high importance for present and future generations and, to this end, the State is committed to the identification, protection, conservation, presentation and transmission of its World Heritage Sites (tentative list) to future generations in accordance with Article 4 of the World Heritage Convention.







### Policy Objective Tentative World Heritage Sites



#### TWHS 1

#### Tentative World Heritage Sites

Protect the Outstanding Universal Value of the tentative World Heritage Sites in County Galway namely the Western Stone Forts and the Burren that are included in the UNESCO Tentative List and engage with other national and international initiatives which promote the special built, natural and cultural heritage of places in the County. Collaborate with landowners, local communities and other relevant stakeholders to achieve World Heritage Site status for the sites identified in County Galway.

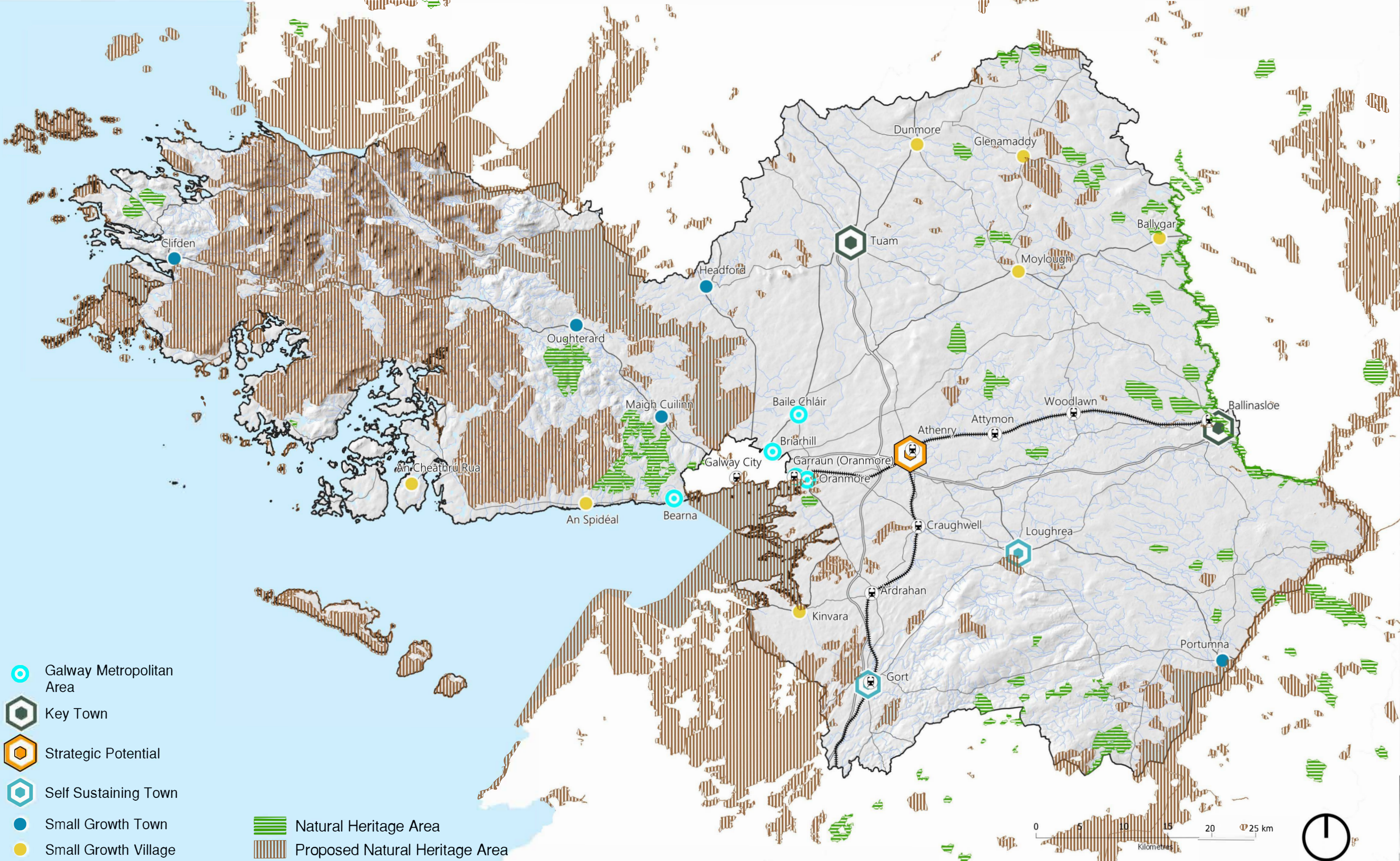








-  Galway Metropolitan Area
-  Key Town
-  Strategic Potential
-  Self-Sustaining Town
-  Small Growth Town
-  Small Growth Village



-  Special Area of Conservation
-  Special Protection Area



**Map 10.1: European Sites**



-  Galway Metropolitan Area
-  Key Town
-  Strategic Potential
-  Self Sustaining Town
-  Small Growth Town
-  Small Growth Village

-  Natural Heritage Area
-  Proposed Natural Heritage Area



**Map 10.2: Natural Heritage Areas**