

Chapter 4: Biodiversity and Landscape

Strategic Aim:

Protect and enhance Offaly's natural assets of clean water, biodiversity, landscape, green infrastructure, heritage and agricultural land.

4.1 Introduction

Biodiversity or biological diversity simply refers to all living things on earth; people, plants, animals, fungi and micro-organisms, the ecosystems and habitats which they form part of and their interdependence and interconnectedness with each other. The conservation of biodiversity is an integral part of good environmental management.

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.

Current negative trends in biodiversity and ecosystems will undermine progress towards 80% of the assessed targets of the UN Sustainable Development Goals, related to poverty, hunger, health, water, cities, climate, oceans and land. A Strategic Objective of this Co. Development Plan is to contribute, as practicable, towards achievement of these goals. Loss of biodiversity is therefore shown to be not only an environmental issue, but also a developmental, economic, security, social and moral issue as well.

Halting and reversing the loss of biodiversity ensures that we are supplied with the 'ecosystem services' it provides, that are essential to our well-being. In agriculture, these services include the maintenance of soil structure and the supply of nutrients, pollination and pest control which will guarantee our food security. Outdoor recreation and tourism also relies heavily on ecosystem services and biodiversity to provide the experience of being 'in nature' that both local people and visitors to County Offaly increasingly seek out.

In line with Regional Policy Objective (RPO) 3.4 of the Eastern and Midland Regional Spatial and Economic Strategy, the Council promotes an ecosystems services approach in the preparation of this County Development Plan. The four main types of ecosystem services are provisioning, regulating, habitat and cultural, each of which are defined in Table 4.1 below.

Table 4.1 Definition of Each Type of Ecosystem Service

Type of Ecosystem Services	Definition
Provisioning services	Products obtained from ecosystems such as food, fresh water, wood, fibre, genetic resources and medicines.
Regulating services	Benefits obtained from the regulation of ecosystem processes such as climate regulation, natural hazard regulation, water purification, waste management, pollination and pest control.
Habitat services	Provision of habitats for migratory species and to maintain the viability of gene-pools.
Cultural services	Non-material benefits that people obtain from ecosystems such as spiritual enrichment, intellectual development, recreation and aesthetic values.

Offaly has a rich biodiversity and range of ecosystems, including its geology such as the Slieve Bloom Mountains and Croghan Hill, extensive peatlands, wetland landscapes, rivers, Grand Canal, woodlands, grasslands, eskers, trees and hedgerows. Protecting and enhancing our biodiversity and ecosystems is vital not only for our health, well-being, tourism, attractiveness of place, and quality of life of our communities and but is also crucially important in adapting to climate change.

4.2 Legislative and Policy Context

This chapter is prepared having regard to the following legislative and policy context:

- EU Habitats Directive (92/43/EEC);
- EU Birds Directive (2009/147/EC);
- EU Water Framework Directive (2000/60/EC);
- Wildlife Acts 1976 as amended;
- Directive 2011/92/EU, as amended by Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment;
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment;
- Convention of Wetlands of International Importance (Ramsar sites);
- National Monuments Act 1930 as amended;
- Heritage Ireland 2030;
- Appropriate Assessment of Plans and Projects in Ireland – Guidelines for Planning Authorities 2009;

- European Landscape Convention (Florence, 2000);
- National Landscape Strategy 2015-2025;
- Project Ireland 2040 – National Planning Framework;
- National Development Plan 2018-2027;
- Eastern and Midland Regional Spatial and Economic Strategy 2019-2031;
- National Adaptation Framework – Planning for a Climate Resilient Ireland, Department of Communications, Climate Action and Environment, 2018;
- All Ireland Pollinator Plan 2015-2020;
- National Biodiversity Action Plan 2017-2021;
- Offaly Heritage Plan Key Actions for 2017-2021; and
- Biodiversity Action Strategy for Offaly 2005.

4.3 Designated Sites for Nature Conservation

There are a number of designations which offer protection or require that particular areas of our natural heritage are managed. These include:

- Natura 2000 sites - Special Areas of Conservation and Special Protection Areas
- Natural Heritage Areas
- Other sites for environmental or ecological protection such as Wildlife Sites (including Statutory Nature Reserves), Ramsar Sites, Flora Protection Order Sites, Wildfowl Sanctuaries, Biogenetic Reserves and Sites designated for the protection of plant species and habitats.

4.3.1 Natura 2000 Sites (European Sites)

Both Special Areas of Conservation and Special Protection Areas form part of the 'Natura 2000' network of sites throughout Europe, also known as European sites. Special Areas of Conservation (SACs), which are listed in Annex I (habitats) and Annex II (species – not birds) of the EU Habitats Directive have been selected because they support habitats and plant and animal species that are rare or threatened in Europe and require particular measures, including the designation of protected sites, to conserve them. Special Protection Areas (SPAs) which were established under Annex 1 of the Birds Directive, have been selected because they support populations of birds of particular species that are rare or threatened in Europe and require particular measures, including the designation of protected areas to conserve them. The Birds Directive also recognises that habitat loss and degradation are the most serious threats to the conservation of wild birds and therefore places great emphasis on the protection of habitats, such as wetland landscapes, for endangered as well as regularly occurring migratory species.

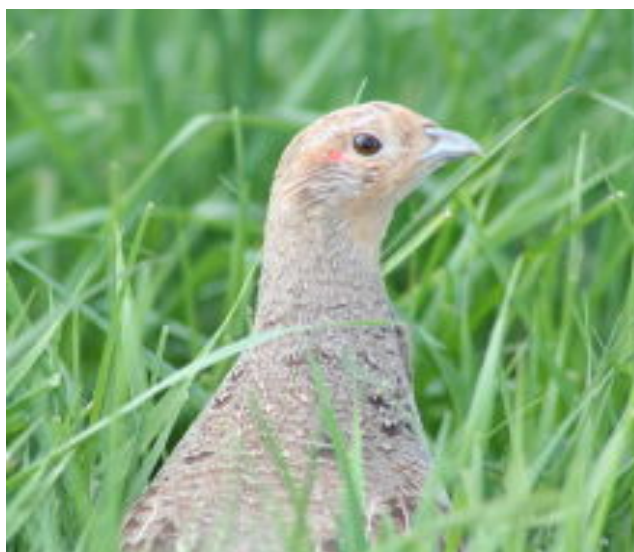


Figure 4.1 Grey Partridge

Table 4.2 Special Areas of Conservation in County Offaly

Site Name	Site Code
All Saints Bog and Esker SAC	000566
Charleville Wood SAC	000571
Clara Bog SAC	000572
Clonaslee Eskers and Derry Bog SAC	000859
Ferbane Bog SAC	000575
Fin Lough (Offaly) SAC	000576
Island Fen SAC	002236
Lisduff Fen SAC	002147
Mongan Bog SAC	000580
Moyclare Bog SAC	000581
Pilgrim's Road Esker SAC	001776
Raheenmore Bog SAC	000582

Ridge Road, South West of Rapemills SAC	000919
River Barrow and River Nore SAC	002162
River Shannon Callows SAC	000216
Sharavogue Bog SAC	000585
Slieve Bloom Mountains SAC	000412
The Long Derries, Edenderry SAC	000925

Table 4.3 Special Protection Areas in County Offaly

Site Name	Site Code
All Saints Bog SPA	004103
Dovegrove Callows SPA	004137
Middle Shannon Callows SPA	004096
Mongan Bog SPA	004017
River Little Brosna Callows SPA	004086
Slieve Bloom Mountains SPA	004160

It is a requirement under the Planning and Development Act 2000 (as amended), for a County Development Plan to include objectives for the conservation and protection of Natura 2000 sites (European sites) and other sites. A Planning Authority must have regard to any European Site when making a decision in relation to a plan or project. All plans or projects, unless they are directly connected with or necessary to the management of a Natura 2000 site, are required to be subject to screening for Appropriate Assessment, to determine if they are likely to have a significant effect on a Natura 2000 site, in view of the sites conservation objectives, either individually or in combination with other plans or projects.

A project or plan may only proceed if it can be concluded on the basis of Appropriate Assessment that there will be no adverse effects on the integrity of a Natura 2000 site. If adverse effects are likely, or in cases of doubt, then derogation under Article 6 (4) shall apply, but only in cases of imperative reasons of overriding public interest or based on human health or public safety if it relates to a priority habitat or species.



Figure 4.2 River Shannon

4.3.2 Natural Heritage Areas and proposed Natural Heritage Areas

Natural Heritage Areas (NHAs) are designated sites of national importance for habitats and species in Ireland. NHAs are established under the Wildlife (Amendment) Act, 2000, but are conserved and protected under the Wildlife Acts, 1976 (as amended). In addition, there are 51 pNHAs in County Offaly, published on a non-statutory basis in 1995, which are of significance for wildlife and habitats but have not since been statutorily proposed or designated.

Table 4.4 Natural Heritage Areas in County Offaly

Site Name	Site Code
Black Castle Bog NHA	000570
Cangort Bog NHA	000890
Clonydonnin Bog NHA	000565
Daingean Bog NHA	002033
Hawkswood Bog NHA	002355
River Little Brosna Callows NHA	000564
Screggan Bog NHA	000921

Table 4.5 Proposed Natural Heritage Areas in County Offaly

Site Name	Site Code
All Saints Bog and Esker	000566
Annaghmore Lough Fen (Offaly)	000413
Ballintemple Bog	000882
Ballyduff Esker	000885
Ballyduff Wood	001777
Banagher (domestic dwelling, occupied)	000567
Birr (domestic dwelling No. 1, occupied)	000569
Birr (domestic dwelling No. 2, occupied)	000658
Brackens dwelling, near Whiteford	002058
Camcor Wood	000889
Charleville Wood	000571
Clara Bog	000572
Cloghanbeg	002059
Clonad Wood	000574
Clonlyon Glebe Bog	000893
Clonfinlough Esker	000892
Clorhane Wood	000894
Derrykeel Meadows	000897
Doon Esker Wood	001830
Dovegrove Callows	000010
Drumakeenan, Eagle Hill and Perrys Mill	000900
Drumakeenan National School	002064
Ferbane Bog	000575

Fin Lough (Offaly)	000576
Golden Grove Woods	000903
Grand Canal	002104
Kilcormac Esker	000906
Kinnitty (domestic dwelling, occupied)	000579
Lough Boora	001365
Lough Coura	000909
Lough Nahinch (Tipperary)	000936
Lough Nanag Esker	000910
Miltown, Shinrone	002065
Mongan Bog	000580
Mount St. Joseph Woods	000913
Moyclare Bog	000581
Murphys Bridge Esker	001775
Pallas Lough	000916
Pilgrims Road Esker	001776
Raheen Lough	000917
Raheenmore Bog	000582
Ridge Road, SW of Rapemills	000919
River Shannon Callows	000216
Roscrea Bog	000583
Ross and Glenns Eskers	000920
Sharavogue Bog	000585
Slieve Bloom Mountains	000412
St. Josephs, Mountheaton	002063

The Long Derris, Edenderry	000925
Woodfield Bog	000586
Woodville Woods	000927

Figure 4.3 European and National Designated Sites

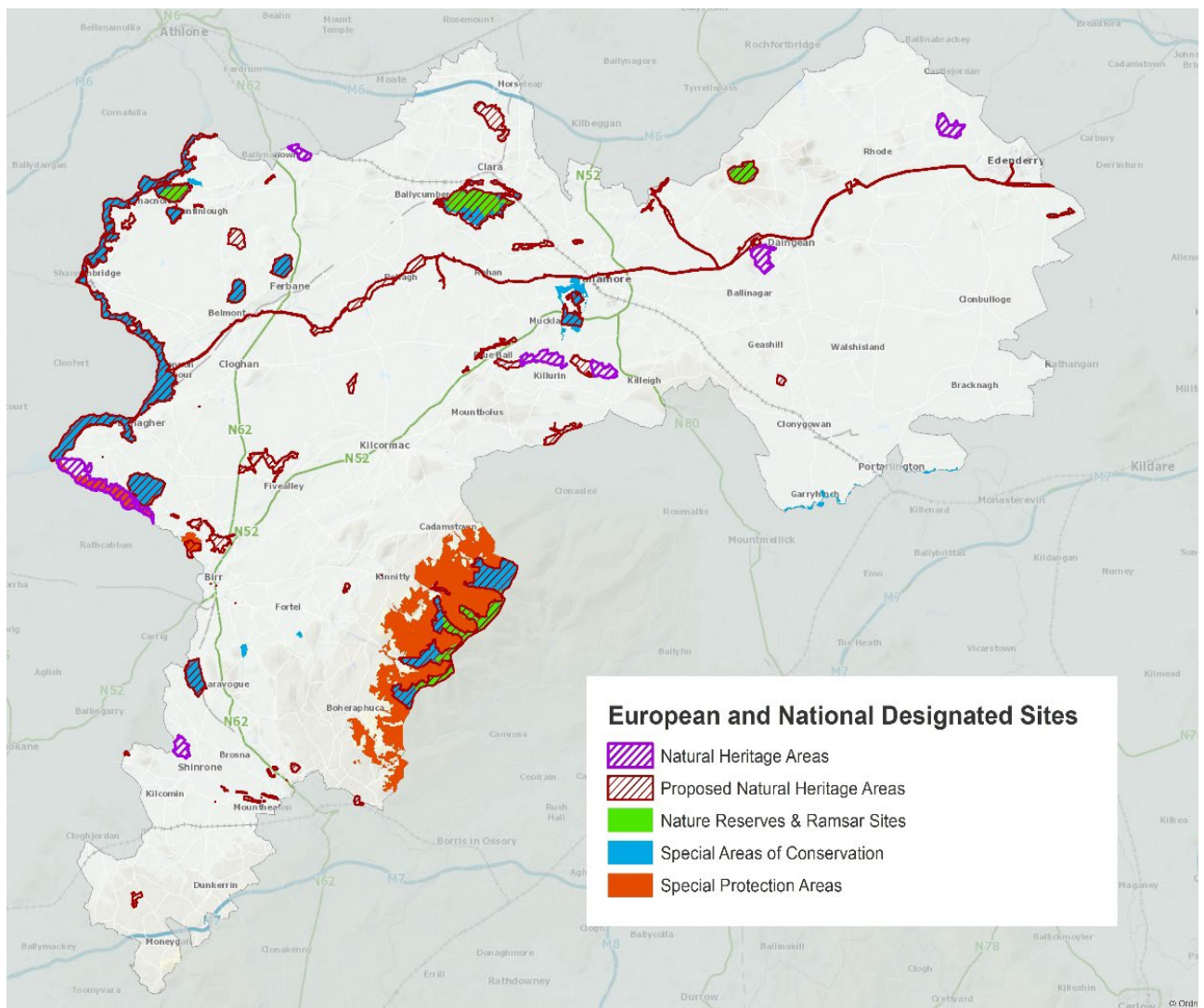




Figure 4.4 Grand Canal

4.4 Other Sites for Environmental and Ecological Protection

There are a number of other sites across the county that have been designated for environmental and/or ecological protection. It is imperative that these sites are protected and conserved for the protection of flora and fauna, for their significant amenity value and for their ongoing educational resource value.

There are four Statutory Nature Reserves in County Offaly as listed in Table 4.6 below. Statutory Nature Reserves have been given a priority designation in association with the EU Habitats Directive. The Ramsar Convention on Wetlands came into force for Ireland on 15 March 1985. Ireland presently has 45 sites designated as Wetlands of International Importance and 4 of these are located in County Offaly covering a total area of 2,979 hectares. Biogenetic Reserves are designated by the Council of Europe and are natural habitats which are especially valuable for nature conservation in Europe. There are currently fourteen Biogenetic Reserves in Ireland, four of which are in County Offaly.

Table 4.6 Statutory Reserves in County Offaly

Nature Reserve	Area (hectares)	Main Habitats
Slieve Bloom Mountains	2,300	Blanket bog
Clara Bog	460	Raised bog
Mongan Bog	119	Raised bog
Raheenmore Bog	162	Raised bog

Table 4.7 Convention on Wetlands (RAMSAR) Sites in County Offaly

Ramsar Site	Area Designated (hectares)	Site Number
Clara Bog	460	415
Mongan Bog	127	416
Raheenmore Bog	162	417
Slieve Bloom Mountains	2,230	335

Table 4.8 Biogenetic Reserves

Clara Bog
Mongan Bog
Slieve Bloom Mountains
Raheenmore Bog



Figure 4.5 Bog Cotton

4.5 Non-Designated Areas

The Council recognises that nature conservation is not just confined to Designated sites and acknowledges the need to protect non-designated sites such as plant species protected under the Flora (Protection) Order 2015 and animal species protected under the Wildlife Act 1976 and the Wildlife Act 1976 as amended.

Certain plant, animal and bird species are protected by law. This 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, and those listed in Annex 1 of the Birds Directive. The planning process should seek to further protect and enhance those species (currently protected by law) and their habitats.

Table 4.9 below lists the sites in County Offaly, which are designated for the protection of plants, species and habitats. These are designated under the provisions of the Wildlife Act 1976. (S.I. No. 338 of 1980). It should be noted that protected species are protected wherever they occur and not just within designated sites. The Flora Protection Order S.I. No. 94 of 1999 lists the species of flora, which are protected, and also protects the habitat or environment of protected flora, making it an offence to wilfully alter or otherwise interfere with these areas. The occurrence in Offaly of species protected under the Flora Protection Order is shown in Table 4.10 below.

The Council shall protect plant and animal species that are listed under Wildlife Act, 1976 (amended in 2000). Some of the rarest flora species are protected under the Wildlife (Amendment) Act 2000. The current list of protected species is set out in the Flora (Protection) Order, (1999) which supersedes orders made in 1980 and 1987.

Under the Habitats Directive there is a requirement that certain species listed in Annex IV of the Habitats Directive are strictly protected. These species are not necessarily associated with areas subject to a specific designation.

Table 4.9 Sites designated for the protection of plants, species and habitats

Grand Canal at Tullamore (N 340 250)
Grand Canal at Kilbeggan (N.35 35)
Shannon Harbour near Bullock Island (N020 178)
Camus Callows, Clonmacnoise (N02 31)

Table 4.10 Occurrence in Offaly of species protected under the Flora Protection Order (1999)

Species	Notes	Location	Grid Reference
Basil Thyme	Eskers; dry species-rich grasslands	The Long Derries, Edenderry Roadside, Portarlington Road, Edenderry Rabbit Burrow, Church Hill, Blueball, Tullamore.	N6568 2933 N6200 3096 N2513 2251
Red Hemp Nettle	Eskers; dry species-rich grasslands	Coneycarn Pit, Glaster, Birr. Murphy's Bridge Esker, Tullamore. Agall Quarry, Blueball, Tullamore.	N00247 10774 N37476 30877 N26977 23048
Opposite-Leaved pondweed	Mesotrophic lakes/water bodies	Shannon Harbour (drain between road and callows). Tullamore River	N030 180 N340 250
Meadow Barley	Waste ground, banks, field edges	Banagher (grazed meadow lying between the Shannon and the old railway line). Minus Island, Banagher.	N01172 16232 N02198 18515
Slender Cotton Grass	Peatlands	Sharavogue Bog	S052988

4.6 Geology, Eskers and Quarries

4.6.1 Geology

The Irish Geological Heritage (IGH) Programme has identified sites of national or local geological heritage importance, which are classed as County Geological Sites (CGS) which have been adopted into the National Heritage Plan. Table 4.11 below includes a schedule of CGS identified by the IGH Programme for Protection in County Offaly in 2016.

County Offaly contains the most significant collection of Mushroom Stones in Ireland. Mushroom stones are solitary sentinels of limestone, shaped like mushrooms from prolonged exposure to lapping waves at the edge of postglacial lakes which have since vanished or retreated. These stones are important geomorphological and archaeological features, giving us information about past landscapes and landscape change while ancient lichen communities continue to live on many of them.

A Geopark is a territory with a well-defined management structure in place where the geological heritage is of outstanding significance and is used to develop sustainable tourism opportunities. The Council considers that there is some scope for considering whether the eskers of Offaly and adjacent counties (principally Westmeath) could meet the criteria for a Geopark application with the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Table 4.11 Schedule of County Geological Sites identified by the Irish Geological Heritage Programme for Protection in County Offaly in 2016

Site Name	Designation	Irish Transverse Mercator (ITM) Co-ordinates
Ballyduff Esker	County Geological Site	630860E 727560N (centre of esker at Ballykilmurry)
Ballylin Mushroom Rock	County Geological Site	611676E 726581N
Ballynagarbry (Mount Temple) Esker	County Geological Site	622050E 738400N (centre of esker)
Camcor Forest Quarry	County Geological Site	621120E 704600N (Camcor Forest Entrance, R440)
Clara Bog	County Geological Site; recommended for Geological NHA	624890E 730400N (Boardwalk)
Clonbulloge Spring	County Geological Site	660696E 723690N
Clonkeen Mushroom Rock	County Geological Site	660080E 723125N
Clonmacnoise Esker	County Geological Site; recommended for Geological NHA	600870E 730650N (centre of esker at Clonmacnoise)
Clorhane Mushroom Rocks	County Geological Site	598775E 728172N
Clorhane Quarries	County Geological Site	598800E 727695N
Crancreagh Mushroom Rock	County Geological Site; recommended for Geological NHA	607500E 716495N
Creevgh Mushroom Rocks	County Geological Site	699760E 729270N
Crinkill Mushroom Rock	County Geological Site	605810E 703123N
Croghan Hill	County Geological Site; recommended for Geological NHA	648050E 733140N
Derrinlough Mushroom Rock	County Geological Site	608509E 715093N
Drinagh Mushroom Rock	County Geological Site	610560E 715868N
Endrim Mushroom Rock	County Geological Site	608900E 728785N

Kilcormac Esker	County Geological Site; recommended for Geological NHA	616500E 714700N (centre of main esker segment, near Kilcormac)
Kinnitty Eskers	County Geological Site	617335E 707535N (centre of main esker segment)
Little Brosna-Shannon Confluence	County Geological Site; recommended for Geological NHA	594750E 713000N (Little Brosna-Shannon confluence)
Lough Boora Parklands	County Geological Site	618200E 719050N (at centre of feature)
Marlows Hole	County Geological Site	626340E 719725N
Mongan Bog	County Geological Site	603300E 730850N (centre of bog)
Mount Briscoe Cave	County Geological Site	649740E 729200N
Screggan Fan	County Geological Site	629170E 722250N
Sillogue Spring	County Geological Site	631360E 730290N
Silver River	County Geological Site	622700E 708515N (Cadamstown Bridge)
Toberdaly	County Geological Site	651670E 731710N





Figure 4.6 Images of Lough Boora Discovery Park

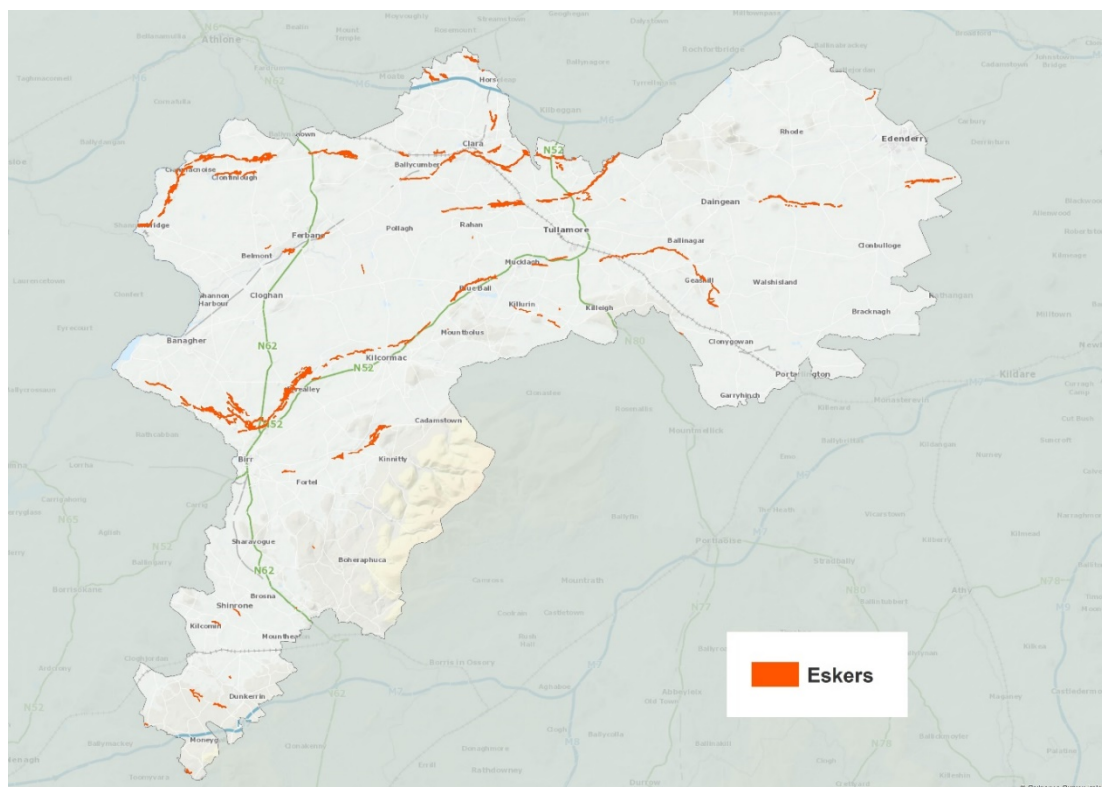
4.6.2 Eskers

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 Offaly's Esker Landscape deriving from its geological, zoological, botanical, scientific and landscape value.

An Offaly Esker Study published in 2006 is a valuable source of information regarding the existing eskers in part of the county. There are twenty esker systems in Offaly containing 208 segments. Each esker system comprises a landform or series of landforms (esker segments) having a single process history, in a specific zone. The esker system covers over 4,000 acres in Offaly. The esker system examined by this survey, the Clonmacnoise Esker, is the largest esker system in the county, covering 5.79 km² and comprising one-third of the area of all eskers in the county. The study found that the Clonmacnoise esker system is of international importance due to its high habitat and species diversity and supports the designation of the Clonmacnoise esker system as a pNHA. The Study also confirms the importance of including policies in the Offaly Development Plan to restrict exploitation on eskers and suggested a further focus on pit restoration. In addition, the Study recommends the Clonmacnoise esker system, as well as many of its adjacent esker systems in Offaly, has the potential to host a portion of a Geopark spanning the Westmeath-Offaly region.

Figure 4.7 below shows the location of the esker systems in the county. This map is based on revised Quaternary geological and geomorphological mapping prepared by the GSI that is based on high resolution digital elevation models, high resolution aerial imagery, national subsoil permeability data, field mapping in certain low confidence areas and academic literature.

Figure 4.7 Location of esker systems in County Offaly



The Council recognises the importance of increasing cycling and pedestrian access to esker sites, similar to the Pilgrim path walking route from Clonmacnoise to the River Shannon Callows and Mongans Bog, which have the potential to increase public awareness and appreciation of these sites.

4.6.3 Quarries

Offaly has a number of exhausted or worked out quarries and sand and gravel pits, where activity has ceased. It is now recognised that worked out quarries have potential as rich habitat and nesting sites. The Council encourages operators to consult with the Irish Concrete Federation (ICF) and the National Parks and Wildlife Service (NPWS) document “Guidelines for the Protection of Biodiversity within the Extractive Industry” which advises how biodiversity can be catered for from planning applications through to operations and rehabilitation of a quarry.

4.7 Peatlands

Notwithstanding the extensive peat production which has taken place at various sites within the county, peatlands act as important amenity areas for locals and visitors while also contributing significantly to climate change mitigation and adaptation, providing important carbon sinks, water attenuation and flooding protection. Peatlands are considered to be very important ecosystems and many of the county’s bogs are listed designated sites under Annex I (habitats) of the EU Directive and are listed in Table 4.2 of this chapter.

National environmental policies are dictating that domestic turf cutting on these designated raised bogs will be phased out over the coming years. The future rehabilitation of peatlands offers great potential to enhance and restore natural systems (natural assets) and increase the flow of ecosystem goods and services like flood regulation, water purification, habitat and species biodiversity as well as amenity and recreational activity. It is necessary for the Council to continue to liaise with various government and non-government organisations in an effort to secure the conservation of the peatlands in the county.

The National Peatland Strategy produced by the Department of Arts, Heritage and the Gaeltacht and the NPWS aims to provide a long-term management framework to optimise the social, environmental and economic contribution of all peatlands within the State, setting out supports, structures, funding mechanisms and regulatory frameworks to promote a partnership approach to their sustainable development.

The Council recognises that the development of peatways offer a unique alternative means for tourists and visitors to access and enjoy rural parts of the county while supporting the development of rural communities and job creation in the rural economy, as well as the protection and promotion of natural assets and biodiversity.

The development of Lough Boora Discovery Park in Offaly, voted 'Ireland's Favourite Place' in a nationwide Royal Town Planning Institute competition in 2018, is an example of a suitable after use for a cutaway bog, providing important habitats for a wide range of animals, birds and plants along with amenity facilities such as a Sculpture Park, visitor centre, angling area, bird watching facilities and walking and cycling routes.

The Council recognises other potential long term opportunities on rehabilitated peatlands such as the development of;

- a 'Regional Peatway' connecting natural and cultural attractions and the development of a National Park for the raised bog peatlands in the midlands; and
- Wilderness corridors at the following locations;
 - Cavemount, Esker, Ballycon, Derrycricket, Clonsast North, Clonsast and Derrycastle in East Offaly; and
 - Blackwater, Ballaghurt and Belmont Bogs in West Offaly, from Clonmacnoise in the direction of Belmont village, all of which can be linked to routes identified in Figure 6.13 'Midlands Cycling Destination, Offaly Network Map.'

The Council envisages that Wilderness Corridors will be large areas that are;

- characterised by an absence of intrusive human activity, settlements, infrastructure or visual disturbance encouraging visitors to 'go off the beaten track', 'to get away from it all' and 'to immerse themselves in nature';
- composed of natural habitats and species and regenerated peatlands;
- located close to major tourist attractions such as Clonmacnoise, the River Shannon and the Grand Canal Greenway which provide opportunities to develop a network of interlinked 'peatways' by reusing existing turbary access tracks and bog railway lines along with routes of this nature.

Figure 4.8 Peatlands in County Offaly

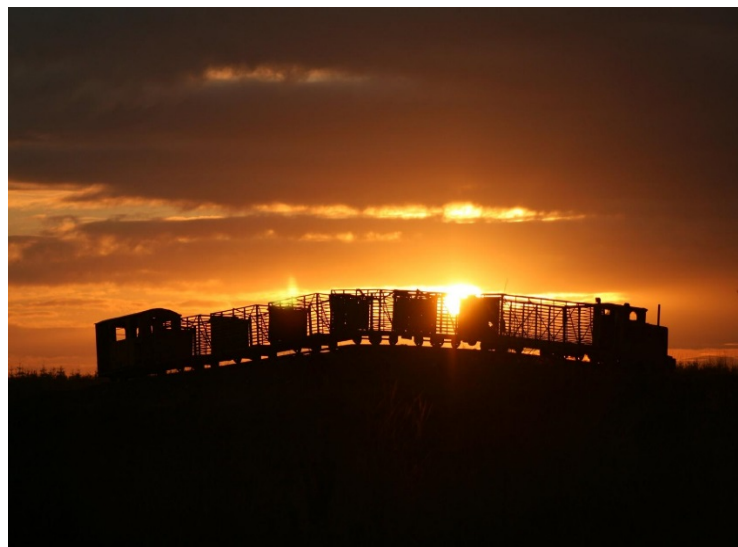
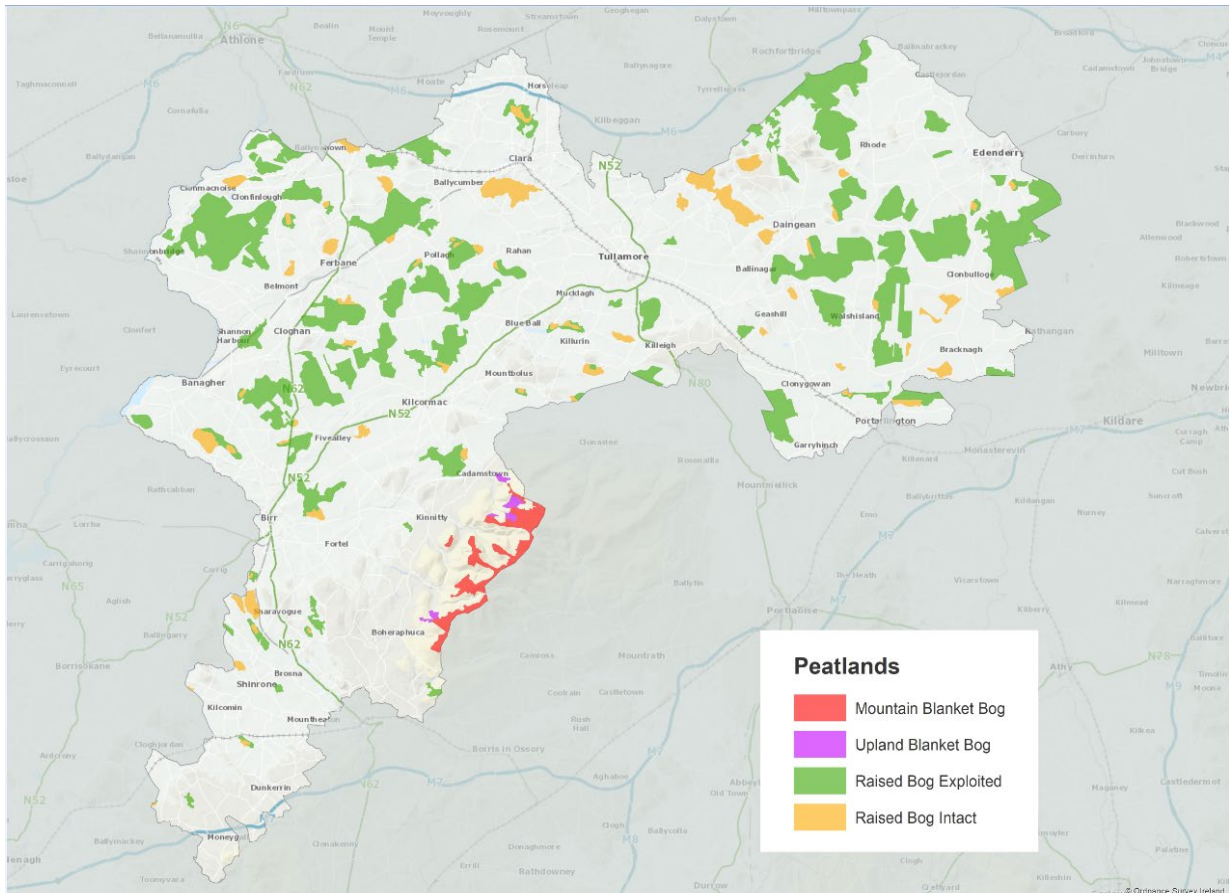


Figure 4.9 Lough Boora Discovery Park

4.8 Lakes, Waterways and Wetland Landscapes

County Offaly contains a number of important rivers, canals, lakes and wetland landscapes, listed in Table 4.12 below, which are of great importance both as amenity resources and wildlife habitats but also are of benefit for the management of fluvial and pluvial flooding.

The number of wetland landscapes in the county is expected to increase post Bord na Móna harvesting, as part of the targeted rehabilitation under the company's Integrated Pollution Control Licences (cessation of pumping, drain blocking and dam building) of former bare peat production areas and also due to the continued effects of climate change. Existing and new wetland landscapes create a rich mosaic of semi-natural habitats including open water, poor fen, rich fen, scrub grassland and heathland.

Table 4.12 Lakes, Waterways and Wetland Landscapes in County Offaly

Rivers	Canals	Lakes	Wetlands
River Shannon, River Barrow, River Brosna, Figile River, Camcor River, Clodiagh River, Silver River, Yellow River, Ballyfinboy River, Monagh River, River Gageborough, Tullamore River.	Grand Canal	Natural Lakes: Pallas Lake Fin Lough Raheen Lake	Natural Wetlands: Shannon Callows Little Brosna Callows
		Man Made Lakes: Bord Na Móna Lakes: Lough Boora Boora Lakes Loch an Dochais Finnermore Lake Loch Clochan Tumduff Mór Tumduff Beag Derryounce Lakes Other: Charleville Lake	Bord Na Móna Wetlands: Turraun Wetlands Leabeg Wetlands Drinagh Wetlands Derries Wetlands

The Council recognises the importance of riparian buffer zones, which are strips of vegetated land bordering a river or stream, which can protect a watercourse from the impact of human activity or development in an area, filtering out pollutants and sediment from overland surface runoff, enhancing flood alleviation and providing a habitat for animals with close affinity to rivers (for example, otters, kingfishers, dippers and dragonflies), and can also provide space for amenity uses, particularly in urban areas. The Inland Fisheries Ireland updated guideline document '*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*' should be followed in this regard.



Figure 4.10 Loch Clochan

4.9 Trees, Forestry and Hedgerows

Trees, forestry and hedgerows make a valuable contribution to the landscape and visual amenity of County Offaly and provide wider environmental benefits that include carbon storage. Trees, either individually, as specimen trees, or in groups also make an important contribution to the landscape of many of the country house demesnes throughout the county. They perform many functions such as shelter from wind, act as a natural barrier, absorb pollutants, produce oxygen, contribute to wellness and provide a biodiversity function in terms of provision of habitat and food sources. Hedgerows, in many instances double hedgerows, often form townland boundaries and as such are an important historic resource. These hedgerows also act as wildlife corridors.

The Council aims to protect individual trees, groups of trees or woodland, which are of environmental and/or amenity value. This can be done so with a Tree Preservation Order (TPO) that can be made through the development plan process or a separate TPO process under Section 205 of the Planning and Development Act 2000 (as amended). The existing Tree Preservation Orders are set out below in Table 4.13.

Table 4.13 Tree Preservation Orders made by Offaly County Council

Reference Number	Location	Date of TPO
T.P.1	Clonmacnoise	6 th August 1970
T.P.2	Faddenmore, Belmont	29 th January 1976
T.P.2A	Tullybeg, Rahan	6 th November 1981
T.P.3	Castleroan, Dunkerrin	10 th June 1981
T.P.7A-7G	Monasterosis (Edenderry 7 separate TPOs)	29 th October 1982
T.P.9	Laywalk, Geashill	31 st January 1984
T.P.15	Kilcloncorkery, Rathangan	6 th August 1986

The Council considers that groups of trees listed in Table 4.14 are of significant value to the environment and will ensure such trees are protected where necessary.

Table 4.14 Groups of Trees that Contribute to Amenity

1	Trees West of Tullamore (centering on Charleville Castle and the Golf Course)
2	Trees at Durrow Demesne
3	Trees at Tullybeg House, Rahan
4	Trees at Cloneygowan Village
5	Trees at Garryhinch Church
6	Trees at the Green Clara
7	Trees at Kinnitty Village
8	Trees at Mount Lucas
9	Trees at Drumcooley Hill
10	Trees at Ballykillen Hill
11	Trees at Bellair

12	Trees at Belmont
13	Trees at Blacklion
14	Trees at Ballylin Wood, Ferbane, in the Business Park
15	Oakley Park, Clareen (on either side of Birr Road bordering and opposite to Coillte Forest)
16	Trees adjacent to Seir Kieran Monastic site, Clareen
17	Trees at Strawberry Hill (between Belmont and Cloghan)
18	Trees at Aughaboy, Ferbane

Figure 4.11 Location of Tree Preservation Orders and Groups of Trees that Contribute to Amenity

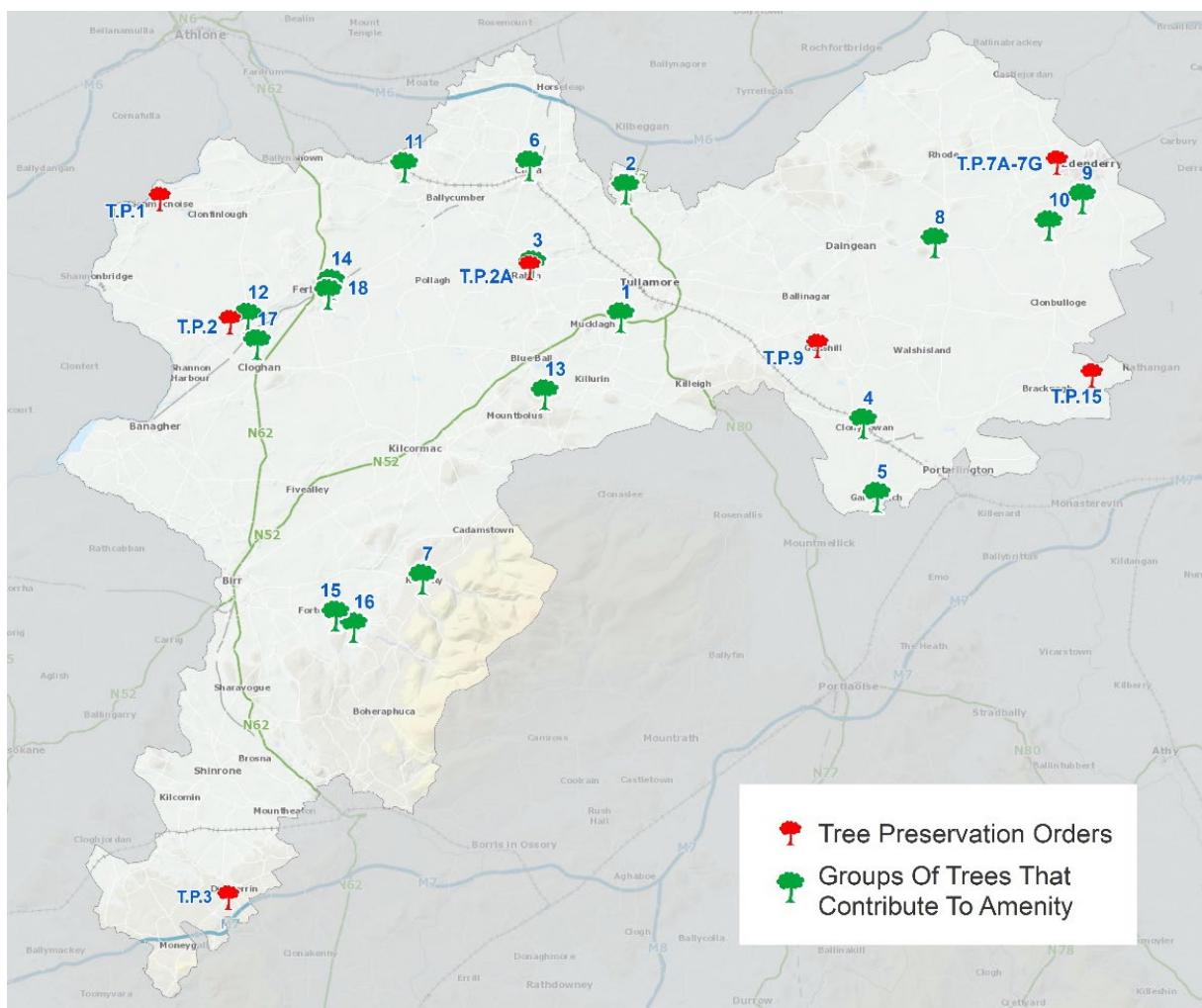




Figure 4.12 Charleville Woods, Tullamore

Ireland's National Forest Inventory 2017 states that Offaly is covered with 293,300 hectares of forestry. Coillte, Ireland's commercial forestry company, is responsible for the planting, growing, protecting, managing and harvesting of extensive areas of forestry in Offaly. Coillte, in addition to their significant role in biodiversity and forestry management, provide:

- valuable long standing walking trails and picnic sites in the county (listed in Table 4.15 below); and
- approximately 100 km (when completed) of mountain bike trails in both Offaly and Laois, which is not only a destination for international mountain biking tourists but also for local cycling enthusiasts.

Table 4.15 Coillte Recreational Woodlands in County Offaly

Slieve Bloom Mountains (including Mountain Bike Trails)
Garryhinch Woodlands, Portarlinton
Glasderry Wood, Brosna, Roscrea
Glenafelly Forest Recreation Area, Slieve Bloom Mountains
Glenregan Forest Recreation Area, Slieve Bloom Mountains
Durrow Abbey, Durrow
Golden Grove, Roscrea
Knockbarron Wood, Kinnitty

There is an extensive network of hedgerows throughout County Offaly. There will be a firm presumption against the removal of hedgerows to facilitate development unless an equivalent compensatory length of native hedgerow is proposed. In general, trees and hedgerows should be included in design plans for development proposals. A full list of native trees and shrubs is shown in Table 4.16 below.

Table 4.16 List of Native Trees and Shrubs

Common Name	Latin Name	Height (Max)	Suitable For Open Spaces	Suitable for Streets and confined spaces	Suitable for tubs, containers, raised beds etc.	Guide to planting
Alder	<i>Alnus glutinosa</i>	22m	Yes	No	Yes	A D P S
Alder buckthorn	<i>Frangula alnus</i>	6m	Yes	No	Yes	D Restricted distribution. Not commonly available.
Arbutus (strawberry tree)	<i>Arbutus unedo</i>	8m	Yes	No	Yes	Not frost hardy
Ash	<i>Fraxinus excelsior</i>	28m	Yes	No	No	A D I P S
Aspen	<i>Populus tremula</i>	24m	Yes	No	No	DPSV Not close to buildings or any services
Bramble	<i>Rubus fruticosus</i>	2m	No	No	No	C/H note: tends to be grow quickly and extensively in wooded areas, wasteland and hedges.
Broom	<i>Cytisus scoparius</i>	2m	Yes	No	Yes	*
Burnet rose	<i>Rosa pimpinellifolia</i>	2m	Yes	No	Yes, but vigorous	C/H Restricted distribution. Not commonly available.
Common (or European) gorse	<i>Ulex europeus</i>	2.5m	Yes	No	In a rural setting	H V
Crab apple	<i>Malus sylvestris</i>	6m	Yes	No	No	A H I P
Dog rose	<i>Rosa canina</i>	2m	Yes	No	Yes. Vigorous	C/H

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Downy birch	<i>Betula pubescens</i>	18m	Yes	Yes	Yes	A D I P
Elder	<i>Sambucus nigra</i>	6m	In hedge	No	No	V
Guelder rose	<i>Viburnum opulus</i>	4.5m	Yes	No	No	D H
Hawthorn	<i>Crataegus monogyna</i>	9m	Yes	Yes	Yes	A H I P S
Hazel	<i>Corylus avellana</i>	6m	Yes	No	No	A H S
Holly	<i>Ilex aquifolium</i>	15m	Yes	Yes	Yes	A H P S
Honeysuckle	<i>Lonicera periclymenum</i>	climber	Yes	On walls	No	C
Ivy	<i>Hedera helix</i>	climber	Yes	Yes	Yes	C
Juniper	<i>Juniperus communis</i>	6m	Yes	No	No	S
Pedunculate oak	<i>Quercus robur</i>	30m	Yes	No	No	AI only suitable for large spaces
Privet	<i>Ligustrum vulgare</i>	3m	Yes	Yes	Yes	No
Rowan or mountain ash	<i>Sorbus aucuparia</i>	9m	Yes	Yes	Yes	A D H I P
Scots pine	<i>Pinus sylvestris</i>	24m	Yes	No	No	A I
Sessile oak	<i>Quercus petraea</i>	30m	Yes	No	No	AI only suitable for large spaces
Silver birch	<i>Betula pendula</i>	18m	Yes	Yes	Yes	A D I P
Sloe, blackthorn	<i>Prunus spinosa</i>	3m	Yes	No	No	A H P V
Spindle	<i>Euonymus europaeus</i>	7.5m	Yes	No	No	H
Western (or mountain) gorse	<i>Ulex gallii</i>	1.5m	Yes	No	Yes	* Restricted distribution. Not commonly available.
Whitebeam spp.	<i>Sorbus aria</i>	12m	Yes	Yes	Yes	I P S
Wild cherry	<i>Prunus avium</i>	15m	Yes	Yes	Yes	A H I
Willow spp.	<i>Salix spp.</i>	6m	Some	No	No	V Not suitable near buildings or services
Wych elm	<i>Ulmus glabra</i>	30m	Yes		No	P S
Yew	<i>Taxus baccata</i>	14m	Yes	No	Yes	A I P S

Key:

H – Suitable for hedging	I – suitable as an individual tree	P – Tolerates smoke or pollution
S – Tolerates shade	V – Invasive ¹	* – Tolerates dry conditions
A – Grows in a wide variety of soils	C – Climber	D – Tolerates or prefers damp conditions

4.10 Green Infrastructure Strategy

The term Green Infrastructure (GI) can be broadly defined² as integrated and interconnected networks of green space and water capable of delivering ecosystem services and quality of life benefits to people. It includes features such as parks, gardens, green roofs, green walls, rivers, lakes, canals, peatland, wetland landscapes, uplands, greenways, blueways, woodlands and farmlands in our countryside and settlements.

The multiple benefits of GI are recognised in a number of national policy documents. The National Biodiversity Plan sees GI as crucial to achieving biodiversity targets and developing ecological corridors that allow the movement of species through their entire natural habitat. The Strategy for the Future Development of National and Regional Greenways focuses on the economic and social benefits of creating and connecting greenways, particularly in rural areas, while the Flood Risk Management Guidelines highlight its key role in managing flood risk and adapting to climate change. GI serves a wide variety of functions including but not limited to; provision of habitat, increased biodiversity, ecological corridors, climate change adaptation and mitigation, water treatment, water retention, flood mitigation, improving attractiveness of place, local amenity provision, air quality improvement, noise abatement measure, health and well-being, sustainable recreational tourism and eco-tourism, cultural and heritage preservation.

County Offaly’s GI includes NHAs, SACs, SPAs designated areas, Areas of High Amenity in the county, woodlands and boglands connected by walking routes, eskers, riparian ways, Bord an Móna rail links and the Grand Canal. Figure 4.13 identifies Offaly’s GI at a strategic level. It does not illustrate the entire local level GI such as open space provision, greens and parks, hedgerows, boundaries, coppices, green walls, green roofs, country lanes and areas of low intensity agriculture and scrubland, which are also an essential component of the county’s GI.

In addition to the policies and objectives in this chapter, the importance of green infrastructure is interwoven throughout the chapters of this Plan reflecting its importance.

¹ This is different to ‘invasive species’ as referred to in section 4.12 of this chapter.

² ...European Landscape Convention, 2000, defines Green Infrastructure as ‘the use of ecosystems, green spaces, playing fields, woodlands road verges, allotments and private gardens. Green Infrastructure can contribute to climate change mitigation and adaptation, natural disaster risk management, protection against flooding and erosion as well as biodiversity conservation.’

Figure 4.13 County Offaly's Strategic Green Infrastructure

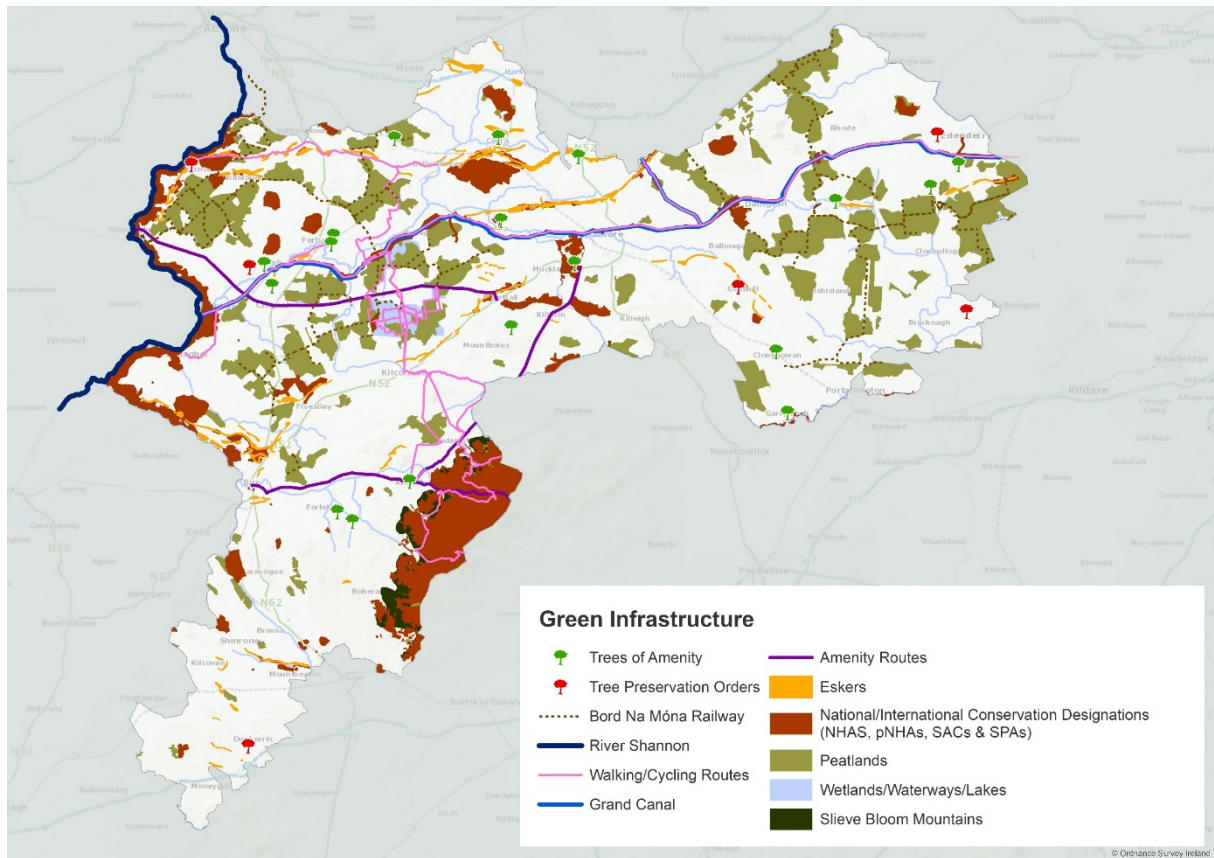


Figure 4.14 Birr Castle and Gardens

4.11 All Ireland Pollinator Plan 2015-2020

The All Ireland Pollinator Plan 2015-2020 sets out natural management measures to protect native species including a reduction in the use of pesticides, management of hedgerow cutting and the retention of unmanaged roads and park areas to support the following five overall objectives;

1. Making Ireland pollinator friendly;
2. Raising awareness of pollinators and how to protect them;
3. Managed pollinators – supporting beekeepers and growers;
4. Expanding our knowledge on pollinators and pollination service; and
5. Collecting evidence to track change and measure success.

Pollinator friendly plants are plants which provide pollen and nectar from early spring right through to autumn. Examples of pollinator friendly plants are listed in Figure 4.10 below.



Figure 4.15 Pollinator Friendly Plants from All Ireland Pollinator Plan 2015-2020

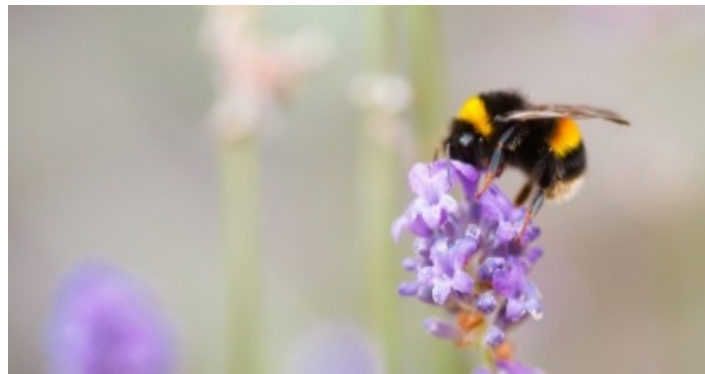


Figure 4.16 Bee Pollination

4.12 Invasive Species

Invasive species, both invertebrate and plants, can represent a major threat to local, regional, and national biodiversity, with their prevalence accelerated by climate change. Both Japanese Knotweed and Himalayan Balsam are becoming more prevalent in this regard. The Council has been controlling Japanese Knotweed since 2008 and Himalayan Balsam on the Camcor catchment since 2018. Terrestrial and aquatic habitats can be negatively affected, resulting in significant damage to conservation and economic interests, such as agriculture, forestry and civil infrastructure.



Figure 4.17 Invasive Species

4.13 Areas of High Amenity

Areas of High Amenity (AHA) are areas worthy of special protection / enhancement due to their uniqueness and scenic / amenity value. These designations are additional to statutory national and European designations which may overlap with these AHA. It is a priority of the Council to protect and preserve the AHAs in Table 4.17 and Figure 4.18.

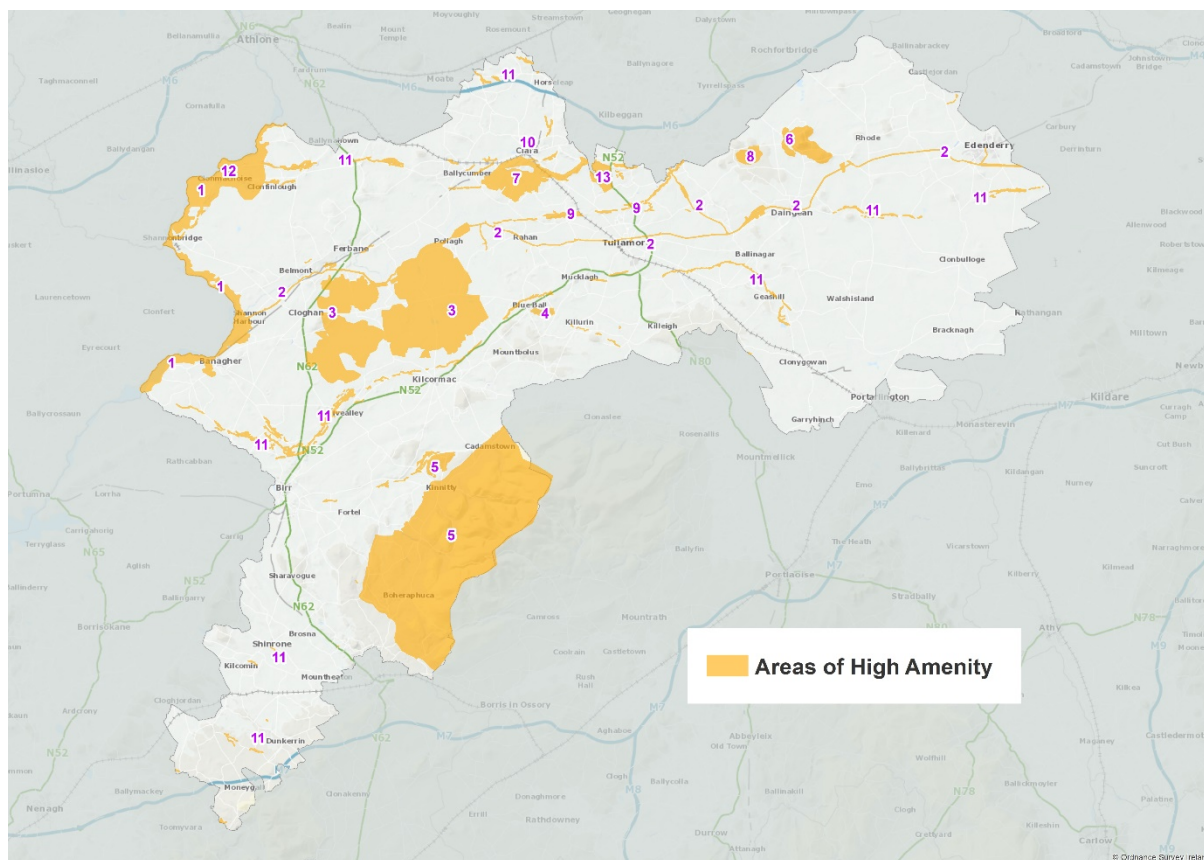
Table 4.17 Areas of High Amenity in County Offaly

<u>Waterways and Wetlands</u>	
1.	River Shannon and Callows
2.	Grand Canal
3.	Lough Boora Discovery Park ³
4.	Pallas Lake
<u>Upland Areas</u>	
5.	Slieve Bloom Mountains
6.	Croghan Hill ⁴
<u>Peatlands</u>	
7.	Clara Bog
8.	Raheenmore Bog
<u>Eskers</u>	
9.	Eiscir Riada
10.	Clara Eskers
11.	Other Eskers
<u>Archaeological and Historical</u>	
12.	Clonmacnoise Heritage Zone
13.	Durrow Monastic Site and Demesne

³ Lough Boora Discovery Park designation also includes bog lands, agricultural lands, ecological, biodiversity, historical site.

⁴ Croghan Hill designation also includes archaeological and historic interest.

Figure 4.18 Areas of High Amenity in County Offaly



4.13.1 Areas of High Amenity - Waterways and Wetlands

Shannon River and Callows

The Council recognises the immense value of the River Shannon and Callows as a key habitat. The Council encourages the protection of this landscape including the Callows and views of special interest and the development of Shannonbridge, Banagher and Shannon Harbour as focal points.

The Grand Canal

The Offaly section of the Grand Canal comprises of some 70 kilometres from Edenderry to Shannon Harbour. It passes through the towns of Daingean and Tullamore and the village of Pollagh. The canal traverses large tracts of boglands and is bordered by hedgerows dating back 200 years and fringes of wild vegetation along the bank.

The Grand Canal is a focus for a wide range of uses, especially for recreation and tourism purposes. The visual quality of the surrounding areas is intrinsic to maintain the attractiveness of the Grand Canal corridor. Hence, the corridor is especially sensitive to large development structures, insensitively designed or sited housing and large-scale land uses such as extractive industries.

The Heritage Council published Waterway Corridor Studies pertaining to Offaly in 2002 and in 2004. The Council will consider these studies in relation to funding and planning applications (See Policy BLP-23 in this chapter).

The recreational value of the Grand Canal is recognised and it is intended to preserve its attractiveness by carefully controlling development in order to protect its amenity and tourism potential.

Developments, which require vehicular access from public roads that were formerly towpaths or from existing towpaths along the Grand Canal, are required to be strictly controlled (refer to Policy BHP-27 in Chapter 10). The development of the canal in relation to walking, cycling, coarse fishing and cruising will however be encouraged whilst achieving a balance with active management of the canal to keep the canal navigable.

The potential for the Kilbeggan to Ballycommon link of the Grand Canal, as a cycling, walking and possibly a navigational route is acknowledged.

Lough Boora Discovery Park

Lough Boora Discovery Park is made up three different wetland areas, two angling lakes and the Lough Boora Mesolithic Site. There are also areas of forestry, pasture, flower-rich natural grassland and wilderness areas. The area is rich in biodiversity as evidenced by the BioBlitz survey carried out by National Biodiversity Data Centre in 2012 with 940 species recorded in 24 hours.

Pallas Lake

The scenic and recreational value of Pallas Lake is recognised, as is the value of the unspoilt rural setting of this area. The Council intends to carefully control development in the area in order to preserve its attractiveness.



Figure 4.19 Pallas Lake

4.13.2 Areas of High Amenity - Upland Areas

Slieve Bloom Mountains

The Slieve Bloom Mountain area is the only substantial upland area in County Offaly. Approximately one-third of the mountains, some 12,000 hectares, lies within County Offaly, the remainder is located in County Laois. The scenic value of the Slieve Bloom Mountains derives from the contrast they offer to Offaly's otherwise flat landscape. The mountains afford the visitor a range of spectacular views, forests and riverside walks, picnic sites, historic and archaeological sites.

The overall policy of the Council towards the mountains will be to co-operate with other bodies in encouraging development of the amenity and recreational potential of the area while at the same time, preserving the quality and character of the environment. The Council accepts that there is need to devise an overall strategy for the integrated development of the Slieve Bloom Mountains area and to secure an appropriate balance between competing land use, for example, farming, forestry, recreation, conservation and residential.

Croghan Hill

The Council recognises the scenic quality and recreational value of the Croghan Hill area. Croghan Hill, Raheenmore Bog (which is a designated Nature Reserve under the Wildlife Act 2000, as amended) and Cannakill Deserted Medieval Village are the main elements of the Area of High Amenity. The Council, through its development management function, will seek to preserve the scenic amenity and recreational potential of this area and to protect it from development that would damage or diminish its overall attractiveness and character. A comprehensive study of the Croghan Hill environment was published in 2011 by John Feehan titled 'Croghan, County Offaly'.

4.13.3 Areas of High Amenity - Peatlands

Clara Bog

Clara Bog is an internationally renowned raised bog, which is a designated Nature Reserve. Moreover, the esker system adjacent to the bog is recognised to be critically important to the functioning of the bog's soak system. The Council will, through its development management system liaise with the NPWS in order to protect and safeguard this area from development, which would damage or detract from its scientific environmental and ecological value.

The Clara Bog Visitor Centre located in Clara town is an important educational and tourist attraction.

Raheenmore Bog

Raheenmore Bog developed in a small basin in the catchment of two major river systems i.e. the Brosna and the Boyne. It is situated about 5km from Daingean. The bog has a well-developed hummock and hollow system. Typical bog land birds that breed include Red Grouse and Snipe. Raheenmore Bog is a classic example of a midland raised bog and the deepest remaining in Ireland.



Figure 4.20 Raheenmore Bog

4.13.4 Areas of High Amenity - Eskers

The Eiscir Riada which traverses the north-western corner of County Offaly in a more or less continuous line from Shannonbridge to Clonmacnoise and on to Clara, Durrow and Rahugh (County Westmeath), is worthy of conservation due to its geomorphologic, scientific, historical, recreational and amenity value and uniqueness. The Council recognises the potential that the esker landscape in the north and north west of the county has to be a UNESCO Geopark, to promote the unique geological heritage of the area.



Figure 4.21 Eiscir Riada at Clonmacnoise

4.13.5 Areas of High Amenity - Archaeological and Historical Landscapes

Clonmacnoise

Clonmacnoise is one of Ireland's foremost national monuments and is of international importance as a spiritual, historic, archaeological and cultural center. The unique atmosphere and attractiveness of Clonmacnoise derives not only from the monastic site itself but its relationship to the River Shannon and the Callows together with the sense of enclosure provided by the eskers. The effect is heightened by the unfolding of the site as it is approached either from the river or any of the three approach roads. In order to preserve and retain the unique and special character of Clonmacnoise, the Council has designated the area surrounding Clonmacnoise, including Mongan Bog, Fin Lough and Clonmacnoise Callows, as a Heritage Zone within which a restrictive policy applies to developments (See Policy BLP-35 in this chapter, Policy in Chapter 2 Core Strategy, Settlement Strategy and Housing Strategy, and Policy BHP-41 in Chapter 10 Built Heritage).

Offaly County Council supports the preparation of a masterplan that conserves and protects the Clonmacnoise monastic site while catering for visitors and will co-operate with the OPW and other agencies in its implementation.

Durrow Abbey, Monastic Site and surrounding area

Durrow Abbey Demesne, situated between Tullamore and Kilbeggan contains the remains of the monastery of Durrow founded by St. Columille in about 587. The Esker Riada and the Slí Mhór, which run approximately 600 meters north of the site, may have played an important role in the site's location. Durrow Demesne is a fine example of an historic designed landscape in the natural style, which sought to respect and enhance natural features (Durrow Abbey Conservation Plan, Office of Public Works, 2005). The thirty-one hectares of state owned lands which are the subject of the conservation plan, constitutes only a portion of the Historic Durrow Abbey Demesne. The broader demesne landscape, which is currently in private ownership, provides the setting and context for the landscape and archaeological features situated within the state owned lands. The conservation plan states that it is vital that the future management of the surrounding privately owned demesne landscape is complimentary to the conservation objectives for the monuments. The 'historic demesne boundary' as marked in the Office of Public Works' Conservation Plan represents the boundary of the Area of High Amenity.

4.14 Landscape

Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors⁵. The Council of Europe's 'European Landscape Convention', signed and ratified by Ireland, recognises the importance of all landscapes, and not just exceptional landscapes and encourages public bodies to adopt policies and measures at national, regional and local level to promote, manage and plan landscapes.

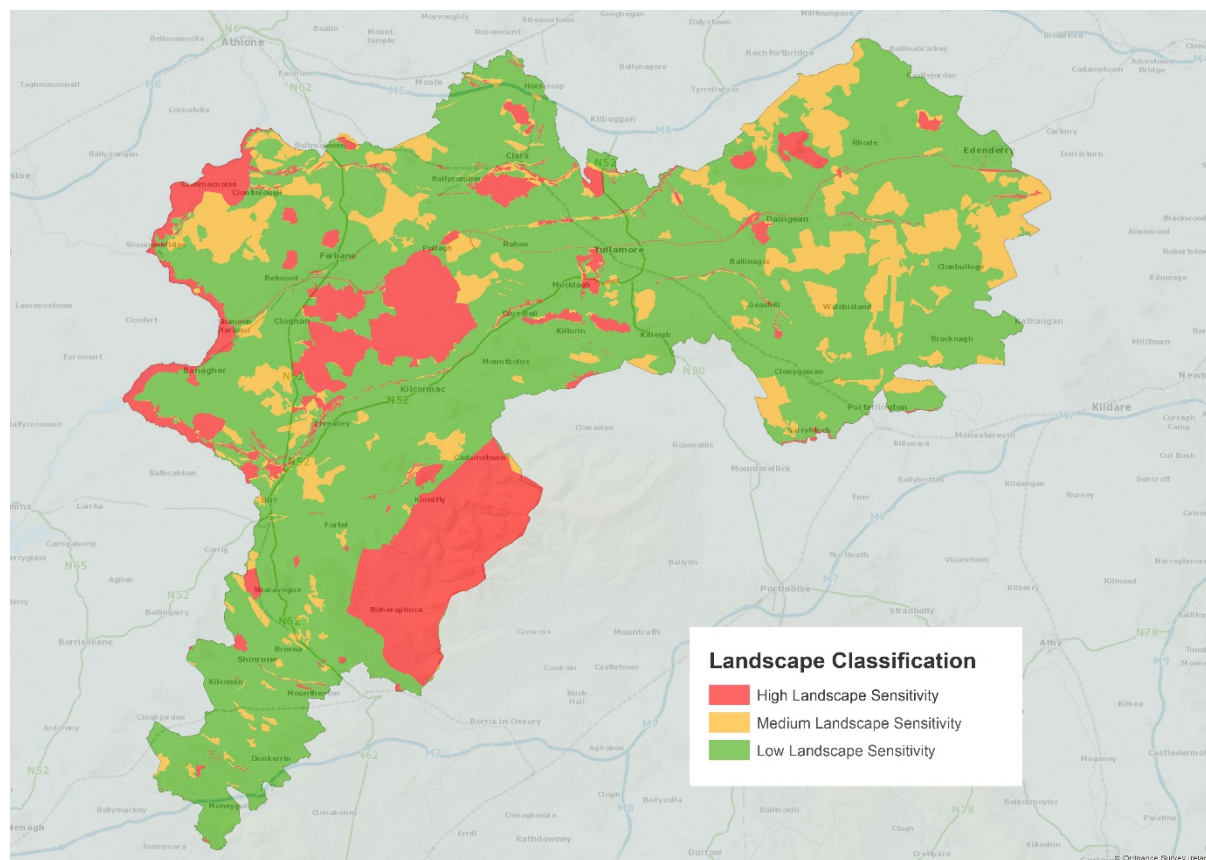
The National Landscape Strategy for Ireland (NLS) 2015-2025 recognises the importance of landscape protection and its interconnectivity with biodiversity and climate change. Both the NLS and the Eastern and Midland Regional Spatial and Economic Strategy (RSES) identify the need for national and regional landscape character assessments to provide a framework for comprehensive and consistent local (county) landscape character assessments advising on the proper collection, monitoring and review of the landscapes' physical, scientific, ecological, biodiversity and cultural assets. Once the necessary national and regional landscape character assessments and maps are in place, in addition to guidance on local landscape character assessments, the Council will carry out a comprehensive county landscape character assessment to ensure a consistent approach.

4.14.1 Landscape Sensitivity

The sensitivity of a landscape is the measure of its ability to accommodate change or intervention without suffering unacceptable effects to its character and values. The sensitivity of the landscapes of County Offaly varies and is thereby classified within the following sensitivity classes: Low, Moderate and High Sensitivity.

⁵ Article 1a of the European Landscape Convention

Figure 4.22 Landscape Classification Areas in County Offaly



The capacity of each landscape character type to absorb new development will largely depend on the sensitivity of the landscape type. Developments which are likely to create a significant environmental and particularly visual impact will best be absorbed into areas where the landscape is most robust, i.e. has the capacity to absorb development without significantly changing its character. All developments should be assessed on a site by site basis to avoid, minimise or mitigate any potential environmental or visual impact.

Table 4.18, 4.19 and 4.20 below lists the Landscape Sensitivity areas in the county, their sensitivity and acceptability to development. Figure 4.22 illustrates the landscape classification areas for the county in broad terms. Figure 4.23 shows the topography of the county.

Figure 4.23 Topography of County Offaly

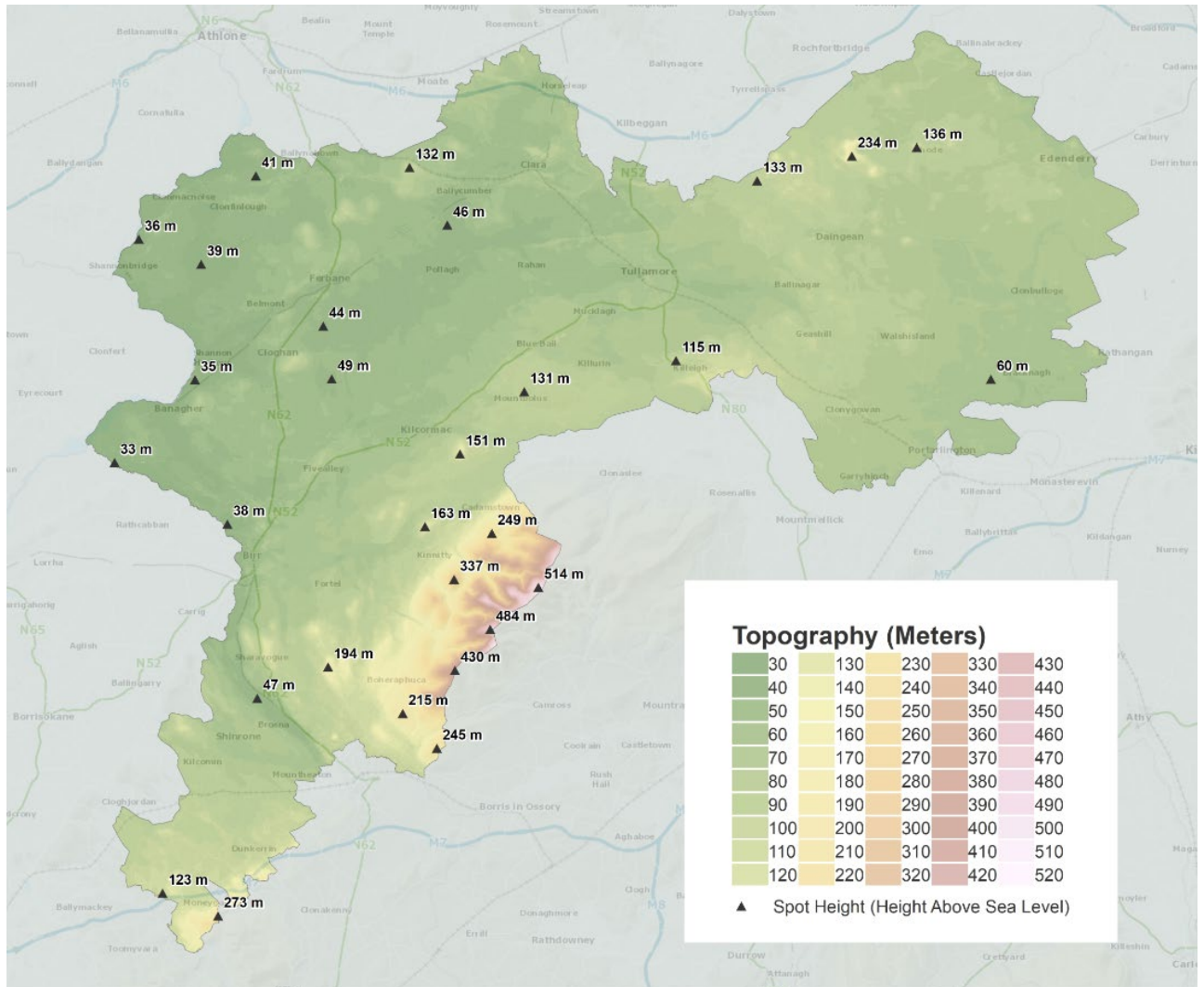


Table 4.18 Low Sensitivity Areas in County Offaly

<p><u>LOW SENSITIVITY AREAS</u></p> <p>Low sensitivity areas are robust landscapes which are tolerant to change, such as the county's main urban and farming areas, which have the ability to accommodate development.</p> <p>Characteristics:</p> <p>County Offaly is largely a rural county which comprises of a predominantly flat and undulating agricultural landscape coupled with a peatland landscape. Field boundaries, particularly along roadside verges which are primarily composed of mature hedgerows typify the county's rural landscape.</p> <p>Sensitivities:</p> <ul style="list-style-type: none">• These areas in general can absorb quite effectively, appropriately designed and located development in all categories (including: telecommunication masts and wind energy installations, afforestation and agricultural structures).• Within the rural areas, development shall be screened by appropriate natural boundaries that are sympathetic to the landscape generally, where possible.• New housing proposed in rural areas should respect Offaly County Councils Rural Housing Design Guidelines, together with conformity with development standards. <p>Acceptability of Development for consideration: A wide range of development subject to appropriateness / conditions</p> <p>Need for Landscaping and Appropriate Design: High.</p>

Table 4.19 Moderate Sensitivity Areas in County Offaly

<p><u>MODERATE SENSITIVITY AREAS</u></p> <p>Moderate sensitivity areas can accommodate development pressure but with limitations in the scale and magnitude. In this category of sensitivity, elements of the landscape can accept some changes while others are more vulnerable to change.</p> <p>Characteristics:</p> <p>Cutaway bogs cover a large part of the landscape of Offaly and in their entirety, are approximately 42,000 hectares. Generally, there are a number of land uses suitable for cutaway bog, not included in High Sensitivity Areas, which include wilderness, grassland, forestry and recreation. Some cutaway bog landscapes are more robust and may be considered for other uses.</p> <p>Sensitivities:</p> <ul style="list-style-type: none">• The development of Lough Boora (albeit designated as high sensitivity) acts as a prototype in the creation of parkland character.

- However, some of these cutaway bogs may be appropriate for other sensitively designed and located developments including renewable energy (wind farms, biomass crops) and/or industrial use.

The Council recognises the need for a land use framework plan for the future development and utilisation of large areas of cutaway bog within Offaly.

Acceptability of Development for consideration: Some form of development subject to appropriateness / conditions.

Need for Landscaping and Appropriate Design: Very High.

Table 4.20 High Sensitivity Areas in County Offaly

HIGH SENSITIVITY AREAS

High Sensitivity Areas are vulnerable landscapes with the ability to accommodate limited development pressure. In this category of landscape, landscape elements are highly sensitive to certain types of change. If pressure for development exceeds the landscapes limitations the character of the landscape may change.

The following include identified features or areas of natural beauty or interest which have extremely low capacity to absorb new development. Areas included within this class are designated Areas of High Amenity.

A) THE RIVER SHANNON AND CALLOWS

Characteristics:

- The Offaly section of the River Shannon flows along the western boundary of the county and passes through Banagher, Shannon Harbour and Shannonbridge.
- These lands are extremely liable to flooding.
- There are local scenic views along the river and access to the local heritage sites such as Clonmacnoise and the Callows.
- The Shannon Callows are water meadows that are the wintering grounds for thousands of migrant wild birds while also providing breeding grounds during the summer. It is an important habitat within this river landscape.
- The Council recognises the immense value of the River Shannon as a major tourist resource and recreational asset.

Sensitivities:

- This area is extremely sensitive to all categories of development, given its scientific, ecological, recreational and scenic value.
- The protection of views of special interest and the landscape of this area is paramount.
- Development should not be of a nature which could damage the sensitive ecological habitats and the archaeological aspects of the river corridor. Moreover, the attractive waterside edge is open and flat and is therefore highly sensitive to development. Further, development at the water's edge is often

inappropriate, as it would be exposed to view and is generally prohibited in that part of the Shannon River Valley that carries a nature designation.

- New development which is considered necessary should be located within towns, villages or within close proximity to existing natural screening and should also be clustered together to avoid ribbon development. This will maintain long distant views out into the open countryside.

B) THE GRAND CANAL CORRIDOR

Characteristics:

- The Grand Canal is a focus for a wide range of uses, in particular, for recreation and tourism purposes.
- The visual quality of the surrounding areas is intrinsic to maintaining the attractiveness of the Grand Canal corridor.

Sensitivities:

- Hence, the corridor particularly outside of settlements is especially sensitive to large development structures, insensitively designed sporadic housing and large-scale land uses such as extractive industries.
- Offaly County Council will have regard to the Waterway Corridor Study 2002 (and any relevant successive studies) in relation to development in the Grand Canal Corridor.

C) WETLANDS

Characteristics:

- The Lough Boora Discovery Park includes Turraun Wetlands, Fynamore Lakes Area and Loch Clochan Wetlands. The areas which were previously cutaway bogs are now a nature reserve colonised by fen type vegetation, which boasts a rich diversity of flora and fauna. The Discovery Park is an open, expansive vista that is currently largely free of buildings and associated installations such as overhead wires.
- The scenic and recreational value of Pallas Lake is recognised, as is the value of the unspoilt rural setting of this area.
- Fin Lough which is a shallow lake, about 16 ha in extent (in winter) and bounded to the north and east by the Clonfinlough esker ridge, and to the south and west by Blackwater Bog, which is now largely cut-over. Fin Lough is characterized by relatively flat open expansive terrain with notable features of interest such as open water, reed swamp, tall sedge, alkaline fen, fen-bog transition, swamp woodland and bog.

Sensitivities:

- Wetlands are of importance for their habitat value and their provision of wildlife shelter.
- Wetlands provide an important recreational space with a distinctive sense of place and peacefulness.
- Any development proposed which occurs within these areas, should demonstrate a necessity to be developed in this location, be very small scale and have minimum visual impacts ensuring that it does not detract from the open expansive vistas present at these locations. In particular, agricultural buildings and dwellings shall be both sensitively designed and sited as to minimise their impact on the landscape.

D) SLIEVE BLOOM MOUNTAINS UPLAND AREA

Characteristics:

- The Slieve Bloom Mountain area is the only substantial upland area in County Offaly, with approximately 12,000 hectares (i.e. one-third of the mountains) within County Offaly, the remainder being in County Laois.
- Their value is derived from the contrast they offer to the county's otherwise flat landscape. The mountains afford a range of spectacular views, forest and riverside walks, bike trails, picnic sites, historic and archaeological sites and areas subject to environment / conservation designations.
- The entire mountain area is identified as an Environment Park and has the largest unbroken area of upland blanket peat in Ireland.
- Housing should be very low impact in design, scale, mass and site selection. Robust, well screened sites should be chosen over unscreened elevated sites in order to restrict the visual impact to as small an area as possible.

Sensitivities:

- This area is extremely sensitive to all categories of development, and the upland area itself is visible from extensive surrounding areas. It is particularly sensitive to large agricultural structures, sporadic housing, major afforestation proposals and masts.
- Softening of the coniferous edge with native deciduous planting is recommended and new recreational facilities associated with forestry should be developed using natural materials.
- Car parking should be set within existing tree canopies where it will not cause visual intrusion from / to viewpoints.

E) CROGHAN HILL AND ITS ENVIRONS

Characteristics:

- Croghan Hill and its environs including Raheenmore Bog (which was designated a nature reserve under the Wildlife Act 1976) and Cannakill Deserted Medieval Village, are the main elements of this high amenity area.
- Croghan Hill is an extinct volcano which lies 234 meters above sea level and commands views over north and east Offaly and the surrounding counties.

Sensitivities

- This is an area of archaeological and high amenity value and is highly sensitive to new developments.
- Croghan Hill, due to its elevated nature in comparison to its surrounding flat landscape, impacts on the visual quality of the surrounding area and is highly sensitive to developments of any nature, in particular sand and gravel extraction.

The Council recognises the scenic quality and recreational value of the Croghan Hill area including Croghan Hill, Raheenmore Bog and Cannakill Deserted Medieval Village.

F) RAISED AND BLANKET BOGLAND AREAS

Characteristics:

- County Offaly contains a number of raised and blanket bog lands, which in addition to their near natural ecosystems are important for their visual amenities and scenic qualities.
- Other important bog land areas include the All Saints Bog, Sharavogue Bog, Slieve Bloom Blanket Bog and Raheenmore Bog.

Sensitivities

- Offaly County Council has a strong policy of conservation of a representative sample of peatlands and the protection of peatland habitats.

G) THE ESKER LANDSCAPE

Characteristics

- Eskers were built up under the ice cap about ten thousand years ago and have archaeological significance, as they formed the early highways in Ireland.
- In old Irish, 'eiscir' means divide while 'riada' means road.

Sensitivities

- The eskers have geomorphologic, scientific, historical, cultural, recreational and amenity value and uniqueness.
- In particular, the esker system north of Clara bog is critically important, as it is most likely the source of nutrient rich water, which feeds the bog's soak systems.
- There is a need to balance the conservation of the important landscape features associated with eskers providing educational / tourism and recreational potential with the requirements of aggregate extraction and economic development. Hence, the esker landscape is highly sensitive to any future development and the opening up of new pits for sand and gravel extraction will be strongly resisted (refer to Chapter 5, Economic Development Strategy).

H) ARCHAEOLOGICAL AND HISTORICAL LANDSCAPES

Characteristics

- County Offaly is rich in landscapes of archaeological and historic interests ranging from large ecclesiastical sites such as Clonmacnoise and Durrow Abbey to archaeological features such as Durrow High Cross.
- Section 10.11 and 10.12 of Chapter 10 Built Heritage provides further policies and objectives concerning the county's archaeological and historical landscapes. These primarily include Clonmacnoise, Durrow, Killeigh, Leamonaghan and Rahan.

Sensitivities

- These landscapes are highly sensitive to new developments, which could potentially damage the historical character and the cultural and social importance of the area.

The Council shall endeavour to ensure that planning applications for development, refurbishment and restoration works etc. within close proximity to these areas are sympathetic to the sensitive nature of the landscape.

Acceptability of development for consideration: Very limited development subject to appropriateness / conditions.

Need for Landscaping and Appropriate Design: Essential.

4.14.2 Protection of Key Scenic Views, Prospects and Key Amenity Routes

County Offaly contains a number of valuable views and prospects which offer a very attractive cross-sectional view and overall impression of differing landscapes as one traverses the county. The Council recognises the need to protect the character of the county by protecting Key Scenic Views, Prospects and Key Amenity Routes within the county. The Council will aim to protect sensitive areas from injurious development, while providing for development and change that will benefit the rural community by ensuring that appropriate standards of location, siting, design, finishing and landscaping are achieved from implementing the development management standards contained in Chapter 13 of this plan.

Table 4.21 below lists the Key Scenic Views and Prospects ‘from’ i.e. the specific road and/or townlands from which the view is experienced and ‘to’ the particular amenity or area which is visible from that view.

Table 4.21 Key Scenic Views and Prospects in Offaly

Map Ref.	View From	View To
V1	N80 in the townland of Ballynasragh, Pigeonhouse, Killeigh, Derryclure, Derrybeg and Cloncon.	South-West Slieve Bloom Mountains and Killeigh Village
V2	Road No. L-08003 in the Slieve Bloom Mountains, townlands of Clough, Ballykelly, Coolcreen, Glenletter, Glenregan, Castletown, Forelacka and Glinsk.	Slieve Bloom Mountains, River Shannon northwards over lowlands
V3	Pilgrims Road (Road No. L-07013) in the townlands of Clonmacnoise, Clonascra, Ballyduff and Bloomhill.	Clonmacnoise and River Shannon, Eskers, Mongan Bog and Finlough.
V4	Road No. R444 in the townlands of Clonmacnoise, Creevagh.	River Shannon and bog lands
V5	N52 in the townlands of Heath, Bunaterin, Derrydolney, Ballywilliam, Curraghmore, Ballynacard, Bally na Curra.	Slieve Bloom Mountains
V6	R356 and Road No. L-07014 in the townlands of Cushcallow, Park, Mullaghakeeraun and Curralahan.	River Shannon and bog lands
V7	Road No. L-01018 in the townlands of Cannakill and Croghan Demesne.	Slieve Bloom Mountains

V8	Townlands of Barnan, Kilduff, Old Croghan, Croghan Demesne, Down.	Views towards Croghan Hill and bog lands.
V9	Townlands of Grovesend and Coole.	South to bog lands
V10	Road No. L-03004 in the townlands of Skehannagh, Killagally Glebe, Ballyclare.	Southwards towards Slieve Bloom Mountains
V11	Regional Road R357 in the townlands of Lumcloon, Bun, Rin, Leabeg and Leamore.	Southwards towards Slieve Bloom Mountains
V12	Road No. L-07009 in the townland of Stonestown.	Over bog lands and Slieve Bloom Mountains
V13	Road No. L-03012 in the townlands of Glaster, Ballynasrah, Newtown, Kilmochonna.	Over Little Brosna and Callows
V14	R440 in the townlands of Kyle, Cloghanmore, Streamstown, Ballinree, Killaun.	Towards Slieve Bloom Mountains
V15	Road No. L-04006 in the townland of Knock.	Slieve Bloom Mountains, Leap Castle
V16	Road No. L-04025 in the townlands of Clonee, Cumber Lower.	Westward over farmland
V17	Road No. L-06034 in the townlands of Knockhill and Drinagh.	Towards North East and North West over lowlands
V18	Road No. L-08008 in the townlands of Grange, Belhill, Longford Big and Church Land.	Views towards Seir Keiran Monastic Site
V19	Road No. L-02011 in the townlands of Rahan Demesne, Newtown.	Churches and Earthworks

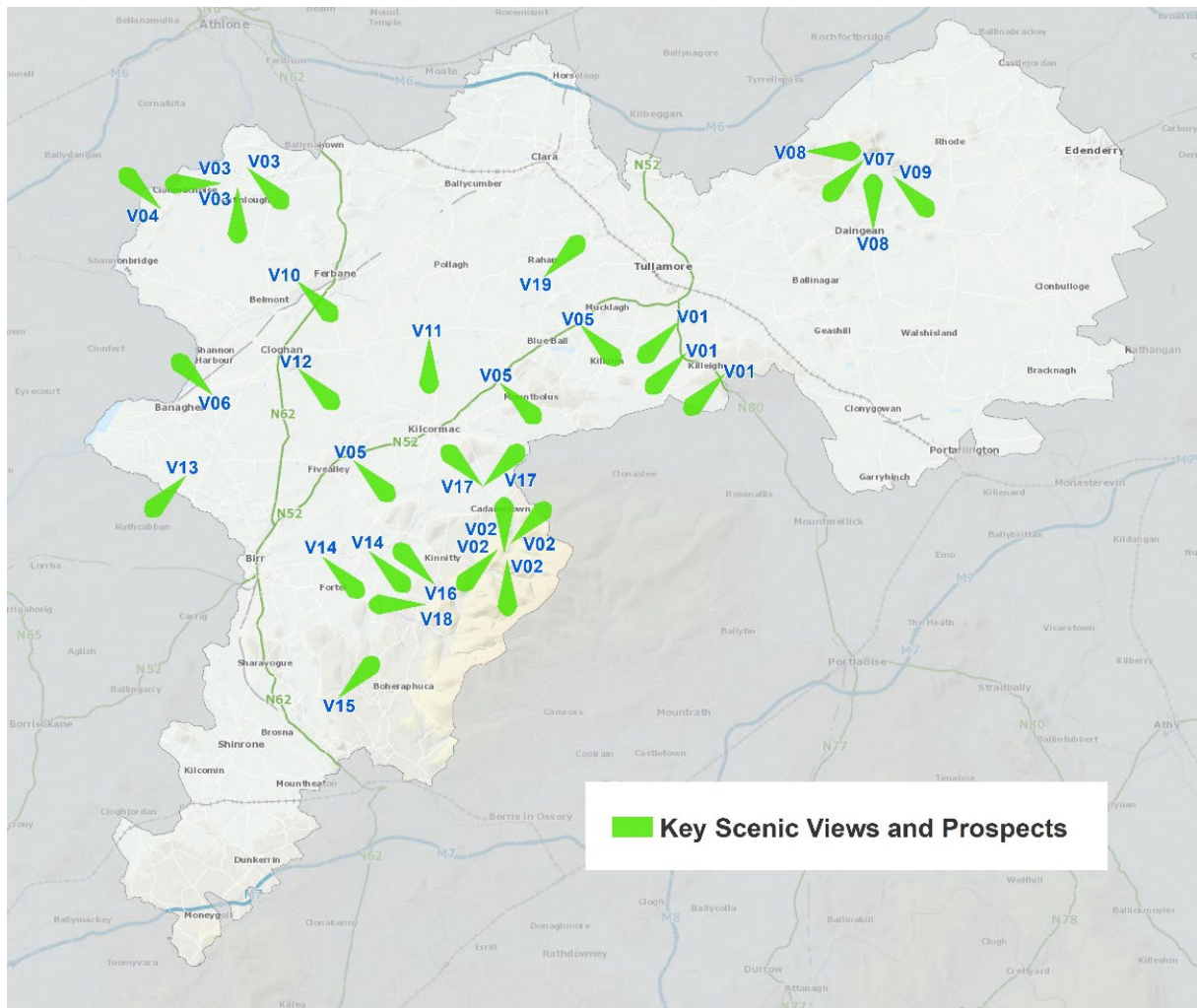


Figure 4.24 Key Scenic Views and Prospects

The following routes are designated as Key Amenity Routes within Offaly. They are also mapped in Figure 8.10 of Chapter 8 Sustainable Transport Strategy.

Table 4.22 Key Amenity Routes in Offaly

Route	Description
R357 Blueball to Shannonbridge.	This route links the N52 at Blueball to Shannonbridge. It passes through esker landscape, peatlands, undulating agricultural lands, Lough Boora Discovery Park and the Callows area of the River Shannon in particular.
R440 Birr through Kinnitty to the county boundary towards Mountrath, and R421 Kinnitty to Ballard.	This route provides an attractive drive within the open countryside to the attractions of the Slieve Bloom Mountains and around the foothills of the mountains themselves.

4.15 Railways

It is acknowledged that Offaly’s strong tradition associated with the peatlands has resulted in some attractive industrial rail lines which cross some of the county’s local roads and afford scenic qualities and remnants of our past. Some continue to be utilised by Bord na Móna. Consideration should be given to reserving the line of such railways / rights of way for possible future re-use. The national rail network which traverses the county also provides an opportunity for individuals to attain an overall perspective of the quality of the landscape of Offaly. Any development proposed adjacent to or within such a location where it may be visible from the rail lines in the county must address this feature as part of its design proposal (See Policy BLP-44 below).

4.16 Biodiversity and Landscape Policies

Designated and Non-Designated Sites

BLP-01 It is Council policy to protect, conserve, and seek to enhance the county's biodiversity and ecological connectivity.

BLP-02 It is Council policy to conserve and protect habitats and species listed in the Annexes of the EU Habitats Directive (92/43/EEC) (as amended) and the Birds Directive (2009/147/EC), the Wildlife Acts 1976 (as amended) and the Flora Protection Orders.

BLP-03 It is Council policy to support and co-operate with statutory authorities and others in support of measures taken to manage proposed or designated sites in order to achieve their conservation objectives.

BLP-04 It is Council policy to protect and maintain the conservation value of all existing and future Natural Heritage Areas, proposed Natural Heritage Areas, Nature Reserves, Ramsar Sites, Wildfowl Sanctuaries and Biogenetic Reserves in the county.

BLP-05 It is Council policy to ensure that development does not have a significant adverse impact, incapable of satisfactory avoidance or mitigation, on plant, animal or bird species protected by law.

BLP-06 It is Council policy to consult with the National Parks and Wildlife Service, and take account of any licensing requirements, when undertaking, approving or authorising development which is likely to affect plant, animal or bird species protected by law.

BLP-07 It is Council policy to support the implementation of the National Biodiversity Action Plan 2017-2021 and the Offaly Heritage Plan Key Actions 2017-2021 and future editions in partnership with relevant stakeholders subject to available resources.

BLP-08 It is Council policy to work with all state agencies to promote the development of all aspects of park management in the Slieve Bloom Mountains.

Geology, Eskers and Quarries

BLP-09 It is Council policy to protect from inappropriate development and maintain the character, integrity and conservation value of features or areas of geological interest as contained in the scheduled list of geological heritage sites identified in Table 4.11 Offaly Geological Sites.

BLP-10 It is Council policy to encourage, where practical and when not in conflict with ownership rights, access to geological features in the county.

BLP-11 It is Council policy to protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county as identified in the Offaly Esker Study, 2006.

BLP-12 It is Council policy to assess the impact of proposals for quarry development on nearby eskers, with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system.

BLP-13 It is Council policy to recognise the natural heritage value of disused quarries as rich habitats and to encourage landowners to preserve quarries post extraction as habitats rather than levelling or

infilling the quarry area where possible subject to health and safety considerations and the protection of the relevant conservation objectives, qualifying interests and integrity of Natura 2000 sites.

Peatlands

BLP-14 It is Council policy to protect the county's designated peatland areas and landscapes, including any historical walkways through bogs and to conserve their ecological, archaeological and cultural heritage and to develop educational heritage.

BLP-15 It is Council policy to work with adjacent local authorities and relevant stakeholders in promoting a National Park designation for the peatlands in the midlands and a 'Regional Peatway' connecting natural and cultural attractions.

BLP-16 It is Council policy to support the provision of outdoor pursuits, walking and cycling routes through the county's peatlands and network of industrial railways linking the River Shannon Blueway, Royal Canal, Grand Canal and Barrow Blueway across the midlands as outlined in the 'Major Cycling Destination in the Midlands of Ireland –Feasibility Study 2016', which is a priority of the 'Outdoor Recreation Plan State Lands and Waters' (2017).

BLP-17 It is Council policy to support the National Parks and Wildlife Service in carrying out an EU LIFE fund supported raised bog restoration project in restoring the following Special Areas of Conservation sites in the county to favourable conservation status:

- Clara Bog;
- Ferbane Bog;
- Mongan Bog;
- Moyclare Bog;
- Raheenmore Bog; and
- Sharavogue Bog.

BLP-18 It is Council policy to support collaboration between Offaly County Council, Regional Transition Team and relevant stakeholders of a partnership approach to integrated peatland management for a just transition that incorporates the management, rehabilitation and restoration / re-wetting of significant tracts of peatlands in conjunction with appropriate developed after uses.

Waterways, Lakes and Wetland Landscapes

BLP-19 It is Council policy to protect the landscape associated with the River Shannon, including the Callows and views of special interest, and also to encourage the development of Shannonbridge, Banagher and Shannon Harbour as focal points. It will also be Council policy to investigate the possibility of providing a Linear Park based on the River Shannon from Banagher to Meelick, which takes account of the sensitive ecological nature of the Callows area.

BLP-20 It is Council policy to preserve riparian buffer strips free from development by reserving a minimum of 10 metres either side of all watercourses (measured from top of bank) with the full extent

of the protection determined on a case by case basis by the Council, based on site specific characteristics and sensitivities.

BLP-21 It is Council policy to promote clear span bridging structures as the preferred option for culverts. Any development proposal requiring culverting should also document stream habitat lost and provide compensatory habitat where possible. Realignment of water courses should incorporate stream enhancement measures, as outlined in Office of Public Works Environmental Guidance. The Council will consult with Inland Fisheries Ireland in relation to riparian and instream works as appropriate.

BLP-22 It is Council policy to promote the removal of historic culverts and infilling of watercourses.

BLP-23 It is Council policy to consider the Waterways Corridor Study 2002 and protect the recreational, educational and amenity potential of navigational and non-navigational waterways within the county, such as the Grand Canal Corridor, towpaths and adjacent wetland landscapes, taking into account more recent heritage and environmental legislation (including the SEA Directive) and environmental policy commitments.

Trees, Forestry and Hedgerows

BLP-24 It is Council policy to support the protection and management of existing networks of woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character, and to strengthen local networks.

BLP-25 It is Council policy to encourage the planting of native species in all new residential developments (individual and multiple units) and as part of landscaping for commercial and industrial developments.

BLP-26 It is Council policy to require, where practical, the management of mature trees, such as tree surgery instead of felling particularly where the trees contribute to amenity.

Green Infrastructure Strategy

BLP-27 It is Council policy to recognise the economic, social, environmental and physical value of green infrastructure.

BLP-28 It is Council policy to protect existing green infrastructure within the county, to provide additional green infrastructure where possible and to encourage green infrastructure to be spatially connected to facilitate the extension or establishment of ecological corridors.

BLP-29 It is Council policy to seek to increase investment in green infrastructure provision and maintenance by accessing relevant EU funding mechanisms and national funding opportunities.

BLP-30 It is Council policy to integrate the provision of green infrastructure with infrastructure provision and replacement, including walking and cycling routes, as appropriate, while protecting natural heritage.

BLP-31 It is Council policy to support the use of green infrastructure for carbon sequestration to combat climate change.

All Ireland Pollinator Plan

BLP-32 It is Council policy to support the aims and objectives of the All Ireland Pollinator Plan 2021-2025 and any subsequent editions by delivering appropriate management actions as set out in their guidance documents.

BLP-33 It is Council policy to support alternative landscape maintenance regimes which promote and work towards the reduction and ultimate elimination of use of herbicides in Parks and public land, while supporting the National Bee Pollinator Plan in promoting bee friendly habitats.

Invasive Species

BLP-34 It is Council policy to continue to deliver and support measures for the prevention, control and/or eradication of invasive species within the county, and to seek details of how these species will be managed and controlled where their presence is identified.

Areas of High Amenity

BLP-35 It is Council policy to protect and preserve the county's Areas of High Amenity namely the Slieve Bloom Mountains, Clonmacnoise Heritage Zone, Durrow High Cross, Abbey and surrounding area, the River Shannon, Lough Boora Discovery Park, Grand Canal, Croghan Hill, Raheenmore Bog, Pallas Lake, Clara Bog, Clara eskers, Eiscir Riada and other eskers. Notwithstanding the location of certain settlements, or parts of, for which there are settlement plans (Towns, Villages, Sráids), within the Areas of High Amenity, it is not the intention of this policy to hinder appropriate sustainable levels of development (as set out in the plans and subject to proper planning). Further, it is policy to facilitate the sustainable extension and expansion of existing visitor, tourist related or other rural enterprises within the Areas of High Amenity, where such development is appropriate and where it can be demonstrated that it gives 'added value' to the extending activity and to the immediate area which is the subject of the 'Area of High Amenity' designation.

BLP-36 It is Council policy, to ensure that issues of scale, siting, design and overall compatibility (including particular regard to environmental sensitivities) with a site's location within an Area of High Amenity are of paramount importance when assessing any application for planning permission. The merits of each proposal will be examined on a case-by case basis.

BLP-37 It is Council policy to support the preparation of a masterplan that conserves and protects the Clonmacnoise monastic site and will co-operate with the Office of Public Works and other stakeholders in its preparation and implementation.

Landscape

BLP-38 It is Council policy to protect and enhance the county's landscape, by ensuring that development retains, protects and where necessary, enhances the appearance and character of the county's existing landscape.

BLP-39 It is Council policy to seek to ensure that local landscape features, including historic features and buildings, hedgerow, shelter belts and stone walls, are retained, protected and enhanced where

appropriate, so as to preserve the local landscape and character of an area, whilst providing for future development.

BLP-40 It is Council policy to ensure that consideration of landscape sensitivity is an important factor in determining development uses.

BLP-41 It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals, located within or adjacent to sensitive landscapes. This assessment will provide details of proposed mitigation measures to address likely negative impacts.

BLP-42 It is Council policy to control advertising structures and hoardings in the open countryside. The Council will use its enforcement powers under the Planning and Development Act 2000 (as amended) to secure the removal of unauthorised advertising signs and hoardings including those that are affixed to trailers, wheeled vehicles etc.

Protection of Key Scenic Views and Prospects and Key Amenity Routes

BLP-43 It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals that are likely to significantly affect Key Scenic Views and Prospects as listed in Table 4.21 and Key Amenity Routes as listed in Table 4.22.

Rural houses and National Railway Network

BLP-44 It is Council policy, to ensure that rural houses in close proximity to the national rail network are of an appropriate scale and design, and sited sensitively to ensure that attractive vistas of the county's landscape are protected.

High Nature Value (HNV)

BLP-45 It is Council policy to support and promote High Nature Value (HNV) farming projects and schemes.

Public Awareness

BLP-46 It is Council policy to raise public awareness and understanding of the County's natural heritage and biodiversity.

4.17 Biodiversity and Landscape Objectives

Natural Capital

BLO-01 It is an objective of the Council that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation and the sustainable management of County Offaly's natural capital.

Designated and Non-Designated Sites

BLO-02 It is an objective of the Council that no plans, programmes or projects 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 projects⁶).

BLO-03 It is an objective of the Council that all projects and plans arising from this Plan⁷ will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and subsequent Appropriate Assessment where necessary, that:

1. The plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
2. The plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
3. The plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

⁶ 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 project to proceed, and c) Adequate compensatory measures in place.

⁷ Such projects include but are not limited to those relating to: agriculture; amenity and recreation; contaminated sites; electricity transmission; flood alleviation and prevention; forestry; mineral extraction; renewable energy projects; roads; telecommunications; tourism; wastewater and discharges; and water supply and abstraction.

BLO-04 It is an objective of the Council to ensure that the impact of development within or adjacent to national designated sites, Natural Heritage Areas, proposed Natural Heritage Areas, Ramsar Sites and Nature Reserves likely to result in significant adverse effects on the designated site is assessed by requiring the submission of an Ecological Impact Assessment prepared by a suitably qualified professional, which should accompany planning applications.

BLO-05 It is an objective of the Council in accordance with Article 4(4) of the Birds Directive and Regulation 27(4) of the European Communities (Birds and Habitats) Regulations 2011-2015 to strive to avoid pollution or deterioration of bird habitats outside Special Protection Areas.

BLO-06 It is an objective of the Council to take account of the objective and management practices proposed in any management or related plans for European Sites (SACs and SPAs) in and adjacent to the county published by the Department including the National Raised Bog Special Areas of Conservation (SACs) Management Plan 2017-2022 and any subsequent editions.

Geology, Eskers and Quarries

BLO-07 It is an objective of the Council to protect county geological sites and mushroom stones identified in Table 4.11 Schedule of County Geological Sites identified by the Irish Geological Heritage Programme for Protection in County Offaly.

BLO-08 It is an objective of the Council to increase pedestrian and cycling access to esker and geological sites in turn increasing appreciation of esker and geological heritage, where possible, subject to Article 6 of the Habitats Directive.

BLO-09 It is an objective of the Council to consider, in consultation with the National Parks and Wildlife Service, Westmeath County Council, the Geological Survey of Ireland and others, the potential designation of the north Offaly esker landscape as a UNESCO Geopark, to promote the unique geological heritage of the area.

Peatlands

BLO-10 It is an objective of the Council to require the preparation and submission of a Hydrological Report/Assessment for significant developments within and in close proximity to protected raised bogs and to take account of same in the assessment of impacts on the integrity of peatland ecosystems.

BLO-11 It is an objective of the Council to work with relevant stakeholders on suitable peatland sites in order to demonstrate best practice in sustainable peatland conservation, management and restoration techniques to promote their heritage and educational value subject to ecological impact assessment and appropriate assessment screening.

Waterways, Lakes and Wetland Landscapes

BLO-12 It is an objective of the Council to maintain a riparian zone for larger and smaller river channels based on the Inland Fisheries Ireland updated guideline document, '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’.

BLO-13 It is an objective of the Council to (a) investigate the feasibility of and cooperate with relevant agencies in providing a Linear Park based on the River Shannon from Banagher to Meelick, which takes account of the sensitive ecological nature of the Callows area and (b) to support the development of an overall vision/strategy for the Shannon Callows in co-operation with all stakeholders to ensure that the area is appropriately managed at a landscape scale.

Trees, Forestry and Hedgerows

BLO-14 It is an objective of the Council to preserve individual trees and groups of trees that are included in Table 4.13 and 4.14.

BLO-15 It is an objective of the Council to consider the making of Tree Preservation Orders to protect trees and woodlands of high value.

BLO-16 It is an objective of the Council to encourage the preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees, not listed in Table 4.13 and 4.14;

- (a) in particular, on the grounds of Country Houses, Gardens and Demesnes and on approaches to settlements in the county; and
- (b) as part of the development management process, require the planting of native, deciduous, pollinator friendly trees in all new developments where possible.

BLO-17 It is an objective of the Council to encourage pursuant to Article 10 of the Habitats Directive, the management of features of the landscape, such as traditional field boundaries, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species.

BLO-18 It is an objective of the Council to encourage the retention, wherever possible, of hedgerows and other distinctive boundary treatment in the county. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is unavoidable, provision of the same type of boundary will be required of similar length and set back within the site in advance of the commencement of construction works on the site (unless otherwise agreed by the Planning Authority).

Green Infrastructure

BLO-19 It is an objective of the Council to require all new developments to identify, protect and enhance ecological features by making provision for local biodiversity (for example, through provision of swift boxes or towers, bat roost sites, green roofs, etc.) and provide ecological links to the wider Green Infrastructure network as an essential part of the design process.

Invasive Species

BLO-20 It is an objective of the Council to require, as part of the planning application process, the appropriate eradication/control of invasive species when identified on site or in the vicinity of a site,

in accordance with Regulation 49 of the European Communities (Birds and Natural Habitats) Regulations 2011 to 2015.

BLO-21 It is an objective of the Council to continue to maintain mapping identifying the location of invasive species in the county in conjunction with the National Biodiversity Data Centre.

Areas of High Amenity

BLO-22 It is an objective of the Council to ensure that new development, whether individually or cumulatively, does not impinge in any significant way on the character, integrity and distinctiveness of or the scenic value of the Areas of High Amenity listed in Table 4.17. New development in Areas of High Amenity shall not be permitted if it;

- Causes unacceptable visual harm;
- Introduces incongruous landscape elements; and
- Causes the disturbance or loss of (i) landscape elements that contribute to local distinctiveness; (ii) historic elements that contribute significantly to landscape character and quality such as field or road patterns; (iii) vegetation which is a characteristic of that landscape type and (iv) the visual condition of landscape elements.

Landscape

BLO-23 It is an objective of the Council to prepare a County Landscape Character Assessment in accordance with all relevant legislation and guidance documents and following the forthcoming National and Regional Landscape Character Assessment.

BLO-24 It is an objective of the Council to have regard to the Landscape Sensitivity Areas in Tables 4.18, 4.19 and 4.20 in the consideration of planning applications.

BLO-25 It is an objective of the Council to protect skylines and ridgelines from development where such developments will create significant visual intrusion.

Protection of Key Scenic Views, Key Prospects and Key Amenity Routes

BLO-26 It is an objective of the Council to protect Key Scenic Views and Key Prospects contained in Table 4.21, and Key Amenity Routes as listed in Table 4.22 from inappropriate development.

BLO-27 It is an objective of the Council to ensure that proposed developments take into consideration their effects on views from Key Scenic Views and Prospects and Key Amenity Routes and are designed and located to minimise their impact on this views and prospects.

Wilderness Corridors

BLO-28 It is an objective of the Council to work with stakeholders such as Bord Na Móna, Coillte, National Parks and Wildlife Service, Waterways Ireland and Just Transition related groups to examine the feasibility of developing a Wilderness Corridor on rehabilitated peatlands linked to routes identified in Figure 6.13 'Midlands Cycling Destination, Offaly Network Map at;

- (i) Cavemount, Esker, Ballycon, Derrycricket, Clonsast North, Clonsast and Derrycastle Bogs in East Offaly; and
- (ii) Blackwater, Ballaghurt and Belmont Bogs in West Offaly, from Clonmacnoise in the direction of Belmont village in West Offaly.