



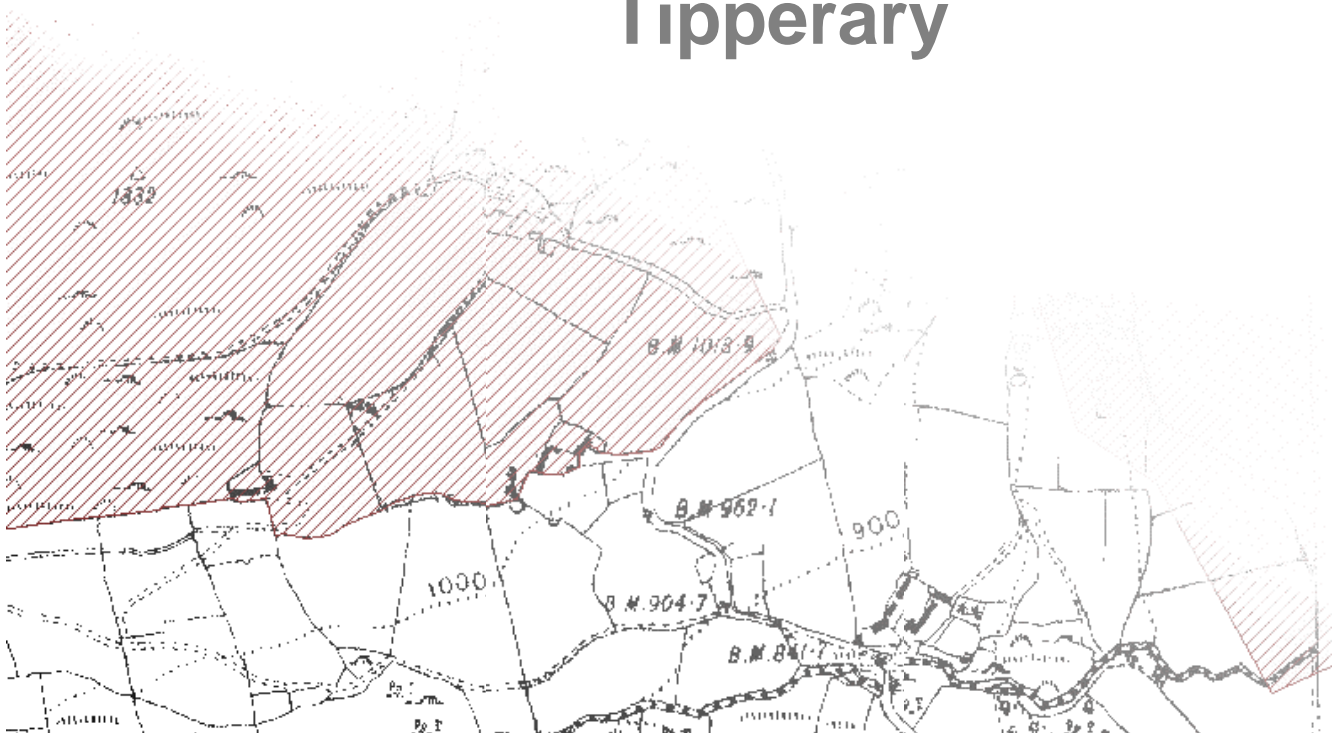
National Parks and Wildlife Service Conservation Plan for 2005-2010



Galtee Mountains cSAC

Site Code 646

Co.s Limerick &
Tipperary



SUMMARY

Introduction

Galtee Mountains cSAC has been designated as a candidate Special Area of Conservation under the EU Habitats Directive. The site was designated due to the presence of two Annex I priority habitats (active blanket bog and species-rich *Nardus* grassland) and four other Annex I habitats as listed under the EU Habitats Directive (European dry heath, alpine and boreal heath and both calcareous and siliceous rocky slopes with chasmophytic (cliff) vegetation).

Description of Galtee Mountains cSAC

The Galtee Mountains cSAC traverses the Limerick and Tipperary border and is situated in east Limerick and south Tipperary. The Galtees are Ireland's highest inland mountain range, with Galtymore at an elevation of 920m. The main ridge is generally above 700m and extends approximately 10km from east to west. The underlying geology of the site comprises sandstone and shale. The high altitude and inland location of this upland site are of particular conservation importance.

The active blanket bog within the site is largely confined to the flatter areas along the main ridge and the intervening cols. The vegetation is characterised by the presence of Ling, Cotton-grasses and Bog Moss species. Crowberry is locally abundant. Other noticeable flora species include Great Wood-rush, Carnation Sedge, Stiff Sedge, Bilberry, Viviparous Fescue and Deergrass. Active erosion is evident along the many old drainage channels/turbary boundaries present in the majority of the blanket bog areas. As the terrain becomes steeper, the bog grades into wet heath and eventually to dry heath.

Species-rich *Nardus* grassland is present within the site at a number of locations along the site boundary. The best examples of the habitat are fenced off and summer grazed by cattle. The vegetation contains a large range of co-dominant species including Mat Grass, Common Bent, Ling, Bilberry, Devil's-bit Scabious, Heath Bedstraw, Pignut, Sheep's Sorrel and Heath Rush. There is a well-developed bryophyte layer. The habitat, at one location, supports a population of the rare and protected Small White Orchid. Unenclosed sections of species-rich *Nardus* grassland are generally grazed year-round by sheep and, as a consequence, are slightly degraded.

The main east-west ridge of the Galtee Mountains essentially divides the site into two halves. The southern half comprises heath dominated rolling slopes, intermittently cut by the presence of deep river valleys. In contrast, the northern half is much steeper and generally supports upland grassland, rather than a Ling and Bilberry dominated vegetation. Corries, and their associated oligotrophic lakes, are evident on the northern side. The cliffs and scree in the vicinity of the corries and lakes support numerous alpine species, including Green Spleenwort, Roseroot, Mountain Sorrel, Cowberry, Alpine Saw-wort and the rare Northern Rock-cress. Other notable flora species occurring include Wilson's Filmy Fern, Tunbridge Filmy Fern, Fir Clubmoss and Brittle Bladder Fern. The many mountain streams within the site are often situated in deep gullies, which offer a suitable environment for the development of scrub. This habitat mainly comprises Rowan and

Hawthorn, but also includes Downy Birch, Eared Willow, Grey Willow, Sessile Oak, Holly and Common Gorse.

The site supports populations of three Red Data Book plant species, Alpine Saw-wort, Small White Orchid and Northern Rock-cress. The latter two species are also listed under the Flora Protection Order (1999). The Peregrine and Merlin, EU Annex I Birds Directive species, occur. The Peregrine breeds within the site. Other important fauna species present within the site include the Otter, Irish Hare and Badger, which are listed as Red Data Book species. Small stocks of Brown Trout are present in the rivers and some of the corrie lakes (e.g. Lough Muskry and Lough Curra) within the site.

The main land use within the site is year-round sheep grazing, with over-grazing noticeable on most slopes. Extensive burning of heath occurs that, due to its severity and frequency, has a very detrimental effect on the vegetation. Former peat cutting, the presence of drainage channels, occasional burning, trampling and grazing from livestock have been attributed to the active erosion channels that are evident in many of the remaining areas of deep peat. A small number of sheep-dipping pens are situated on the periphery of the site. The surrounding ground is often enriched by pesticide residues/run-off and littering is also evident.

Hill walking is a common activity carried out within the site and there has been an increase in the number of walkers using the site in recent years. There are no marked walkways within the site and erosion is evident along the informal tracks. The highest peak, Galtymore, is the most popular destination within the site for walkers. There has been a significant increase in the number of motorised vehicles accessing the site, in particular quad bikes and four-wheel drives, with motorbikes continuing to access the main ridge. Rod fishing for Brown Trout is occasionally carried out, the majority of which takes place on Lough Muskry.

An unmetalled road runs from a forestry track (i.e. outside the boundary of the site) as far as Lough Muskry. In addition, old tracks are present throughout the site, many of which were used in the past for transporting turf from the mountain tops.

Main conservation objectives

- To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; active blanket bog (8% of the site), species-rich *Nardus* grassland (<1%), European dry heath (47%), Alpine and boreal heath (2%) and siliceous/calcareous rocky slopes (3%)
- To maintain other habitats at favourable conservation status, such as upland grassland (29%), wet heath (9%), lakes and rivers (1%) and scrub (<1%)
- To maintain the populations of notable species on the site at favourable conservation status, including Small White Orchid, Northern Rock-cress, Alpine Saw-wort, Otter, Irish Hare, Badger, Peregrine Falcon and Merlin
- To establish effective liaison and co-operation with landowners, legal users and relevant authorities

Main management issues

- Burning
- Drainage
- Erosion
- Grazing
- Recreational pressure

Main strategies to achieve objectives

- Maintain sustainable grazing levels
- Control damaging activities, such as burning and fertiliser use
- Conduct monitoring surveys of habitats and important species
- Ensure effective liaison between relevant stakeholders

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Map 1 Location and Boundary Map (version 1.0)

Map 2 Indicative Habitat Map

Map 3 Management Zoning Map

READER'S GUIDE

The National Parks and Wildlife Service (NPWS) of the Department of the Environment, Heritage and Local Government (DEHLG) has produced this plan to provide ecological information about the site and to outline the main objectives for the conservation of the special features of the site. The purpose of this draft is to provide stakeholders the opportunity to input into the development of the plan.

The **Introduction** section outlines the **policy background** to the site's designation and the relevant legislation.

The **Site Description** section contains **general information** on the site's boundaries and ownership and on the statutory bodies with responsibility for its conservation. It also contains sections on the **physical aspects** of the site such as the geology and hydrology as well as the **biological features**, in particular, the habitats and species found there. **Land use** and cultural features are also described.

The **Conservation Value** section assesses the main ecological attributes of the site.

The **Management Framework** section outlines the management necessary for the conservation of the site. It starts with a set of specific **conservation objectives**. These are followed by the main **management issues** that may impact on the conservation of the site and the **strategies** that are proposed to achieve the conservation objectives. In the final section, the site is divided into management **zones** to indicate where each strategy applies.

The appendices include a **glossary** where scientific and technical terms are explained, **reference material** consulted in the preparation of the plan and a list of **notifiable actions** relevant to each habitat within the site.

By preparing, implementing and reviewing this plan on a five-year basis, DEHLG aims to achieve the objectives of the EU Habitats Directive in relation to this site.

INTRODUCTION

Legal Background for Conservation Plans

The legal basis for selection and designation of **Special Areas of Conservation** (SACs) is the **EU Habitats Directive**, which was adopted in 1992. Focusing on the conservation of natural and semi-natural habitats and species of flora and fauna, the Habitats Directive seeks to establish “Natura 2000”, a network of protected areas throughout the European Community. The Habitats Directive includes a list of habitats that require SAC designation and specific conservation measures. This list is known as Annex I and the habitats are referred to as Annex I habitats. On this list, habitats that require special attention because they are in danger of disappearance, are termed ‘priority habitats’. A second list, Annex II in the Habitats Directive comprises species that must be afforded special protection.

In Ireland, the habitats and species that must be afforded protection under the Habitats Directive include:

- 16 Annex I priority habitats that require particular attention – including raised bogs, active blanket bogs, turloughs and machair,
- 45 other Annex I habitats – such as certain types of heaths, lakes and woodlands,
- 25 Annex II species – including Otter, Freshwater Pearl Mussel and Killarney Fern.

It is the responsibility of each member state to designate SACs to protect the Annex I habitats and Annex II species. These sites, together with the **Special Protection Areas** (SPAs) designated under the **EU Birds Directive** (1979), form the European “Natura 2000” network.

The Birds Directive contains annexes, which are lists of birds that require particular conservation measures (Annex I), and also species that may be hunted, and species that may be sold. There are 28 Annex I species regularly occurring in Ireland including Whooper Swan, Greenland White-fronted Goose, Peregrine Falcon, Corncrake and Terns. Member states are also required to protect sites that are important for migratory species such as ducks, geese and waders.

The Habitats Directive was transposed into Irish law through the **European Communities (Natural Habitats) Regulations 1997**. The **Wildlife Act 1976** is the main statute governing the protection of wildlife in Ireland and was amended in 2000 to take account of European law, particularly the Habitats and Birds Directives. The **Wildlife (Amendment) Act 2000** also makes legal provision for the designation and protection of a national network of **Natural Heritage Areas** (NHAs). Over 1,100 proposed NHAs were published in 1995 and almost 400 of these are also selected as candidate SACs.

The European Communities (Natural Habitats) Regulations 1997 include the following points:

The Minister for the Environment, Heritage and Local Government must transmit a candidate list of sites to the European Commission for consideration.

Following adoption of this list by the Commission, the Minister will formally designate the sites as SACs.

Sites are legally protected once they are publicly advertised.

Landowners and other users with a legal entitlement should be notified of designation, and the Minister must make all reasonable efforts to do so. Notification also includes a list of activities that may alter, damage, destroy or interfere with the integrity of the site. A person who illegally damages a site may be prosecuted or required to repair damage.

Landowners and other users with a legal entitlement may appeal the designation of lands on scientific grounds.

Landowners and other users with a legal entitlement will be compensated for actual loss of income arising from restrictions imposed as a result of designation.

DEHLG is the government department with responsibility for the designation and protection of wildlife habitats, species and areas of conservation interest. As part of their responsibility in relation to biodiversity and wildlife under the Wildlife Acts (1976 and 2000), the Minister's brief extends far beyond the habitats and species listed in the annexes of the Habitats and Birds Directives. For this reason, cSAC conservation plans may deal with species that are not mentioned in these annexes.

Reasons for Designation of Galtee Mountains cSAC

HABITATS LISTED IN ANNEX I OF THE EU HABITATS DIRECTIVE	CONSERVATION VALUE
<ul style="list-style-type: none"> • *Active blanket bog (EU Habitat Code 7130) 	This habitat comprises 8% of the site and represents a good example of high altitude blanket bog.
<ul style="list-style-type: none"> • *Species-rich <i>Nardus</i> grassland (EU Habitat Code 6230) 	The habitat represents a small area (<1%) of the site, but the fenced off and summer grazed sections are of good conservation value. In addition, the habitat supports a population of the protected Small White Orchid.
<ul style="list-style-type: none"> • European dry heath (EU Habitat Code 4030) 	Dry heath occupies 47% of the site and is a good representative example of this habitat.
<ul style="list-style-type: none"> • Alpine and boreal heath (EU Habitat Code 4060) 	The site is the only inland mountain range to support a significant area of these communities at such high altitude.
<ul style="list-style-type: none"> • Calcareous rocky slopes with chasmophytic vegetation (EU Habitat Code 8210) 	Considered to be a comparatively isolated example of the community, which is of excellent conservation value.
<ul style="list-style-type: none"> • Siliceous rocky slopes with chasmophytic vegetation (EU Habitat Code 8220) 	The comment for calcareous rocky slopes with chasmophytic vegetation (8210) also applies to this community.

* indicates priority habitat in Annex I of the Habitat Directive

Implications of Site Designation for Landowners and other Site Users

In most areas designated as cSACs, current practices will not have to change significantly.

In cases where users with a legal entitlement are required to change practices or restrict activities to protect the wildlife interest of the site, compensation will be payable based on actual loss of income.

If a user with a legal entitlement wishes to carry out certain activities, not covered by licence or consent from another statutory body, within the designated area, they must consult with, and get consent from, the Minister for the Environment, Heritage and Local Government. These activities are listed as “Notifiable Actions” for each habitat (see Appendix V).

The designation of the site can be appealed by landowners and legal users on scientific grounds. Details of the appeals procedure are also given in Appendix VI.

SITE DESCRIPTION

Location Including Site Boundaries

The majority of the site is situated in south-western Co. Tipperary, with a smaller area located in south-eastern Co. Limerick (Map 1).

Grid Ref.: R 90 24

Latitude: N 52°22'03"

Longitude: W 08°09'42"

Area: 6422 ha

Altitude Range: 244 m to 920 m

Townlands: Ardane, Ballygeana, Ballyhurry, Ballynamuddagh (Ed Anglesborough), Barna, Baunteen, Bohernarnane, Boolakennedy, Boolanlisheen, Carrigeen Mountain, Cloheenafishoge, Clohernagh, Coolagarranroe, Cullenagh, Curraghavokey, Drumleagh, Glencoshabinnia, Glengarra, Hopkinsrea, Kilcoran, Knocknagalty, Knocknascrow, Longford (Ed Clonbeg), Lyre, Mackanagh Upper, Moneynaboola, Poulavala, Rossadrehid, Rossbog, Skeheenaranky, Stonepark and Toor Beg

Site Boundaries

The site is bounded on all sides by agricultural land, used for grazing, and conifer plantations.

The site was surveyed in 1995 and enlarged considerably to its present extent.

Site Infrastructure

The many old tracks that traverse the site were traditionally used for transporting turf. There is an unmetalled road that runs from a forestry track to Lough Muskry. There are numerous roads in proximity to the site that offer access to the site, with the main Dublin-Cork road located beyond the southern edge of the site.

Legal Status

Ownership

Much of the site is in commonage, with the remainder under multiple private ownership.

Designations of the Site

candidate Special Area of Conservation	Sitecode IE0000646	Published on 1 st March 1997
proposed Natural Heritage Area	Sitecode 646	Unpublished
CORINE Biotope Site	Site Code: 800000486	

Department of Agriculture	The Department of Agriculture has designated the Galtee Mountains as a “ <i>severely handicapped area</i> ”.
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Past Status and Designation of the Site

The site was originally listed as an Area of Scientific Interest (ASI) in 1974.

Rights Pertaining to the Site

Grazing	A large portion of the site is held under commonage.
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Government Departments and Agencies

Department of the Environment, Heritage and Local Government (DEHLG)	DEHLG is the government department with responsibility for the protection and conservation of Ireland’s natural heritage.
National Parks & Wildlife Service (NPWS)	NPWS is the section of the DEHLG responsible for maintaining the nature conservation value of the site. Periodic inspection of the site is carried out by the local Conservation Ranger. Regional staff also participate in research and survey projects by collecting data on the site, provide advice to planning authorities on the impacts of development applications and provide an education and advisory service to the public (see Appendix VIII) for further details of NPWS regional staff.
South Tipperary and Limerick County Councils	South Tipperary and Limerick County Councils are the planning authorities for the site. As such they are obliged to ensure appropriate assessment of the implications of developments requiring planning permission that may have an impact, either individually or in combination with other developments on the designated area.
Environmental Protection Agency (EPA)	The EPA is an independent state sponsored body with a wide range of statutory duties including monitoring environmental quality and overseeing the performance by local authorities of their statutory environmental protection functions.

Local Authority Policy in relation to the Site

Tipperary South County Development Plan (1996) states that “*the Council will co-operate with the adjoining authorities and with other interested parties to protect the potential of these mountain areas (i.e. including the Galtees) and to carry out appropriate development as and when resources permit*”. The Galtee Mountains are listed in the Development Plan as an Area of Primary Amenity Value, an Area of Scientific Interest and a Natural Heritage Area (NHA). With reference to the latter designation, the plan also states that “*planning permission will be refused where a development would lead to ecological damage*”.

Limerick County Development Plan (1999) states that “*The planning Authority will have regard to the protection of NHAs,...SPAs,...and SACs*”. It also states that “*Development likely to have serious adverse effects on these areas will not normally be permitted*”.

Physical Features

Climate

The closest synoptic weather station to the site is at Cork Airport, and 30-Year Average information for this station was obtained from the Met Eireann website. The full details are presented in Appendix III. In summary, the mean daily air temperature at the station is 9.4°C, ranging from an average low of 5.0°C in February to an average high of 14.8°C in July. The average annual rainfall is 1194mm, and the average daily duration of sunshine is 3.8 hours. Winds are predominantly from the west, with an average wind speed of 11.1 knots. There is an annual average of 16.4 days with snow or sleet recorded for the Cork Airport station, with 5.6 days where snow was still lying on the ground by 9am.

Geology & Geomorphology

The underlying geology is comprised of Old Red Sandstone and Silurian Shales. The southern smooth slopes of the mountain range give way to a steep northern face, pocked with deep corries and their accompanying moraine-impounded lakes. The long ridge of the Galtees, which runs for about 10km in an east-west direction, was too high to be over-ridden by the inland ice-sheets and, although it resulted in the creation of small corrie glaciers, its summits are capped by tors built of massive conglomerate.

Soils & Soil Processes

Although peat covers most of the mountain range, much of the deeper deposits have suffered from erosion. Peat formation is occurring in most places, but active erosion channels are also present and these are resulting in peat loss. Mineral soils are evident, particularly on the steep, well-drained north-facing slopes within the site.

Biological Features

Habitats and Vegetation

Note: Throughout the conservation plan, habitats are named and described under two different systems: the Annex I habitats are as listed in the EU Habitats Interpretation Manual Version 15/2(1999), while all other habitats are as listed according to the NPWS NHA classification system.

The following table lists the habitats within the site. The Annex I habitats of the Habitats Directive for which the site was selected are listed, with the relevant NHA habitats category also shown. Annex I priority habitats are marked with an asterisk (*). The Indicative Habitat map for the site is presented in Map 2. The percentage area presented for each habitat type is based on the approximate geographic area of each habitat, as shown in Map 2.

Habitats Found within Galtee Mountains cSAC

ANNEX I HABITAT TYPE	HABITAT CATEGORY	% AREA
*Active blanket bog (EU Code 7130)	Blanket bog	8%
*Species-rich <i>Nardus</i> grassland (EU Code 6230)	Upland Grassland on Mineral Soil	<1%
European dry heaths (EU Code 4030)	Dry heath	47%
Calcareous rocky slopes with chasmophytic vegetation (EU Code 8210)/ Siliceous rocky slopes with chasmophytic vegetation (EU Code 8220)	Exposed rock	3%
Alpine and boreal heaths (EU Code 4060)	Heath	2%
-	Upland grassland	29%
-	Wet heath	9%
-	Lakes and rivers	1%
-	Scrub	<1%



Galtee Mountains View

Annex I Habitats:

Active blanket bog (7130) (8% of total site area or 514ha)

The active blanket bog within the site is largely confined to the flatter areas along the main ridge and the intervening cols. The peat is generally 1-1.5m deep. The vegetation is characterised by the presence of Ling (*Calluna vulgaris*), Common Cotton-grass (*Eriophorum angustifolium*), Hare's-tail Cotton-grass (*Eriophorum vaginatum*) and *Sphagnum* moss species (e.g. *S. capillifolium*, *S. papillosum* and *S. palustre*). Crowberry (*Empetrum nigrum*) is locally abundant. Other flora species occurring include Great Wood-rush (*Luzula sylvatica*), Carnation Sedge (*Carex panicea*), Stiff Sedge (*Carex bigelowii*), Bilberry (*Vaccinium myrtillus*), Viviparous Fescue (*Festuca vivipara*), Wavy Hair-grass (*Deschampsia flexuosa*) and Deergrass (*Trichophorum caespitosum*). Two bryophytes, *Diplophyllum albicans* and *Rhacomitrium lanuginosum*, occur. Old drainage channels/turbary boundaries are present in the majority of blanket bog areas, and the erosion of peat along these is evident. This habitat may be used as a breeding location for wader bird species.

Species-rich *Nardus* grassland (6230) (<1% of total site area)

This habitat is found on the periphery of the site in the north-west and on the western side of Cush (in the north of the site). The best examples are fenced off and summer grazed by cattle. The vegetation contains a large range of co-dominant species including Mat Grass (*Nardus stricta*), Common Bent (*Agrostis capillaris*), Ling, Bilberry, Devil's-bit Scabious (*Succisa pratensis*), Heath Bedstraw (*Galium saxatile*), Pignut (*Conopodium majus*), Sheep's Sorrel (*Rumex acetosella*) and Heath Rush (*Juncus squarrosus*). There is a well-developed bryophyte layer, including *Rhytidiadelphus squarrosus*, *Polytrichum* spp., *Thuidium tamarascinum*, *Pleurozium* sp., and *Hylocomium splendens*. Other frequently encountered flora species include Heath Grass (*Danthonia decumbens*), Green-ribbed Sedge (*Carex binervis*), Lousewort (*Pedicularis sylvatica*), Heath Milkwort (*Polygala serpyllifolia*), Yarrow (*Achillea millefolium*), Tormentil (*Potentilla erecta*), Daisy (*Bellis perennis*), Hard Fern (*Blechnum spicant*), White Clover (*Trifolium repens*), Hawkweeds (*Pilosella* spp.), Soft Rush, (*Juncus effusus*) and Marsh Thistle (*Cirsium palustre*). One area of this habitat supports a population of the rare and protected Small-white Orchid (*Pseudorchis albida*). Unenclosed sections of species-rich *Nardus* grassland are generally grazed year-round by sheep and are slightly degraded.

European dry heath (4030) (47% of total site area or 3017ha)

This habitat is widespread throughout the site, and often appears in a mosaic with other habitats, such as wet heath and upland grassland. It is most extensive on the south-facing slopes. Ling dominates the vegetation, although there is also good cover of Bilberry. Bell Heather (*Erica cinerea*), Tormentil, Heath Bedstraw and mosses (e.g. *Polytrichum* and *Sphagnum* spp.), with Bents (*Agrostis* spp.) relatively common. Small amounts of Mat Grass, Heath Rush and Purple Moor-grass (*Molinia caerulea*) are present. Much of the dry heath within the site is burned regularly and this, combined with over-grazing by sheep, has resulted in a deterioration in the diversity (both in terms of structure and species) of the habitat.

Calcareous rocky slopes with chasmophytic vegetation (8210)/ Siliceous rocky slopes with chasmophytic vegetation (8220) (3% of total site area or 193ha)

The habitats are found in mosaic with each other, and also overlap with areas of alpine and boreal heath. The habitats are generally concentrated around the north-facing cliffs associated with the corries present within the site. Sandstone and conglomerate are considered siliceous in character, and the vegetation on these substrates includes species such as Bilberry, Great Wood-rush, Cowberry (*Vaccinium vitis-idaea*), Wilson's Filmy Fern (*Hymenophyllum wilsonii*) and Tunbridge Filmy Fern (*Hymenophyllum tunbridgense*). Alpine Saw-wort (*Saussurea alpina*), Northern Rock-cress (*Cardaminopsis petraea*), Green Spleenwort (*Asplenium viride*), Brittle Bladder Fern (*Cystopteris fragilis*), Mountain Sorrel (*Oxyria digyna*) and Roseroot (*Sedum rosea*) are found on outcrops of the richer shale. Northern Rock-cress and Alpine Saw-wort are Red Data Book species, and the former of the two is also a protected species (i.e. Flora Protection Order, 1999). Peregrines (*Falco peregrinus*) and Ravens (*Corvus corax*) use the cliffs associated with the corries for breeding.

Alpine and boreal heath (4060) (2% of total site area or 128ha)

Due to the high elevation of the Galtees, this habitat is represented on some of the mountain peaks. The vegetation is relatively species poor and includes dwarf Ling, Bilberry, Dwarf Willow (*Salix herbacea*), Great Wood-rush, Starry Saxifrage (*Saxifraga stellaris*), Wavy Hair-grass, Common Bent and Sheep's Fescue (*Festuca ovina*). Other species present are Fir Clubmoss (*Huperzia selago*), Stiff Sedge, Crowberry and *Rhytidiadelphus* moss sp. Alpine and boreal heath can be found in mosaic with scree and chasmophytic vegetation on rocky slopes.

Other Habitats:

Upland grassland

This habitat is most extensive in the west of the site, on the steep north-facing slopes. It is also found around the gullies associated with headwaters, and in mosaic with dry heath on gentle slopes elsewhere. The vegetation is characterised by Mat Grass, in addition to Common Bent, Tormentil, mosses (e.g. *Polytrichum* sp. and *Rhytidiadelphus* sp.) and occasional patches of Soft Rush and Great Wood-rush.

Wet heath

The majority of the wet heath habitat is located on the periphery of the active blanket bog and is usually situated on sloping ground. It occurs in mosaic with active blanket bog and dry heath. Ling, Hare's-tail Cotton-grass, Crowberry and Deergrass dominate the vegetation. *Sphagnum* mosses are abundant in the understorey. Occasional species include Cross-leaved Heather, Bilberry, Bell Heather, Heath Rush, Purple Moor-grass, Common Cotton-grass, Carnation Sedge and Heath Milkwort. There is a large area of wet heath present in the south-eastern corner of the site that is dominated by tussocky Purple Moor-grass. Soft Rush, Marsh Violet (*Viola palustris*) and Sundews (*Drosera* spp.) are evident here.

Lakes and rivers

Five oligotrophic lakes associated with corries are present within the site. They are generally deep, clear bodies of water with a poor representation of aquatic macrophytes. Shoreweed (*Littorella uniflora*) and green filamentous algae were recorded from one of these lakes. Streams and rivers are common within the site, two of which originate from corrie lakes, which eventually flow into nearby rivers such as the Aherlow, Suir, Tar and Funshion. Bryophytes, such as *Fontinalis antipyretica*, and liverworts are common on the wet rocks. The majority of the streams are rocky, steep and fast flowing and are usually located in deep gullies. The bankside vegetation in these gullies is diverse and includes Great Wood-rush, Golden-saxifrage (*Chrysosplenium oppositifolium*), Foxglove (*Digitalis purpurea*), Wood-sorrel (*Oxalis acetosella*), Cuckooflower (*Cardamine pratensis*) and Marsh Violet. Scrub is also occasionally present. Otters (*Lutra lutra*) and Dippers (*Cinclus cinclus*) use the main rivers for feeding. Brown Trout (*Salmo trutta*) are also common in both streams and rivers.

Scrub

Small areas of patchy scrub are found on some of the lower reaches of upland grassland, particularly in the north-west of the site. This habitat is generally represented by numerous isolated specimens of Hawthorn (*Crataegus monogyna*) and Common Gorse (*Ulex europaeus*). The scrub becomes more woodland-like in some of the steep-sided stream gullies, and reaches high into the mountains as a result of the shelter provided by the gullies. Rowan (*Sorbus aucuparia*) and Hawthorn are the most common species, with other species including Downy Birch (*Betula pubescens*), Eared Willow (*Salix aurita*), Grey Willow (*Salix cinerea*), Sessile Oak (*Quercus petraea*) and Holly (*Ilex aquifolium*). Due to the inaccessible location of some of the areas of scrub, the grazing pressure is very low and Bilberry, Ling and Bracken (*Pteridium aquilinum*) grow very tall. The small and fragmented nature of the scrub habitat makes it difficult to map and it is not represented on the gross habitat map (i.e. Map 2).

Notable Flora:

Three Red Data Book species occur on the site, the Small White Orchid, Northern Rock-cress and Alpine Saw-wort, with the former two species also listed on the Flora Protection Order (1999). Numerous other notable species occur, including Green Spleenwort, Roseroot and Irish Saxifrage (*Saxifraga rosacea/decipiens*), with a complete list presented in Appendix IV.

Fauna:**Fish**

Brown Trout has been recorded from several of the lakes within the site, in particular Lough Muskry and L. Curra.

Birds

Two Annex I EU Birds Directive species, Peregrine and Merlin, occur on the site. Two to three pairs of Peregrine have been observed, with Merlin observed only occasionally.



Peregrine (Falco peregrinus)

Notable bird species observed using the site include Raven (*Corvus corax*), Skylark (*Alauda arvensis*), Sparrowhawk (*Accipiter nisus*), Kestrel (*Falco tinnunculus*), Dipper (*Cinclus cinclus*), Wheatear (*Oenanthe oenanthe*), Meadow Grey Heron (*Ardea cinerea*) and Red Grouse (*Lagopus lagopus*). Pipit (*Anthus pratensis*) is recorded in the site and Red Grouse is known to breed within the site. Nightjars (*Caprimulgus europaeus*) occur in adjacent Coillte woodland (K. Collins *pers. comm.*). Hen Harriers (*Circus cyaneus*) which nest close outside the cSAC have been noted moving within the site.

Mammals

The Otter, an Annex II EU Habitats Directive species and Internationally Important Red Data Book species, has been recorded on the site using the main rivers. Irish Hare (*Lepus timidus hibernicus*) and Badger (*Meles meles*), both Internationally Important Red Data Book species, are also known to occur. Fallow Deer (*Dama dama*) occurs on the site.

Land Use

Land use on the site

Burning

Burning is regularly carried out within the site in order to encourage better grazing for livestock. The majority of it takes place on the southern side of the mountain range where heath is the dominant vegetation type. It is often practiced within the illegal burning period (i.e. 1st March to 31st August), and is usually unsupervised, such that large tracts of land are burned each time a fire is started. Vegetation burning is often carried out on a short-term rotation (i.e. about every ~3 years), with some areas being burned in successive years.

Grazing	<p>Year-round sheep grazing is practiced in the majority of the site, which is unfenced and livestock can access most of the site. Present livestock densities are causing over-grazing. Cattle are noted as occasional grazers, as are donkeys (i.e. mostly on enclosed areas of species-rich <i>Nardus</i> grassland). Fallow Deer are present in the conifer plantations adjacent to the site and may venture into it from time to time.</p> <p>The impacts of grazing on the commonage areas of this site have been assessed by the Commonage Framework Planning Project (CFPP). The relevant plans are LI-1, TI-1 and TI-2. The findings of these plans are reflected in the management strategies and zoning sections of this conservation plan.</p>
Recreation	<p>Hill walking is a common activity within the site, with the numbers of walkers using the site increasing in recent years. Published material on walking within the site is available. One local walking group organises around five trips each year in the Galtees. On busy days, more than 100 people may be present on the mountains within the site. There are no marked walkways within the site, and the majority of people walk along the main ridge. Galtymore, the highest peak, is the most popular destination for walkers. Recreational walking is particularly popular along the ridge between Lyracappul and Galtymore, where a dry stone wall offers a convenient boundary to follow. There are localised signs of poaching and peat erosion alongside this wall.</p> <p>The use of the site by various types of motorised vehicles has increased significantly during the past few years. Of particular concern is the increase in usage of the site by quad bikes and four-wheel drives. Motorbikes continue to be used on the main ridge.</p>
Erosion	<p>Active blanket bog was once present on the majority of the cols within the Galtee mountain range. Much of it still exists, but some areas have suffered from severe erosion, and all or most of the peat is gone, with only scree, bedrock and thin peaty soils remaining. Contributing factors to this process include former peat cutting, the presence of drainage channels, occasional burning, trampling and grazing from livestock. Active erosion channels are evident in many of the remaining areas of deep peat.</p>
Fishing	<p>Rod fishing of the small stocks of Brown Trout present in the rivers and some of the corrie lakes (e.g. Lough Muskry and Lough Curra) within the site occurs.</p>
Spread of unwanted species	<p>There are some small, isolated patches of dense Bracken present within the site. These are generally located near river valleys or stream gullies in the south, but extensive burning may encourage spread further upslope. Small numbers of Rhododendron (<i>Rhododendron ponticum</i>) seedlings are evident along the periphery of the site adjacent to forestry blocks in the south.</p>
Sheep-dipping	<p>A small number of sheep-dipping pens are situated on the periphery of the site. Surrounding ground is often enriched by pesticide residues/run-off.</p>
Littering	<p>Small amounts of litter are evident in the vicinity of sheep-dips and where recreational use is concentrated (e.g. between rock crevices on the top of Galtymore).</p>

Roads/Pathways	An unmetalled road runs from a forestry track located outside the boundary of the site as far as Lough Muskry. In addition, old tracks are present throughout the site, many of which were used in the past for transporting turf from the mountain tops.
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Land use adjacent to the site

Afforestation	There are numerous conifer plantations situated around the periphery of the site. The majority are centred around river valleys and have little influence on the site itself.
Grazing	Sheep grazing is practiced on much of the land adjoining the cSAC. Some of the fields outside the site boundary in the north-west are used for cattle grazing. Fallow Deer graze the forestry plots.
Burning	Burning is regularly carried out on the mountain slopes outside the site, in order to encourage better grazing for livestock.
Recreation	Hill walkers use the mountain slopes and forestry tracks outside of the site. A youth hostel is located near the site boundary in Glengarra Wood.
Fertilisation	Small amounts of fertiliser are used on some of the fields adjacent to the site, to encourage better grazing for livestock.
Roads/Pathways	There are numerous roads in proximity to the site that offer access to visitors and provide good views of the mountain range. The main Dublin-Cork road (N8) passes along the southern edge of the Galtees.
Water abstraction	The main abstraction point for the Galtee Regional Water Supply (75% of supply) is from the Muskry Stream, just north of the cSAC (R272925). About 25% of the Galtee Regional Water Supply comes from College Stream, again, just north of the cSAC boundary (R271912). In total, 3285000m ³ of water, per annum, is abstracted between the two points.

Past human use

Peat extraction was once carried out in numerous parts of the site. Old trackways are still visible that lead up to many of the flat areas where the peat is quite deep. Drainage channels are evident in most of these areas, and were probably dug to mark out turbary boundaries. Farmers previously used the Galtee Mountains for cattle grazing during the summer months, and would remove the cattle from the mountains during the winter period. During the famine years, farming of potatoes and other crops was practised in some of the low-lying regions, particularly in the valleys. 'Lazy-beds' can still be seen today in some places. Game shooting was also carried out in the Galtee Mountains. Deer, Grouse, Woodcock and other species were hunted, with visiting gentry staying in one of the game lodges situated in the area (e.g. Kilcoran Lodge). In more recent times, gold mining exploration was carried out in the Galtees. Lough Muskry has been used to provide a water supply to Tipperary Town for approximately 100 years.

Recorded Monuments and Other Features

There are numerous recorded monuments found within the site that are protected under section 12 of the National Monuments (Amendment) Act 1994.

MONUMENT NO.	DESCRIPTION	NAT. GRID	TOWNLAND
TI074-014	Cairn	19528; 12481	Boheranane, Cloheenafishoge
TI080-001	Cairn	19161; 12390	Rossadrehid, Cullenagh (Shanrahan Pt.)
TS073-029	Clochán	186277;125105	Money naboola
TS073-030	Structure	186439;124816	Money naboola
TS073-031	Enclosure (prehistoric)	187285;125865	Drumleagh
TS073-032	Clochán	186268;125468	Money naboola
TS073-033	Standing Stone	186204;126008	Money naboola
TS073-034	Booley Hut	187200;126008	Drumleagh
TS074-014	Cairn	196030;124519	Bogernarnane/Cloheenafishoge
TS074-21	Booley Hut	188703;124827	Drumleagh
TS074-22	Booley Hut	187542;125497	Drumleah
TS080-001	Cairn possible	191607;123878	Rossadrehid/Cullenagh
LI050-02301	Cairn	18500; 12369	Bauteen, Carrigeen Mountain
LI050-02302	Cairn	18507; 12369	Ballygeana, Bauteen, Carrigeen Mountain
LI050-024	Cairn	18522; 12363	Ballygeana, Carrigeen Mountain
LI050-02501	Cairn	18541; 12363	Ballygeana, Carrigeen Mountain
LI050-02502	Cairn	18545; 12365	Carrigeen Mountain
LI050-026	Cairn	18555; 12373	Carrigeen Mountain, Knocknagalty
LI050-027	Cairn possible	18567; 12387	Knocknagalty
LI050-02801	Cairn possible	18617; 12420	Knocknagalty
LI050-02802	Cairn possible	18618; 12421	Knocknagalty
LI050-02803	Cairn possible	18620; 12421	Knocknagalty
LI050-029	Cairn possible	18667; 12384	Knocknagalty
LI050-03001	Cairn possible	18688; 12361	Knocknagalty
LI050-03002	Cairn possible	18691; 12356	Knocknagalty
LI050-031	Cairn possible	18749; 12368	Knocknagalty
LI050-032	Cairn possible	18826; 12393	Knocknagalty
LI050-033	Cairn possible	18836; 12392	Knocknagalty
LI050-034	Cairn possible	18853; 12394	Knocknagalty
LI058-002	Cairn	18440; 12247	Ballynamuddagh, Carrigeen Mountain

CONSERVATION VALUE OF GALTEE MOUNTAINS cSAC

The Galtee Mountains cSAC supports significant areas of EU priority and other habitats, including active blanket bog, alpine and boreal heaths, dry heath and small areas of chasmophytic vegetation on siliceous and calcareous slopes.

The active blanket bog present on the site is a high altitude example of mountain blanket bog with typical vegetation present. The presence of Stiff Sedge is of conservation interest. In many of the areas the blanket bog is severely eroded. The habitat is considered to be of significant representativity with an average or reduced conservation value, mainly due to the eroded nature and continued vulnerability of the habitat. However, as an example of high altitude blanket bog, the habitat is valuable as it represents a comparatively isolated, inland station. In the context of the entire site, the habitat has good overall conservation value.

Good representative examples of alpine and boreal heath communities occur at the site. They are relatively species poor and almost devoid of alpine species. However, this habitat is important as the Galtees is the only inland mountain range to support a significant area of these communities at such high altitude. The overall conservation value of these habitats within the site is excellent.

Dry heath is present on approximately 47% of the site. The dry heath is probably best developed on the steeper slopes above the headstreams and is considered to be of good representativity, due to the lack of human interference. The Galtees are of value for dry heath vegetation as they are comparatively isolated from the more western montane heaths and are considered to have good conservation value.

The chasmophytic vegetation on siliceous and calcareous rocky slopes occurs on the sandstone, conglomerate and shale rock cliffs that overhang corrie lakes on the northern side of the ridge. The sandstone and conglomerate are defined as siliceous in character, with the shale being calcareous. The two chasmophytic communities comprise approximately 100ha of the site and form good representative communities. The chasmophytic vegetation of the Galtees are comparatively isolated from other similar habitat in the Comeraghs and the mountains of the western seaboard. They contain a rich alpine flora, including one of only two stations in Ireland for Northern Rockcress (*Cardaminopsis petraea*) and are in a near-natural or natural condition. The communities are considered to be of excellent conservation value.

The site provides habitat for the Peregrine, an Annex I EU Birds Directive species. Despite the apparent suitability of the habitat within the site, the site only supports one known occupied territory. However, the site is considered to be of significant conservation value with regard to the Peregrine.

MANAGEMENT FRAMEWORK

Conservation Objectives

European and national legislation places a collective obligation on Ireland and its citizens to maintain at favourable conservation status areas designated as candidate Special Areas of Conservation. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

According to the EU Habitats Directive, favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, is stable or increasing, and
- the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable as defined below.

The favourable conservation status of a species is achieved when:

- population data on the species concerned indicate that it is maintaining itself, and
- the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

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| Objective 1: | To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; active blanket bog (8% of the site), species-rich <i>Nardus</i> grassland (<1%), European dry heath (47%), Alpine and boreal heath (2%) and siliceous/calcareous rocky slopes (3%). |
| Objective 2: | To maintain other habitats at favourable conservation status, such as upland grassland (29%), wet heath (9%), lakes and rivers (1%) and scrub (<1%). |
| Objective 3: | To maintain the populations of notable species on the site at favourable conservation status, including Small White Orchid, Northern Rock-cress, Alpine Saw-wort, Otter, Irish Hare, Badger, Peregrine Falcon and Merlin. |
| Objective 4: | To establish effective liaison and co-operation with landowners, legal users and relevant authorities. |

Management Issues

While many activities in or adjacent to the site have the potential to cause deterioration/disturbance, it is important to determine the significance of such activities relative to the conservation objectives at a particular site. To that end, all known potential environmental effects of the sites principal activities (in alphabetical order) have been listed and the biological and chemical impacts that may cause change to the biological communities present have been described.

- **Burning**
- **Drainage**
- **Erosion**
- **Forestry**
- **Grazing**
- **Littering**
- **Nutrient enrichment**
- **Ownership**
- **Recreational pressure**
- **Water abstraction**

Burning

Extensive burning of vegetation, with the aim of improving grazing for sheep, is practised in the majority of the site and is often carried out on a short term rotation (i.e. about every ~3 years), with some areas being burned in successive years. The high frequency of burning is having a negative impact on the ecological quality of the site. It reduces flora species diversity and encourages a change in the vegetation from Ling dominated heath to upland grassland. In addition, the exposed peat that results from burning is susceptible to erosion on the steeper slopes, and cracking and movement of the peat is evident in some parts of the site. This ultimately leads to localised loss of soil/peat and the development of scree. The present burning regime is also of little benefit to Red Grouse, which is a species that requires a mix of both old and young heather shoots.

Heather growing in areas above 600m is generally kept short by wind clipping and it is known that the regrowth of this species is very slow after burning. This, combined with the high risk of initiating erosion, means there are no benefits of burning such areas (see Sutherland and Hill, 1995).

Drainage

Old drainage channels/turbary boundaries are evident in most peaty areas. They are regularly spaced (i.e. about 10-15m apart) and run across the slope and are having a drying-out effect on the surrounding peat.

Erosion

Some sections of blanket bog are suffering from extensive erosion, which is likely to have been initiated by the excavation of old drainage channels. It is suffering from the natural processes of wind and frost action. Occasional burning, trampling and grazing pressure have also contributed to the erosion evident within the habitat.

Forestry

The large coverage of forestry plantations around the outside of the site offers suitable habitat for predator species such as Fox (*Vulpes vulpes*) and Hooded Crow (*Corvus corone*). Large numbers of these predators may have a significant negative impact on the survival and breeding success of ground nesting birds such as Red Grouse.

Grazing

The current high stocking density of sheep within the site is reducing the ecological diversity of certain habitats and encouraging the change of heath into upland grassland. Concentrated sheep grazing on the steep grassland slopes on the northern side of the mountain range has resulted in the occurrence of localised soil erosion.

Some areas of species-rich *Nardus* grassland are unfenced and are grazed by sheep year-round. The sheep-grazing regime is having a negative impact on this delicate habitat by severely reducing flora species diversity. In contrast, the areas of this habitat that are only grazed by cattle in summer are in very good condition.

Grazing assessments on commonage lands have been conducted in accordance with the CFPP and grazing reductions have been recommended, where appropriate. It is further proposed that similar grazing assessments will need to be conducted on privately owned lands as part of REPS or a DEHLG farm plan.

Littering

Small scale littering is evident in certain parts of the site. Of particular note is the presence of glass, bottles and plastic amongst rocks on Galtymore. Such disturbance is detrimental to the arctic-alpine plant community.

Nutrient enrichment

A small number of sheep-dips are located within the site. The surrounding ground is nutrient-enriched (which is evident from the change in vegetation) and littering is also associated with these dipping sites. Chemicals stored at these locations are a potential hazard to wildlife and particularly to aquatic life in nearby watercourses.

Ownership

The site is in multiple private ownership and, consequently, liaison with landowners will be time consuming due to the large number of them.

In addition, two County Councils (i.e. Limerick and Tipperary) have authority for planning issues within this site (as the site traverses the Limerick/Tipperary border) and the enforcement of some aspects of the plan may be more difficult.

Recreational pressure

There has been a recent increase in recreational pressure on the site from a variety of activities. The number of hill-walkers using the site has increased such that more than 100 walkers may be using the site on a particular day. Also of concern is the increase of motorised vehicles using the site, including quad bikes, four-wheel drives and motorbikes. There are no formed tracks on the site and the level of recreational pressure is causing poaching and erosion.

Tipperary County Council are proposing to regulate the use of motorbikes on the Galtee Mountains through the enforcement of Bye-laws.

Water abstraction

Water has been abstracted from Lough Muskry for nearly 100 years, but this activity may influence the water level in the nearby lake to the south-east (see NHA Survey Report). Operations are currently underway to improve the water supply output from this source, which will require the laying of a new pipeline and will result in minor soil/peat disturbance in the area. It will also eliminate the leakage from the present pipeline, which in turn may radically alter the amount of water flowing in the river that descends into Rossadrehid. Finally, it will reduce further the level of water in Lough Muskry and possibly the nearby small lake.

General Strategies

Specific strategies that relate to the above objectives are outlined below. However, there are a number of strategies that relate to the site as a whole. These are as follows:

Implement plan

DEHLG will seek to ensure that the aims of this conservation plan are achieved through:

- liaison with the landowners, relevant authorities and interested parties
- implementation of REPS or DEHLG farm plans, which will use this document as a guideline for prescribing management on a farm by farm basis, and also will ensure that the agreed prescriptions for the relevant habitats are adhered to (Appendix VII)
- enforcement of Regulations under the Habitats/Birds Directives and the Wildlife Acts
- enforcement of other relevant legislation such as the Water Framework Directive

Establish a monitoring regime

The monitoring regime for the site will comprise:

Water quality monitoring

Water quality is monitored at regular intervals by the EPA and/or local authorities.

Under the Water Framework Directive local authorities are obliged to establish River Basin District plans covering all inland and coastal waters that will lead to the identification and implementation of effective measures for improved water management.

NPWS will liaise with the EPA, the local authorities and other relevant statutory agencies and research organisations to:

- determine the quality and quantity of waters associated with water dependent habitats
- establish reference conditions necessary for monitoring the status of the habitats and species and to
- ensure that the sampling regime is adequate to detect changes in their conservation status

Scientific monitoring

Monitoring of the conservation status of the qualifying interests will be done by, or on behalf of, the staff of the Monitoring Section of the NPWS or staff working to NPWS in accordance with the procedures laid down by that section.

Protocols for monitoring Galtee Mountains cSAC will be developed, in consultation with other agencies where appropriate, to determine if the site is being maintained at favourable conservation status.

Site surveillance

Regular inspection of the site by the NPWS staff, with special attention to the priority and other habitats, protected species, recreational pressure, condition of tracks and burning of vegetation will identify any major changes, damaging operations, or threats should they arise.

Enforce notifiable actions

Certain activities may be restricted in SACs. Notifiable Actions for particular habitats and species are listed in Appendix V of this plan. Consent from the Minister may be required before these actions may be carried out within the designated area. For example, the grazing of livestock above a sustainable density or the creation of new tracks or paths are notifiable actions for both the blanket bog and grassland habitats on the site.

Specific Strategies

Objective 1.

To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; active blanket bog (8% of the site), species-rich *Nardus* grassland (<1%), European dry heath (47%), Alpine and boreal heath (2%) and siliceous/calcareous rocky slopes (3%).

Strategies:

- 1.1. Manage grazing on commonages** The impacts of grazing on commonage areas of the site have been assessed by the Commonage Framework Planning Project (Commonage Plans (CPs) LI-1, TI-1 and TI-2). These plans recommend de-stocking rates in areas that have been damaged by over-grazing. These rates will be incorporated into REPS plans and /or farm plans produced by DEHLG for each farm and must be achieved within an agreed timescale from the beginning of the REPS/farm planning period.

No farmer's stock will be reduced to less than 25 ewes. If the CP specifies a de-stocking level of less than 10%, then no de-stocking is required. If the CP specifies a de-stocking of more than 10%, then de-stocking should occur as indicated. The relevant CPs (i.e. LI-1, TI-1 and TI-2) recommend a combined de-stocking level of 18.3%. The individual CPs should be consulted for further details.

The zoning map (Map 3) reflects the findings of the CP assessments, and these are specified in the prescriptions for each individual zone.

On commonages in six western counties, a stock reduction of 30% was implemented in December 1998 for farmers not already in REPS. This is taken into account when applying Commonage Framework Plans.
- 1.2. Manage grazing on privately owned lands** For non-commonage land, NPWS will seek to ensure that sustainable grazing levels are established via REPS and DEHLG farm plans, using a similar methodology applied to commonage areas (see Strategy 1.1).
- 1.3. Control damaging activities** NPWS will seek to control access of motorised vehicles (in particular quad bikes, four-wheel drives and motorbikes) to the site by the erection of signage. NPWS will also support the regulation of access through the proposed County Bye-laws relating to motorised vehicle use of the site.
- 1.4. Monitor erosion and recreational use** NPWS will monitor erosion and recreational use of active blanket bog in accordance with the general monitoring strategies. Peat erosion caused by hill walking will be given particular attention. If this becomes a serious problem, walkers will be re-directed around the affected area by means of short signposted routes (e.g. with a series of white wooden posts).
- 1.5. Maintain current grazing regime** For species-rich *Nardus* grassland, continue grazing in enclosed areas, where only summer grazing by cattle/donkeys is carried out. Sheep will not be introduced into the areas and stock-proof fences/field boundaries will be maintained. See Strategy 1.2 for grazing assessment and reductions.

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| 1.6. Fence habitat and change grazing regime | Unenclosed areas of species-rich <i>Nardus</i> grassland that are grazed by sheep should ideally be fenced off and have their grazing regime changed to summer grazing by cattle. See Strategies 1.1 and 1.2 regarding grazing reductions and assessments, depending on whether the land is under commonage or in private ownership. |
| 1.7. Survey additional areas of grassland | NPWS will survey additional areas of species-rich <i>Nardus</i> grassland located in the vicinity of the site and will consider these areas for inclusion within the cSAC. The majority of the areas are enclosed and would be easier to manage than some of the unfenced and degraded species-rich <i>Nardus</i> grassland contained within the site. Additional areas of species-rich <i>Nardus</i> grassland included as a consequence of the survey will be managed in accordance with the above strategies (i.e. Strategies 1.5 and 1.6). |
| 1.8. Maintain fire breaks | NPWS will liaise with landowners regarding the creation and maintenance of firebreaks. |

Objective 2.

To maintain other habitats at favourable conservation status, such as upland grassland (29%), wet heath (9%), lakes and rivers (1%) and scrub (<1%).

Strategies:

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| 2.1. Control grazing | Control grazing in these habitats in accordance with Strategies 1.1 and 1.2. |
| 2.2. Maintain fire breaks | See Strategy 1.8. |
| 2.3. Erect signage | NPWS will erect public information signs on the approaches to the site, with the approval of the Liaison Committee. Specific locations include on the road to Lough Muskry, the road to Pigeon Rock Glen, near the youth hostel at Glengarra Wood and on Galtymore. The signs will provide information relevant to the conservation value of the area and highlight user practice codes (with the aid of pictograms) for members of the public (e.g. do's and don'ts while hill-walking). In addition, they will encourage visitors to use any pathways provided/signposted, to bring home their litter and not to start fires. |
| 2.4. Control damaging activities | The use of motorised vehicles, other than those owned by local landowners being used in the ordinary course of agriculture, will not be permitted on heath, bog or grassland habitats within the site. The necessity for the use of vehicles by the emergency services and State bodies from time to time is recognised. Signs stating that no vehicles are allowed will be erected at access points to the site, if necessary. See Strategy 1.3 also. |
| 2.5. Monitor recreational use | See Strategy 1.4. |
| 2.6. Maintain scrub | Scrub should be retained on the site and controlled through implementation of the appropriate grazing regime (Strategies 1.1 and 1.2). Allow scrub invading the lower slopes around the site to develop. Scrub/woodland clearance (including burning and cutting) is a notifiable action. |
| 2.7. Control fish stocking | Lakes within the site should not be stocked with fish without prior consultation with NPWS. |

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| 2.8. Maintain water quality and levels | NPWS will continue to liaise with South Tipperary County Council and Southern Fishery Board to ensure that water levels at Lough Muskry do not drop to a level that endangers the resident fish population. The water quality of the lakes will be monitored regularly (see general monitoring strategies).

The water level in the small lake south-east of Lough Muskry will be monitored by the local Conservation Ranger following the completion of the water supply improvement scheme in the area. |
| 2.9. Monitor spread of unwanted species | Local Conservation Rangers will monitor the extent of Bracken and the spread of Rhododendron into the site. |
| 2.10. Control of sheep-dipping | Two sheep-dipping pens are present within the site, in the north-western and the extreme south-eastern corner. REPS guidelines should be followed regarding the disposal of spent sheep dip (refer to section 7.5 in the REPS agri-environmental specifications). No dumping or littering should take place in the vicinity of sheep-dips. NPWS will liaise with the relevant County Councils on the monitoring of sheep-dips and their proper use. |

Objective 3.

To maintain the populations of notable species on the site at favourable conservation status, including Small White Orchid, Northern Rock-cress, Alpine Saw-wort, Otter, Irish Hare, Badger, Peregrine Falcon and Merlin.

Strategies:

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| 3.1. Maintain species populations | The implementation of Strategies 1.1-1.8, 2.1-2.10 and the general strategies will ensure the maintenance of important flora and fauna species. |
| 3.2. Monitor population status | Monitor the population status of notable flora and fauna species, in accordance with the general monitoring strategies. |
| 3.3. Conduct bird counts | Conduct bird counts of the number of birds nesting within the site and using the site for feeding. |
| 3.4. Control of hunting | Hunting will be controlled under the Wildlife Act (1976), to ensure the protection of all wild bird species. |
| 3.5. Liaise with rock climbing groups | NPWS will liaise with rock climbing groups in order to minimise the disturbance to Peregrine Falcons during the nesting season. |

Objective 4.

To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Strategies:

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| 4.1. Liaise with interested parties | NPWS will strive to initiate and maintain effective liaison with landowners, legal users (particularly through the Liaison Committee), relevant authorities and interested parties on achieving the objectives for conservation of the site. |
| 4.2. Liaise with REPS planners | REPS planners should consult with local NPWS staff when they are developing plans for land within the site. |
| 4.3. Liaise with Department of Agriculture | NPWS will liaise with the Department of Agriculture on the monitoring of sheep stocking densities within the site. |
| 4.4. Liaise with planning authorities | NPWS will liaise with the County Councils regarding relevant issues, including water quality monitoring (in accordance with the general monitoring strategies), erection of information signs, inclusion of the Galtee Mountains as a cSAC in future County Development Plans, monitoring of sheep-dips and their proper use and upgrading or modification of existing tracks within the site. |

Zoning

Note: Zoning is the division of a nature conservation site and neighbouring areas into a number of sub-units. Four types of zones are identified (not necessarily all occurring within a site): A, B and C are zone types within the site. D is a zone type outside the site where activities may have an impact on the site. The relevant strategies are listed for each site.

Zone A: A Natural Zone

Areas of high conservation value, that require no or little management intervention.

1A: NON-INTERVENTION AREAS

1A1: Lakes, rivers and scrub

Strategies 1.8, 2.6, 2.7, 2.8 and the general monitoring strategies apply.

2A: MAINTENANCE AREAS WITH LIMITED MANAGEMENT INTERVENTION

2A1: Species-rich *Nardus* grassland

Strategies 1.5, 1.7, 2.6 and the general monitoring strategies apply.

Zone B: Active Management

Areas of high conservation value where high management input is needed to maintain, rehabilitate, restore to a more desirable state.

B1: Active blanket bog, alpine heath, wet heath, dry heath, rocky slopes and upland grassland under commonage (Commonage units LI 1g and TI 1i/TI 2a)

These areas have been identified in the CFP as being moderately to severely overgrazed and require stock reductions (see Strategy 1.1). See CFP for full details. Strategies 1.1, 1.3, 1.4, 2.1-2.6, 2.9 and the general strategies apply.

B2: Active blanket bog, alpine heath, wet heath, dry heath, rocky slopes and upland grassland in private ownership

Grazing assessments are required for these privately owned lands (see Strategy 1.2). In addition, strategies 1.3, 1.4, 2.1-2.6, 2.9 and the general strategies apply.

B3: Species-rich *Nardus* grassland under commonage

Strategies 1.1, 1.6, 2.6 and general strategies apply.

B4: Species-rich *Nardus* grassland and upland grassland in private ownership

Strategies 1.2, 1.6, 2.6 and general strategies apply.

Zone C: Intensive use Zone

Intensively used areas/infrastructure, which form an integral part of a nature conservation site.

C1: Roads/Tracks/Pathways

Strategies 2.3 and 2.4 apply.

C2: Sheep-dipping pens

Strategy 2.10 applies.

C3: Hill-walking route

Strategies 2.3 and 2.5 apply.

C4: Lake

Strategies 2.7, 2.8 and the general monitoring strategies apply.

Zone D: Impact Zone

Areas outside the site where activities may have an impact on the site.

D1: Fires

Fires may spread into the site as a result of burning carried out on land adjacent to the cSAC. The local Conservation Rangers will monitor the occurrence of burns, and liaise with the appropriate landowners outside the site if this becomes a significant problem.

D2: Rhododendron

Rhododendron seedlings may invade the periphery of the site from adjacent forestry blocks. The local Conservation Rangers will monitor the occurrence of invasion by Rhododendron, and take the necessary action to prevent the establishment of this invasive species within the site.

D3: Increase in recreational use

Future increases in the level of recreational use of the site may reduce the ecological value of the site, by increasing disturbance and accelerating the erosion of peaty substrates. The local Conservation Rangers will monitor both the level and type of recreational activity occurring within the site.

Summary of Specific Strategies

Note: It is implicit with all the strategies presented that their implementation is dependent on availability of adequate resources in terms of staff, expertise and financial resources. Also, that cooperation with landowners and other key stakeholders is key to achieving the stated objectives.

	Strategy	Action required	Who to implement	When/Duration/Frequency	Estimated Total Cost	Additional Resources needed
1.1	Manage grazing on commonages	Implement stock reduction recommended by the CFPs.	NPWS/ Landowners			
1.2	Manage grazing on privately owned lands	Conduct grazing assessments in accordance with CFP methodology.	NPWS/ Landowners			
1.3	Control damaging activities	Control access of motorised vehicles and support draft County Council Bye-laws relating to motor vehicle use of the site.	NPWS			
1.4	Monitor erosion and recreational use	Monitor erosion and recreational use in accordance with the general monitoring strategies.	NPWS			
1.5	Maintain current grazing regime	Continue grazing regime in enclosed areas of species-rich <i>Nardus</i> grassland and maintain stock-proof fencing.	NPWS/ Landowners			
1.6	Fence habitat and change grazing regime	Fence off unenclosed areas of species-rich <i>Nardus</i> grassland and amend grazing regime in accordance completed grazing assessment (Strategy 1.2).	NPWS/ Landowners			
1.7	Survey additional areas of grassland	Survey additional areas of the habitat and consider for inclusion in the SAC.	NPWS			
1.8	Maintain fire breaks	Liaise regarding creation and maintenance of firebreaks.	NPWS/ Landowners			
2.1	Control grazing	See Strategies 1.1 and 1.2.	-			
2.2	Maintain fire breaks	See Strategy 1.8.	-			
2.3	Erect signage	Erect signage on approaches to the site, with approval of the Liaison Committee.	NPWS/ Liaison Committee			
2.4	Control damaging activities	Control access of motorised vehicles and erect signs controlling access.	NPWS			
2.5	Monitor recreational use	See Strategy 1.4.	-			
2.6	Maintain scrub	Retain scrub and maintain through appropriate grazing regime (see Strategy 1.1).	NPWS/ Landowners			

TABLE Summary of Specific Strategies CONTINUED.....

	Strategy	Action required	Who to implement	When/Duration/ Frequency	Estimated Total Cost	Additional Resources needed
2.7	Control fish stocking	Lakes will not be stocked without prior consultation with NPWS.	NPWS			
2.8	Maintain water quality and levels	Liaise regarding the water quality and levels in Lough Muskry. Also monitor the water levels of the lake to the south-east of Lough Muskry.	NPWS/ South Tipperary Co. Co./Southern Fishery Board			
2.9	Monitor spread of unwanted species	Monitor the spread of Bracken and Rhododendron.	NPWS			
2.10	Control of sheep-dipping	Ensure proper use of sheep-dips.	NPWS/ South Tipperary Co. Co.			
3.1	Maintain species populations	See Strategies 1.1-1.8, 2.1-2.10 and general strategies.	-			
3.2	Monitor population status	See general monitoring strategies.	NPWS			
3.3	Conduct bird counts	Conduct counts of nesting birds.	NPWS			
3.4	Control of hunting	Control hunting through implementation of the Wildlife Act (1976).	NPWS			
3.5	Liaise with rock climbing groups	Liaise with regard to minimising disturbance to nesting Peregrine Falcons.	NPWS/Rock climbing groups			
4.1	Liaise with interested parties	Maintain effective liaison with all interested parties.	NPWS			
4.2	Liaise with REPS planners	Liaise with NPWS when developing REPS plans within the site.	REPS Planners			
4.3	Liaise with Department of Agriculture	Liaise with Dept. of Agriculture regarding the monitoring of sheep stocking densities.	NPWS/ Dept. of Agriculture			
4.4	Liaise with planning authorities	Liaise with planning authorities regarding relevant issues.	NPWS/ Limerick Co. Co. and South Tipperary Co. Co.			

APPENDIX I:

GLOSSARY

ABSTRACTION - The process of taking water from a river, stream, spring pond or lake or from ground water. This process is “abstracting” water or making an “abstraction”.

AFFORESTATION - The planting of trees (usually conifers) over an area of previously unplanted ground.

ALTITUDE - Vertical height above sea level.

ANNEX I - of the EU Birds Directive, lists birds that are strictly protected so that they cannot be killed, captured, disturbed or traded.

ANNEX I - of the EU Habitats Directive, lists habitats including priority habitats for which SACs have to be designated.

ANNEX II - of the EU Habitats Directive is a list of species for which SACs have to be designated.

BASIN - A depressed area of the Earth’s surface, in which sediments accumulate.

BIODIVERSITY – A general term used to describe all aspects of biological diversity, including: the number of species present in a given environment; the genetic diversity present within a species; the number of different ecosystems present within a given environment.

BIRDS DIRECTIVE (Council Directive 79/ 409/ 2nd April 1979) - Under this Directive Ireland is required to conserve the habitats of two categories of wild birds: 1) Listed rare and vulnerable species and 2) Regularly occurring migratory species. The Directive also obliges Ireland to conserve wetlands, especially those of international importance and regulates the hunting and trading of wildbirds. It was transposed into Irish legislation by the EU (Natural Habitats) Regulations, 1997.

BLANKET BOG - An NPWS habitat classification which refers to bogs which carpet the landscape, following the underlying topography. They can cover extensive areas along the west coast and on uplands throughout the country.

CAIRN - A mound of stones erected as a memorial or marker, some of which are of historical significance.

CALCAREOUS - Made of or containing calcium carbonate (CaCO₃) and therefore alkaline. limestone for example

CATCHMENT - An area of land draining to a defined point. The term river catchment refers to the area of land that drains into a particular river system.

CHASMOPHYTE – a crevice plant.

COL - a gap in a ridge.

COMMONAGE – An area of land which are undivided but are owned by more than one person / or the rights to use the land are owned by more than one person.

COMMUNITY - a well-defined assemblage of plants and/or animals, clearly distinguishable from other such assemblages.

CONSERVATION STATUS - The sum of the influences acting on a habitat and its typical species that may affect its long term distribution, structure and functions. Also refers to the long-term survival of its typical species within the European territory of the Member States.

CORRIE - A circular hollow on a hillside formed by glacial scouring.

DEHLG - Department of Environment, Heritage and Local Government

DENSE BRACKEN – An NPWS habitat classification which refers to areas with 75% cover of Bracken (*Pteridium aquilinum*), a single branched fern with a characteristic small and bright green foliage dying to rich reds and russets in the Autumn.

DEVELOPMENT PLANS - Local Authorities (Co. Councils & Corporations) are obliged under statute to produce a document which sets out the planned development of their areas for a given number of years. In the future Local Authorities will be asked to incorporate designated NHAs, SACs and SPAs classifications into their development plans.

DIVERSITY - see biodiversity.

ELEVATION - The height of something above a given place, usually above sea level.

ENVIRONMENT – The biological and physical conditions in which an organism lives.

EPA – Environmental Protection Agency

EROSION - The processes whereby the materials of the Earth's crust are dissolved, or worn away and simultaneously moved from one place to another by natural agencies which include weathering, solution, corrosion and transportation.

EUROPEAN BIRDS DIRECTIVE (79/ 409/ 2nd April 1979) - See Birds Directive.

EXPOSED ROCK – An NPWS habitat classification describing bedrock surfaces, including inland cliffs and crags. These may support a variety of different plants on soil accumulations, but greater than 50% of the rock surface is without vascular plant cover.

FAUNA - Animal life.

FAVOURABLE CONSERVATION STATUS - The conservation status of a natural habitat will be taken as “favourable” when: its natural range and areas it covers within that range are stable or increasing, and the specific structure and functions which are necessary for its long term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable.

FLORA - plant life.

FLORA PROTECTION ORDER - under the 1976 Wildlife Act, particular plants can be protected under a Flora Protection Order. Under such an order it becomes an offence to cut, uproot or damage these plants unless under licence from the Minister. The same order prohibits damage to the habitats of these species.

GEOMORPHOLOGY – The study of the form and structure of the landscape, which is shaped by the underlying geology.

HABITAT - Refers to the environment defined by specific abiotic and biotic factors, in which a species lives at any stage of its biological cycle. In general terms it is a species home. In the Habitats Directive this term is used more loosely to mean plant communities and areas to be given protection.

HABITATS DIRECTIVE - (Council Directive 92/43/EEC). The Directive on the conservation of Natural Habitats and of Wild Flora and Fauna. This Directive seeks to legally protect wildlife and its habitats. It was transposed into Irish legislation by the EU (Natural Habitats) Regulations, 1997.

HEATH – An NPWS habitat classification comprises of vegetation on relatively dry acidic mineral or peat soil usually dominated by Ericaceous shrubs, which include *Calluna vulgaris* (Heather), all Heathers (*Erica* spp.), *Vaccinium myrtillus* (Bilberry), *Empetrum nigrum* (Crowberry), *Arctostaphylos uva-ursea* (Bearberry), *Daboecia cantabrica* (St Dabioic's Heath), or dwarf, cushion forming *Ulex* spp. These shrubs must form a minimum cover of 25% to fall into the heath category. This habitat is frequently found in mosaic with other upland habitats.

HYDROLOGY - The movement of water through a catchment area including freshwater and seawater inputs, water level changes and drainage mechanisms which are all influenced by the underlying geology.

INVERTEBRATES - Animals without backbones.

LAKES AND PONDS - An NPWS habitat classification describing enclosed bodies of fresh water, or semi-enclosed bays of larger bodies of fresh water. Only the open water body itself is included, so areas of standing with tall emergent vegetation are not included here but should be assigned to reedbeds and other swamps.

LATITUDE – The angular distance measured in degrees north or south of the equator.

LAZY BEDS – ridges used for potato growing that were left in the soil during the famine.

LIAISON - Communication and contact between two groups.

LIAISON COMMITTEE - This is a special group set up to discuss the contents of a conservation management plan and the implementation of the plan. The committee will include representation of landowners, right-holders and other interest groups. It shall be the function of the committee to advise NPWS managers on the interaction between site conservation management and local interests. The Liaison Committee will nominate a member to the official Appeals Board which will consider appeals against site designation and other issues. The Liaison Committee will be independent from the NPWS.

LOCAL – A term used in ecology which is applied to distribution of species when assessed on a national grid reference system. The assessment is made on the basis of the number of occupied 10 km National Grid squares. Local applies to 26-75, 10 km squares in this context.

MANAGEMENT - a) Controlling processes within a site (this can be actively carrying out work or can be doing nothing), preferably in accordance with a conservation plan. - b) The practical implementation of the management plan. - c) Undertaking any task or project identified in the management plan, including the identification of new opportunities.

MONITORING – A repeat or repeats of a survey using the same methodology. Designed to look for or measure specific changes and the rate or extent of change. Used to check the “health” quantity or quality of a habitat or species.

MOSAIC - Used to describe habitats that occur together and cannot easily be mapped separately.

MULTIPLE PRIVATE OWNERSHIP- Lands that are divided into areas which are privately owned. There must be more than one private landowner under this heading. (lands in commonage are not described under this heading).

NATIONAL PARKS AND WILDLIFE SERVICE (NPWS) – the section of the Environment Infrastructure and Services division of the Department of Environment, Heritage and Local Government with responsibility for nature conservation and implementation of Government conservation policy as enunciated by the Minister for the Environment, Heritage and Local Government.

NATURA 2000 - A network of sites across the European Community, selected for the purpose of conserving natural habitats and species of plants and animals which are rare, endangered or vulnerable in the European Community. SACs and SPAs form the Natura 2000 network.

NATURAL HABITAT - Can be aquatic or terrestrial areas distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural.

NHAs - Proposed Natural Heritage Areas. These are areas that are important for wildlife conservation. Some of these sites are small, such as roosting areas for rare bats; others can be large such as a blanket bog or a sand dune system.

NOTABLE SPECIES - Plants or animals which are worthy of mentioning either because they are particularly typical of a habitat, or because they are rare/ scarce/ atypical.

NOTIFIABLE ACTIONS - Actions specified under the cSAC regulations and are listed in the appendices of a conservation plan. These are actions which could cause damage to the site, and for which prior approval is required before they can be carried out.

NPWS - National Parks and Wildlife Service

OLIGO – Prefix denoting few or little

OLIGOTROPHIC - Applied to waters that are relatively low in nutrients, as in lakes which are low in dissolved minerals and which can only support limited plant growth.

ORGANISM - Any living thing.

OS – Ordnance Survey

PATROL MONITORING - Regular monitoring of a site usually carried out by the Conservation Ranger to check for damaging activities and to carry out other activities such as to assess the vegetation, to assess the effectiveness of the management regime on the condition of the site, etc.

PERIPHERY - Distant from the centre, on the fringe/edge.

POACHING - Damage caused to the vegetation by excessive numbers of large grazers.

PRIORITY HABITAT - A subset of the habitats listed in Annex I of the EU Habitats Directive. These are habitats which are in danger of disappearance and whose natural range mainly falls within the territory of the European Union. These habitats are of the highest conservation status and require measures to ensure that their favourable conservation status is maintained.

PROXIMITY - Nearness in space.

RARE - An ecological term applied to distribution of species when assessed on a national grid reference system. The assessment is made on the basis of the number of occupied 10 km National Grid squares. A species is described as rare if has been recorded in to 3-10, 10 km squares.

RED DATA BOOK – A register of threatened species that includes definitions of degrees of threat.

RED DATA BOOK (lower plants) - This Red Data Book deals with Stoneworts which are recognised as a separate class, Characea, of the Green Algae Chlorophyta). Many of these species are threatened by loss of habitat or pollution.

RED DATA BOOK 1 (vascular plants) This Red Data Book deals with rare and threatened flowering plants and ferns of Ireland with an account of their present distributions and conservation status.

RED DATA BOOK 2 (mammals, birds, amphibians and fish) - identifies those species threatened in Ireland or those species whose populations are considered to be of international importance, though not necessarily threatened in Ireland. It details the current state of Irish vertebrates and provides a concise summary of the various legislation for each species.

REPS - Rural Environmental Protection Scheme. This is an Agri-Environmental programme which seeks to draw up agreements with farmers, according to the type of farming, landscape and features on the land. The overall objectives of REPS are to achieve: the use of farming practices which reduce the polluting effects of agriculture by minimising nutrient loss- an environmentally favourable extensification of crop farming, and sheep farming and cattle farming; - ways of using agricultural land which are compatible with protection and improvement of the environment, the countryside, the landscape, natural resources the soil and genetic diversity; - long-term set-aside of

agricultural land for reasons connected with the environment; - land management for public access;- education and training for farmers in types of farming compatible with the requirements of environmental protection and upkeep of the countryside.

RIVERS AND STREAMS - An NPWS habitat classification describing linear channels of moving water. These are natural features that distinguish them from ditches and drainage channels.

SACs - Special Areas of Conservation have been selected from the prime examples of wildlife conservation areas in Ireland. Their legal basis from which selection is derived is The Habitats Directive (92/43/EEC of the 21st May 1992). SAC's have also been known as cSAC's which stands for "candidate Special Areas of Conservation", and pcSAC's which stands for "proposed candidate Special Areas of Conservation."

SCIENTIFIC MONITORING - this is carried out by the monitoring section of the NPWS, whose function here is to ensure that the favourable conservation status of the site is maintained and where possible improved.

SCREE - An NPWS habitat classification which refers to unconsolidated rocky or stony material on a hillside.

SCRUB – An NPWS habitat classification which comprises areas with more than 50% cover of shrubs or small trees. There may be scattered standard trees, but in general the canopy height is 5 m or less. This category does not apply to stands of young trees which will eventually grow to a height of more than 5 m.

SEVERELY HANDICAPPED AREA - An EU designation which allows farmers within these areas to avail of extra headage payments and premium payments.

SHALE - Fine-grained sedimentary rock, like mudstone but with an irregular parting.

SPAs - Special Protection Areas for Birds are areas which have been designated to ensure the conservation of certain categories of birds. Ireland is required to conserve the habitats of two categories of wild birds under the European Birds Directive (Council Directive 79/ 409/ 2nd April 1979). The NPWS is responsible for ensuring that such areas are protected from significant damage.

SPECIES - the lowest unit of classification normally used for plants and animals.

SPECIES RICH *NARDUS* GRASSLANDS, (on siliceous substrates in mountain areas.)- A priority habitat listed in Annex I of the EU Habitats Directive. Closed dry or mesophile, perennial grasslands occupying siliceous soils. Vegetation is highly varied, but the variation is characterised by continuity. *Nardus stricta* (Mat Grass) is not the dominant vegetation but is characteristic of this habitat type.

STRATEGY - A course of action or a broad approach towards achieving an objective . It is the general thrust of management towards achieving an objective. It is a description of how the objective is to be achieved.

SURVEY - a) Study/visit to produce an inventory of what is present / record a situation.- b) Establishing a baseline (study).

SUSTAINABLE - The highest rate at which a renewable resource can be used without reducing its supply (without causing damage to the resource).

TERRAIN - A piece of ground which is usually described by its physical character, i.e. rocky terrain.

TOR – a pile of rocks on the top of a hill or a rocky peak or hill.

TURBARY – Refers to the right to harvest turf.

UNDERSTOREY - The plant layer below the tree canopy in a woodland.

UPLAND GRASSLAND ON MINERAL SOIL - An NPWS habitat classification describing usually species rich grasslands on mineral soils, normally at altitudes exceeding 100m. Often the

vegetation is dominated by calcicolous (lime loving) grasses. Ericaceous scrubs such as Ling, Heather, are scarce or absent, although Gorse, Blackthorn or Hawthorn can occur.

VERTEBRATES - Animals with backbones.

VERY RARE - an ecological term which is applied to distribution of species when assessed on a national grid reference system. The assessment is made on the basis of the number of occupied 10 km National Grid squares. Very Rare applies to 1-2, 10 km squares in this context.

ZONING - The division of a nature conservation site (& neighbouring lands) into a number of sub-units. Within each zone the management prescriptions will be reasonably uniform and will differ in type or intensity from the other zones in the plan.

APPENDIX II: REFERENCE MATERIAL

Map References:

- O.S. 1/2 inch (1:126,720) map: 18, 22
- O.S. Discovery (1:50,000) map: 74
- O.S. 6 inch (1: 10,560) map: LI 50, LI 58, TI 74, TI 80

Databases :

NHA database, NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Natura 2000 database, NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Photographic Coverage:

Aerial photo Nos. 5132-5135, Flight Line 55. Date: 1995. NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Relevant Legislation:

- S.I. No. 39 of 1976: Wildlife Act 1976
- S.I. No. 38 of 2000: Wildlife (Amendment) Act 2000
- S.I. No. 94/1997: European Communities (Natural Habitats) Regulations 1997.
- Local Government (Planning and Development) Acts 1963-2002.

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APPENDIX III: CLIMATE

CORK AIRPORT													
monthly and annual mean and extreme values, 1962-1991													
TEMPERATURE (degrees Celsius)	<i>jan</i>	<i>feb</i>	<i>mar</i>	<i>apr</i>	<i>may</i>	<i>jun</i>	<i>jul</i>	<i>aug</i>	<i>sep</i>	<i>oct</i>	<i>nov</i>	<i>dec</i>	<i>year</i>
<i>mean daily max.</i>	7.6	7.5	9.3	11.3	13.8	16.6	18.5	18.2	16	13.1	9.9	8.5	12.5
<i>mean daily min.</i>	2.6	2.5	3.1	4.2	6.5	9.2	11.1	10.9	9.4	7.5	4.5	3.7	6.3
<i>mean</i>	5.1	5	6.2	7.7	10.2	12.9	14.8	14.5	12.7	10.3	7.2	6.1	9.4
<i>absolute max.</i>	12.6	13.5	15.5	20.5	23.6	25.7	28.7	27.5	24.7	19	15.9	13.6	28.7
<i>absolute min.</i>	-8.5	-8.6	-6.1	-2.4	-0.9	2.4	4.8	4.9	2.3	-0.4	-3.3	-5.9	-8.6
<i>mean no. of days with air frost</i>	6.7	5.6	3.4	1.8	0.1	0	0	0	0	0	2.4	3.9	24
<i>mean no. of days with ground frost</i>	15	12.7	12	9.4	2.9	0.2	0	0	0.4	2.6	9.5	12.2	76.8
RELATIVE HUMIDITY (%)													
<i>mean at 0900UTC</i>	90	90	88	83	81	81	83	86	88	91	90	90	87
<i>mean at 1500UTC</i>	84	80	75	71	71	72	72	73	76	82	83	86	77
SUNSHINE (hours)													
<i>mean daily duration</i>	1.7	2.28	3.51	5.21	6.02	5.73	5.4	5.14	4.13	2.8	2.16	1.56	3.8
<i>greatest daily duration</i>	7.3	9.3	11.8	13.8	15.4	15.9	15.4	14.2	12.8	9.9	8.5	6.7	15.9
<i>mean no. of days with no sun</i>	11	9	6	4	2	3	2	2	4	7	9	12	69
RAINFALL (mm)													
<i>mean monthly total</i>	138.3	115.6	98.7	67.7	83.4	68.8	66.4	88.7	96.4	125.4	111.1	133.8	1194
<i>greatest daily total</i>	55.1	48.2	39.3	44.9	49.3	43.3	83.8	64.8	51.8	86.7	69.9	52.2	86.7
<i>mean no. of days with $\geq 0.2\text{mm}$</i>	20	17	18	14	16	15	14	16	16	19	19	20	204
<i>mean no. of days with $\geq 1.0\text{mm}$</i>	16	13	13	10	12	10	9	11	12	15	14	16	151
<i>mean no. of days with $\geq 5.0\text{mm}$</i>	9	8	6	4	6	5	4	5	6	8	7	8	75
WIND (knots)													
<i>mean monthly speed</i>	12.9	12.6	12.3	11	10.6	9.5	9.1	9.2	10.3	11.2	11.6	12.4	11.1
<i>max. gust</i>	94	83	70	63	60	51	57	54	64	75	66	68	94
<i>max. mean 10-minute speed</i>	58	54	44	41	41	36	40	38	45	48	46	46	58
<i>mean no. of days with gales</i>	3.2	2.2	1.7	0.7	0.4	0.1	0.1	0.2	0.7	1.2	1.8	2.5	15
WEATHER (mean no. of days with...)													
<i>snow or sleet</i>	4.5	4.7	3	1.1	0.2	0	0	0	0	0	0.6	2.3	16.4
<i>snow lying at 0900UTC</i>	2.7	1.8	0.4	0	0	0	0	0	0	0	0	0.6	5.6
<i>hail</i>	1	1.1	1.9	1.9	1.1	0.3	0.1	0.1	0.1	0.4	0.3	0.6	8.8
<i>thunder</i>	0.4	0.1	0.1	0.2	0.4	0.5	0.8	0.5	0.2	0.4	0.1	0.1	3.7
<i>fog</i>	7.4	7.3	7.9	5.9	7.7	8.6	8.5	9.8	10.7	10.4	7.3	8	99.5

Source: Met Eireann

APPENDIX IV: DETAILED INFORMATION ON FLORA

The notable flora species list is derived from Fahy (1974), the pNHA site card, the rare plant database (NPWS), the author's field visit and by local NPWS staff:

- Green Spleenwort (*Asplenium viride*)
- Brittle Bladder Fern (*Cystopteris fragilis*)
- Mountain Sorrel (*Oxyria digyna*)
- Stiff Sedge (*Carex bigelowii*)
- Roseroot (*Sedum rosea*)
- Wilson's Filmy Fern (*Hymenophyllum wilsonii*)
- Irish Saxifrage (*Saxifraga rosacea/decipiens*)
- St. Patrick's Cabbage (*Saxifraga spathularis*)
- Mossy Saxifrage (*Saxifraga hypnoides*)
- Starry Saxifrage (*Saxifraga stellaris*)
- Dwarf Willow (*Salix herbacea*)
- Lesser Meadow-rue (*Thalictrum minus*)
- Cowberry (*Vaccinium vitis-idaea*)
- Harebell (*Campanula rotundifolia*)
- Stone Bramble (*Rubus saxatilis*)
- Water Avens (*Geum rivale*)
- Welsh Poppy (*Meconopsis cambrica*)
- Rosebay Willowherb (*Chamaenerion angustifolium*) - very rare as a native in rocky places in mountains
- Tunbridge Filmy Fern (*Hymenophyllum tunbridgense*) - recorded by Praeger (1934)

APPENDIX V: NOTIFIABLE ACTIONS

The notifiable actions relating to the habitats that occur within the site are listed below:

- Notifiable Action 2.1 – Upland Grassland, Scree, and Inland Cliff
- Notifiable Action 3.1 – Blanket Bog
- Notifiable Action 3.2 – Heath
- Notifiable Action 5.2 – Scrub
- Notifiable Action 6.1 – Rivers or Streams
- Notifiable Action 6.2 – Lakes, Ponds, Canals

HABITAT TYPE 2.1

UPLAND GRASSLAND, SCREE, AND INLAND CLIFF

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

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SECTION A

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SECTION B

Please note that the activities listed in Section B overleaf may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).

If so, these notifiable actions do not apply.

However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.

HABITAT TYPE 2.1

UPLAND GRASSLAND, SCREE, AND INLAND CLIFF

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting/adding lime</p> <p>adding fertiliser of any sort to areas not previously fertilised applying fertiliser which would increase the level of nitrogen in the soil/ applying fertiliser which would increase the level of phosphorous in the soil applying phosphorous to soils which already have in excess of the REPS index 2 levels</p> <p>using fertiliser on slopes over 25 degrees</p> <p>creation of new tracks or paths</p> <p>burning of vegetation</p> <p>reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>rock removal/use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)/ introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>commercial turf cutting</p> <p>erecting or operating a windfarm</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

HABITAT TYPE 3.1

BLANKET BOG

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

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HABITAT TYPE 3.1

BLANKET BOG

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density or type of stock (as defined in approved farm plans)</p> <p>grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock, except as defined in REPS guidelines/ introduction of stock to formerly ungrazed areas</p> <p>adding lime/adding fertiliser of any sort</p> <p>creation of new tracks or paths/burning of vegetation/ reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>rock removal/cutting turf except from existing banks; no cutting from intact (uncut) areas</p> <p>commercial peat moss or turf extraction</p> <p>use of any pesticide or herbicide, including sheep dip/ dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>erecting or operating a windfarm</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

HABITAT TYPE 3.2

HEATH (INCLUDING JUNIPER SCRUB)

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

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If so, these notifiable actions do not apply.

However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.

HABITAT TYPE 3.2

HEATH (INCLUDING JUNIPER SCRUB)

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density or type of stock (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock, except as defined in REPS guidelines</p> <p>introduction of stock to formerly ungrazed areas</p> <p>adding lime/ adding fertiliser of any sort</p> <p>Creation of new tracks or paths</p> <p>burning areas of vegetation over 5 ha, or burning any area more often than once every 15 years</p> <p>reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>rock removal/cutting turf except from existing banks; no cutting from intact (uncut) areas</p> <p>commercial peat moss or turf extraction</p> <p>use of any pesticide or herbicide, including sheep dip</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area/any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>erecting or operating a windfarm</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

HABITAT TYPE 5.2

SCRUB

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SECTION B

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However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.

HABITAT TYPE 5.2

SCRUB

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock (as defined in approved farm plans)</p> <p>adding lime /adding fertiliser of any sort</p> <p>reclaiming land covered by scrub; if scrub is cut it must be allowed to regrow</p> <p>reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>felling of trees, removal of timber</p> <p>removal of foliage, moss or other materials</p> <p>killing ivy</p> <p>use of any pesticide or herbicide /dumping, burning or storing any Materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. walking tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which may cause pollution of the site</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>felling trees or reafforestation</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

HABITAT TYPE 6.1

RIVERS OR STREAMS

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

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SECTION B

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However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.

HABITAT TYPE 6.1

RIVERS OR STREAMS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans) within 30m of the river or stream/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung within 30m of the river or stream</p> <p>supplementary feeding of stock within 30m of the river or stream/adding lime within 30m of the river or stream/adding fertiliser of any sort within 30m of the river or stream</p> <p>extracting water for irrigation or other purposes</p> <p>operation of boat angling or shore angling business/restocking with fish</p> <p>reclamation, infilling, ploughing or land drainage within 30m of the river or stream/ reseeding, planting of trees or any other species within 30m of the river or stream/ removal of trees or any aquatic vegetation within 30m of the river/stream/ use of any pesticide or herbicide in the river or stream or within 30m of the river or stream</p> <p>dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them</p> <p>dumping, burning or storing any materials within 30m of the river/stream including the land spreading of used pesticides (e.g. sheep dip)/alteration of the banks, channel, bed or flow of the river or stream</p> <p>harvesting or burning of reed or willow.</p> <p>causing siltation/ operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which might cause pollution of the river or stream</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>construction or operation of an aquaculture facility.</p> <p>fishing for eels or salmon</p> <p>bank maintenance and grading</p> <p>creation of weirs and dams</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

HABITAT TYPE 6.2

LAKES, PONDS AND CANALS

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

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HABITAT TYPE 6.2

LAKES, PONDS AND CANALS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density as defined in approved farm plans) within 50m of the lake, pond or canal</p> <p>grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock within 50m of the lake, pond or canal</p> <p>adding lime within 50m of the lake, pond or canal /adding fertiliser of any sort within 50m of the lake, pond or canal</p> <p>extracting water for irrigation or other purposes</p> <p>operation of boat angling or shore angling business/restocking with fish.</p> <p>within 50m of the lake, pond or canal: reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species /removal of trees or any aquatic vegetation/use of any pesticide or herbicide in the lake, pond or canal or within 50m of the lake, pond or canal</p> <p>dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them.</p> <p>dumping, burning or storing any materials within 50m of the lake pond or canal including the land spreading of used pesticides (e.g. sheep dip).</p> <p>alteration of the banks, channel, bed or flow of the lake, pond or canal or of watercourses running into or out of it</p> <p>harvesting or burning of reed or willow.</p> <p>causing siltation</p> <p>operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which might cause pollution of the lake, pond or canal</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>construction or operation of an aquaculture Facility.</p> <p>fishing for eels or salmon</p> <p>bank maintenance and grading</p> <p>creation of weirs and dams</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

APPENDIX VI: COMPENSATION AND APPEALS PROCEDURES

Compensation

The Government is committed, as part of the social partnership process, to the payment of a fair and proper level of compensation to landowners who have lands proposed as part of an SAC or SPA and to other users who have a legal entitlement in the site.

A landowner or user with a legal entitlement may seek compensation for actual losses incurred due to restrictions imposed as a result of designation. Eligible persons should submit to NPWS details of the losses incurred as a result of the inclusion of lands in an SAC/SPA and outlining the basis for the calculations. Documentary evidence of past earnings and the activities that produced these should be included with the claim. Should the applicant be dissatisfied with a compensation offer, the case may be referred to an independent arbitrator who will review the matter and make a final decision.

Where a landowner or user with a legal entitlement is restricted in carrying out an activity on their land or licensed area, the compensation due will exclude any payments that have been attracted under grant schemes.

For farmers, there are two options available for receiving compensation for possible restrictions to their farming practices. Farmers may also receive payments for carrying out actions that enhance a nature conservation area.

Rural Environment Protection Scheme (REPS)

Lands within SACs, SPAs, NHAs or commonages are defined as 'Target Areas' under this scheme. A REPS plan usually covers an entire farm, but a farmer with land in a target area receives a higher payment for that area. Farmers with small areas of land in a designated area can get REPS payments for that part of their farm. In either case, the farmer is subject to certain conditions regarding farming and land use practices, set out in the REPS plan for the farm. REPS is administered by the Department of Agriculture, Food and Forestry.

NPWS Farm Plan Scheme

Where a farmer chooses not to participate in REPS, and NPWS seeks to change the farm operation in some way or to restrict a particular activity, NPWS will pay for preparation of a farm plan. This scheme also applies to land within SACs, SPAs, NHAs and commonages.

An NPWS farm plan will normally be confined just to the designated land and will address the conservation requirements, as well as any costs arising. Payment may also be made for work carried out that enhances the nature conservation value of the designated area. The farmer will have a substantial input into the plan.

A list of trained and approved farm planners is available for farmers to choose from. For further information, contact NPWS.

Appeals Procedure

Objection or appeal can be made against the inclusion of a piece of land in a cSAC or SPA. A person can only make objections if they have a legal interest in the site (i.e. an owner or legal user). They must be made on scientific grounds, e.g. a landowner would show that the relevant habitats/species/geological features were not present in such a condition as to warrant designation. Appeals can also be made for the inclusion of lands. Appeals should be accompanied by a map of the area of concern and be as informative as possible. There are two stages to the appeals process:

Internal Appeals are initially dealt with by regional staff. If necessary, they may refer the case to other NPWS staff. If there is no agreement following the internal appeal, the case becomes an external appeal.

The option of an **External Appeal** is available only where an internal appeal is unsuccessful. If so, the appellant may have the case referred to an Appeals Advisory Board, which is independent of NPWS. A grant to defray the cost of an expert scientific report is available to the appellant. The Board is comprised of equal representation of landowners/users and conservationists, with an independent chairperson. The Board makes a recommendation on each appeal to the Minister who then decides on the outcome of the appeal.

APPENDIX VII: FARMING CONDITIONS UNDER REPS

Conditions for the conservation of blanket bogs, heaths and upland grasslands to be applied under REPS

General Provisions

The conditions for specific habitat types are supplementary to the agri-environmental plan requirements of the general REPS programmes. The conditions for the target areas under Supplementary Measure A apply. Planners may seek a derogation from the Regional Inspector to vary these conditions in individual cases. All REPS plans in respect of NHAs must be approved and signed by the Planning Agency's environmentalist/ecologist.

Detailed Conditions

The conditions applicable to Supplementary Measure A apply; the guidelines set out below are complementary to these conditions.

Stocking Density

In all cases an environmentally sustainable plan must be prepared and adhered to for the total area of the farm. Sustainable optimum stocking rates must be set down by the REPS planner following careful assessment of the environmental conservation needs of the lands.

Where the stocking levels set down by the planner require a reduction in stock, this must be achieved within one year of the commencement of the plan.

There can be no increase in stocking levels, no introduction of stock to new areas and no changes in stock type during the period of the REPS plan without the prior approval of DAF.

The maximum number of sheep that may be kept on the farm as a whole must be set down in the REPS plan. The conditions set out for Supplementary Measure A areas must be followed. The following parameters apply:

- Where there is no damage, the current stocking levels are acceptable.
- If the level of damage is moderate, a stocking reduction must be prescribed by the planner at a level related to the damage and sufficient for the vegetation to recover
- If the level of damage is severe, a stocking reduction of between 70 % and 100 % of ewe numbers on the damaged area must be prescribed for a specified period.
- At the review of the REPS plan, the conservation status of the areas will be reviewed. A change in the stocking levels (increase or decrease) may be appropriate depending on progress.

Stocking levels apply to Scottish Blackface sheep or similar medium sized sheep breeds. Stocking levels for cattle or other stock should be at livestock unit applicable rates taking account of DAF conversion rates for the various stock types. The stocking levels recommended in this document are maximum sustainable rates for year round grazing. If shorter periods of grazing are used, the number of animals may be increased, though not necessarily pro rata.

Supplementary Feeding

Supplementary feeding is permitted only on areas where it is currently practised. Locations of feeding points must be specified. To reduce heavy grazing, trampling, poaching and erosion problems, 'feeding points' should be moved every three weeks and sited on ground with least habitat and wildlife value, preferably on grassland well away from stands of heather. Feeding on steep slopes and on peaty soils should be avoided where possible. The total amount of feed used must not be increased.

Use of Fertilisers and Herbicides

Neither organic nor inorganic fertilisers or lime can be applied on bogs, heaths or upland grasslands where they have not been used before. Fertilisers must not be used as a means of regenerating eroded areas. In the case of upland grasslands, fertilisers can only be applied on the basis of the results of a soil test. Where fertilisers are being applied, the initial soil sampling should be relatively intensive, with at least one sample per 2-4 ha. Target soil phosphate levels must not exceed the Index 2 level set out in the REPS specification.

Spraying or broadcast application of herbicides must be avoided. Spot application and wipe-on treatments to eradicate docks, thistles, ragwort and similar noxious weeds may be used. Rhododendron may be removed by cutting and herbicide treatment. Bracken control may be by rolling, cutting and/or by controlled cattle trampling in early summer. In exceptional circumstances, control of bracken by herbicides may be permitted.

Water Pollution

The greatest care should be taken to observe the statutory requirements on water pollution. The hydrology of bogland areas is characterised by extremely nutrient poor surface waters which contain flora and fauna adapted to these conditions. These species would be adversely affected by nutrient enrichment. New sheep dip sites must be listed and located away from streams and flushes to reduce the possibility of water pollution and damage to flora and fauna.

Restricted and Prohibited Practices

- The following practices must not be carried out on blanket bogs, heaths or upland grasslands
- The areas must not be drained, ploughed, cultivated or reseeded.
- There must be no infilling or rock removal.
- Turf cutting on unexploited bogs is not permitted. Turf cutting for domestic use is permitted on existing banks.
- Planting of trees or other crops is not permitted.
- No new tracks or paths can be created.
- Burning is only allowed as a planned management practice.
- Gorse may be controlled by cutting, spot spraying or exceptionally by burning outside of the bird nesting season (March 1st to August 31st).

Complementary Action

(a) Measures to prevent damage by non REPS participants

DAF should take measures to ensure that the environmental benefits achieved in degraded areas under REPS are not negated or diminished by non-participants in the Scheme

(b) Evaluating and Monitoring

Monitoring and evaluating the effects of REPS on blanket bogs, heaths and upland and unimproved grassland is essential in determining the environmental impact of REPS on these habitats so that appropriate modifications can be identified and effected where necessary. The effect of the grazing regime on vegetation and wildlife should be monitored to assess recovery as well as any damage being caused by animals. To this end, DAF and NPWS of DEHLG, in consultation with Teagasc and private planners, will monitor the environmental impact of REPS on these habitats on an ongoing basis. Progress in this regard will be reported to the Consultative Committee on REPS.

(c) Farmer Education /Advice

A REPS promotional campaign will be undertaken as soon as is practicable to inform farmers of the conservation needs of these areas and of the provisions of REPS. This campaign will be undertaken by DAF. Farming and environmental organisations will also be invited to assist in this promotional campaign.

(d) Seminars for Planners

Seminars for REPS planners shall be held to advise on the interpretation of these conditions at ground level.

(e) Demonstration Farms

A number of REPS participant demonstration farms will be set up in selected areas. Research work could also be carried out at these farms to assess the ability/rate of recovery of an area under different stocking conditions.

(f) Quota Rights

Any REPS participant farmer is guaranteed that their quota rights are protected and in the event of a possibility of increasing numbers arising, such farmers would be allowed to do so, subject to the environmental condition of the participant farm.

(g) Scheme Extension

The application of REPS in the target areas will apply for periods of five years renewable for 15 years.

(h) Local Co-ordination

DAF will encourage co-ordination, at local level, of efforts to rejuvenate damaged areas.

APPENDIX VIII: NATIONAL PARKS AND WILDLIFE SERVICE MANAGEMENT STAFF

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Divisional Manager

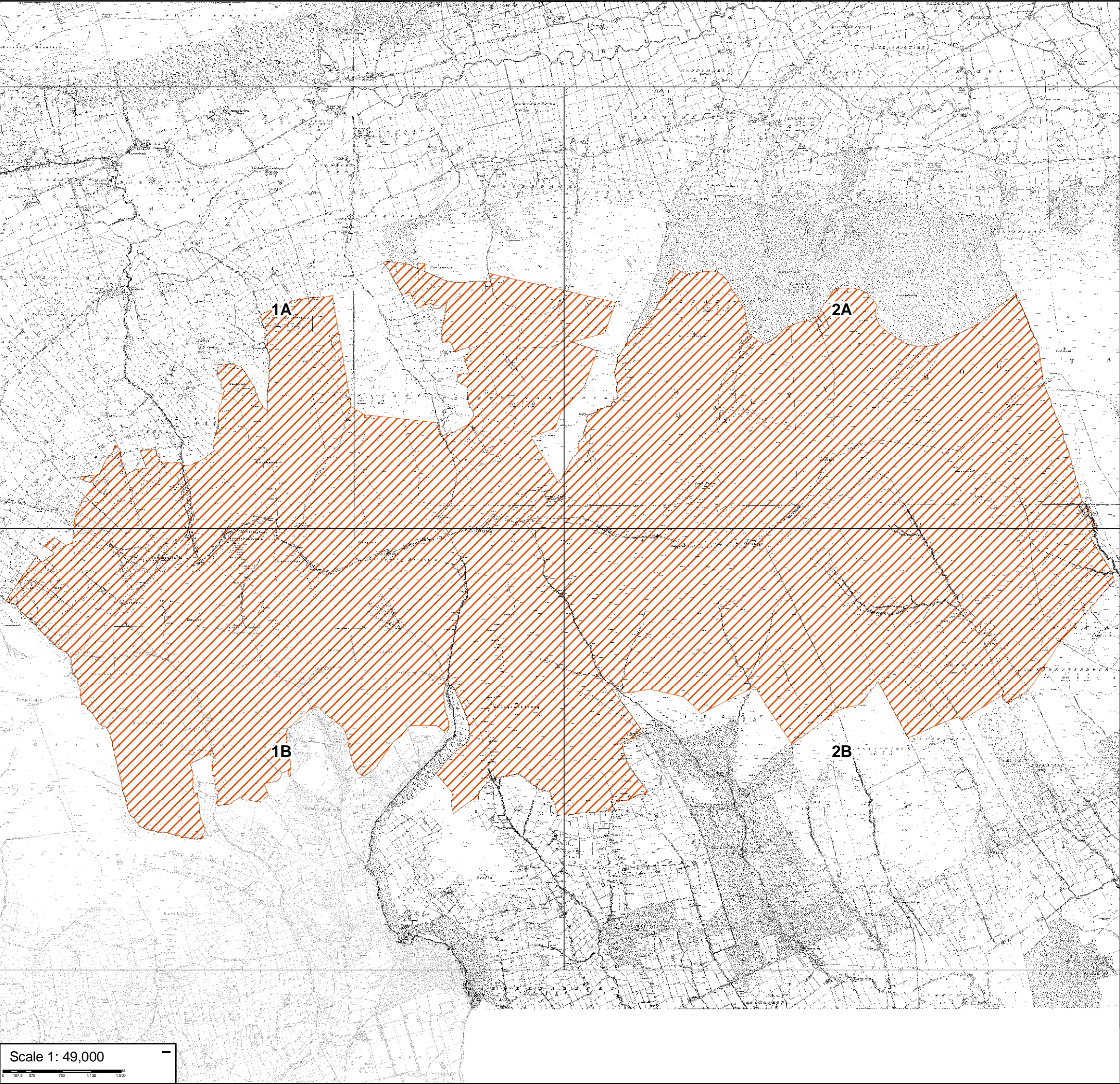
Paddy O Sullivan
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Divisional Ecologist

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The Department of the Environment, Heritage
and Local Government
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Fax (01) 8883272
www.npws.ie



CEANTAR SPEISIALTA CAOMHNATHE
CANDIDATE SPECIAL AREA OF CONSERVATION
GALTEE MOUNTAIN 000646
Version 1.00

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Boundaries of designated areas are subject to revision.
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Níl sna teorainneacha ar na léarscálanna ach nod garshuíomhach ginearálta.
Féadfar athbheithnithe a déanamh ar theorainneacha na gceantar comharthaíthe.
Macasamhail d'ábhar na Suirbhéarachta Ordonáis le chead ón Rialtas (Ceadúnas Uimh. 5953)



Map 1
LOCATION MAP: GALTEE MOUNTAIN cSAC 000646



Department of Environment, Heritage and Local Government
An Roinn Comhshaoil, Oidhreachta agus Rialtais Aitiúil

Co-financed through 'Life' EU funding
Chomh-mhaoinithe trí chiste 'LIFE' an AE



Key

*Active blanket bog (7130)

*Species rich Nardus Grassland (6230)

Wet Heath

Dry Heath (4030)

Alpine Heath (4060)

Exposed Rock (8210/8220)

Upland Grassland

Lake

Dry Heath (4030)/Upland Grassland Mosaic

Upland grassland/Wet Heath mosaic

Exposed Rock (8210/8220)/Dry Heath (4030)/Upland Grassland Mosaic

Rivers and streams

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CANDIDATE SPECIAL AREA OF CONSERVATION

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Map 2

INDICATIVE HABITAT MAP

Map to be read in conjunction with conservation plan.

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Sheet 1A

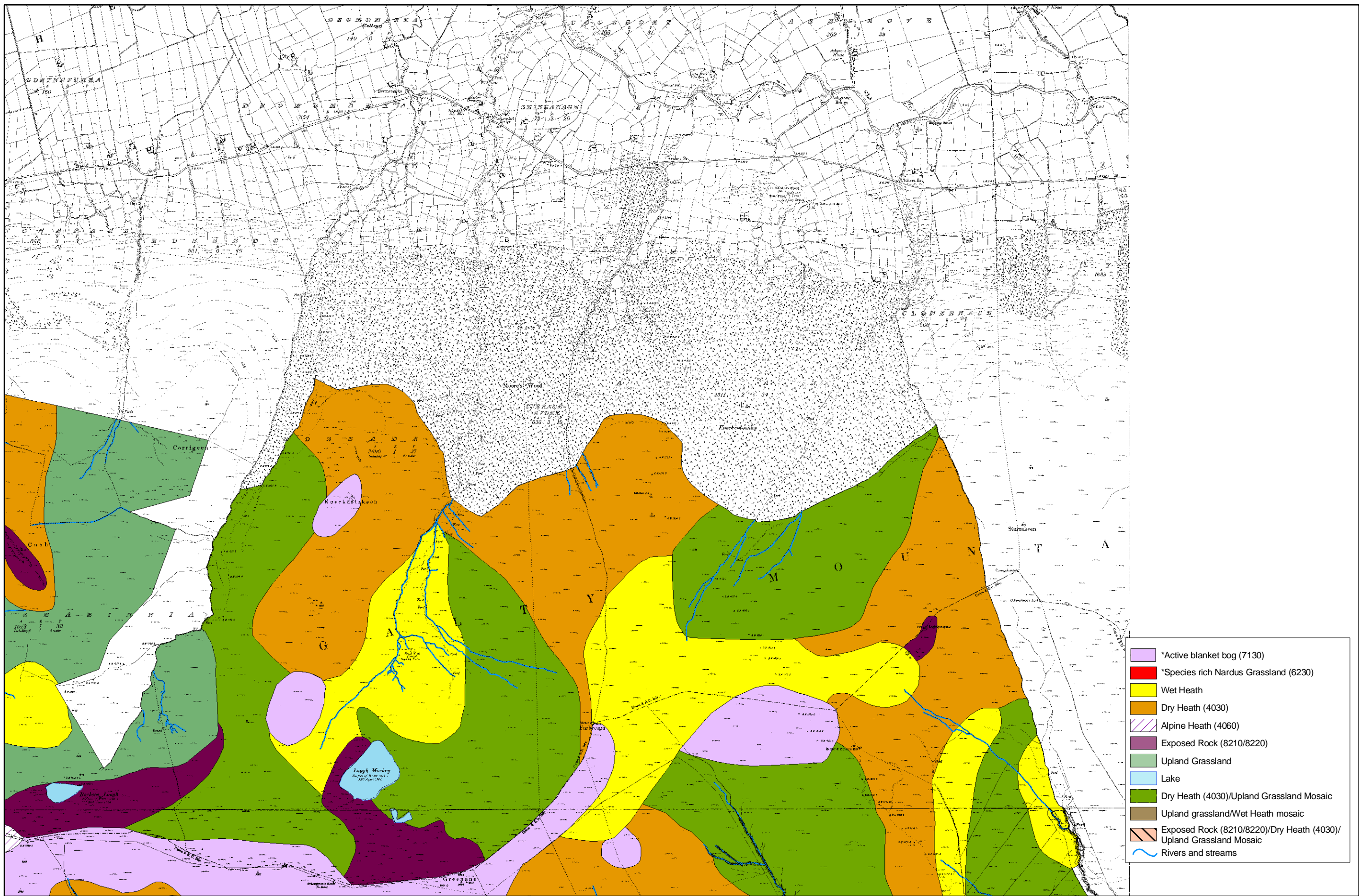
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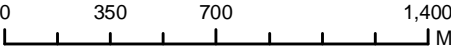
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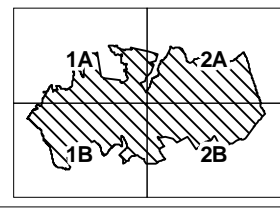
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Map 2
INDICATIVE HABITAT MAP
Map to be read in conjunction with conservation plan.

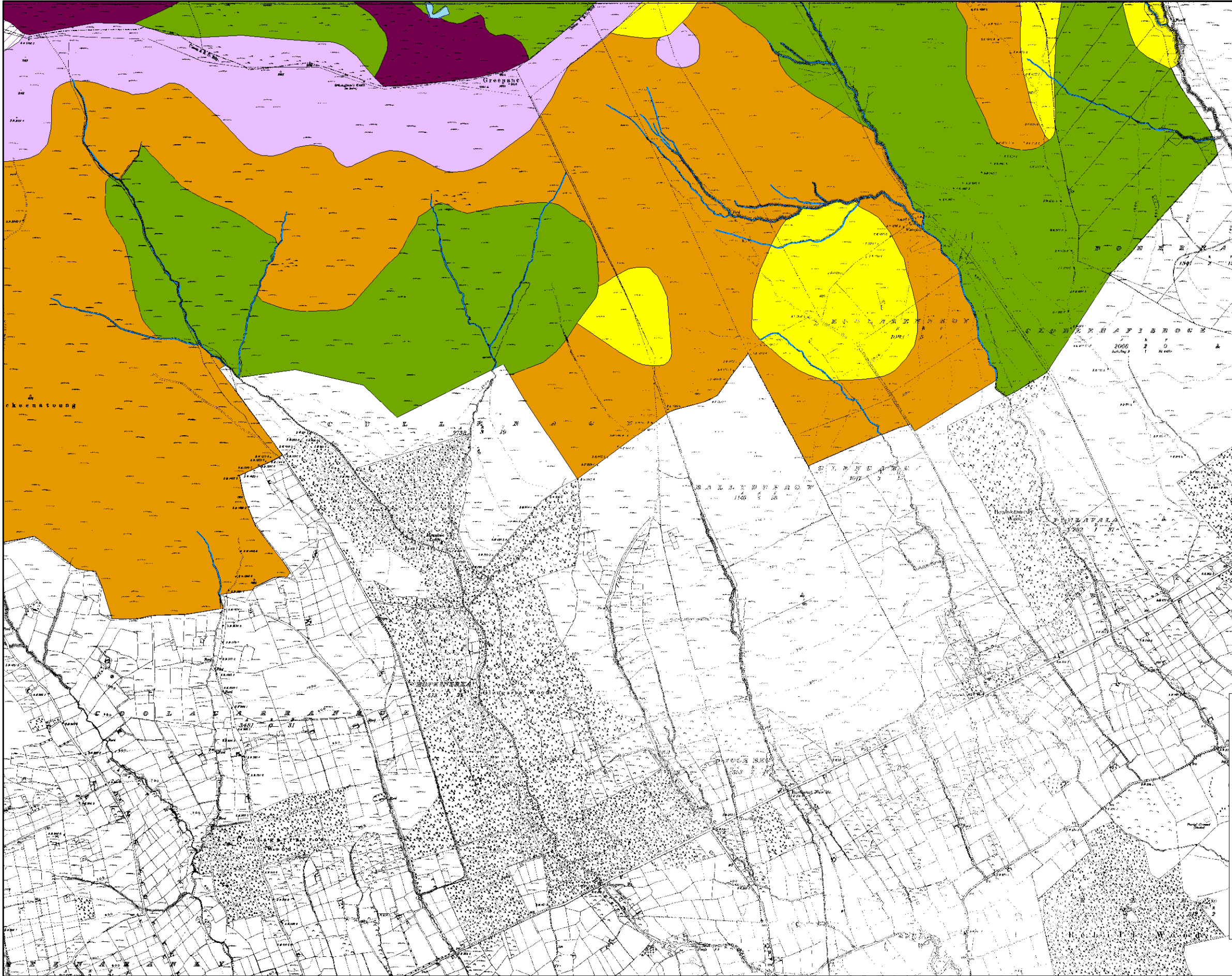


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- *Active blanket bog (7130)
- *Species rich Nardus Grassland (6230)
- Wet Heath
- Dry Heath (4030)
- Alpine Heath (4060)
- Exposed Rock (8210/8220)
- Upland Grassland
- Lake
- Dry Heath (4030)/Upland Grassland Mosaic
- Upland grassland/Wet Heath mosaic
- Exposed Rock (8210/8220)/Dry Heath (4030)/Upland Grassland Mosaic
- Rivers and streams

AN ROINN COMHSHAOIL, OIÐHREACHTA AGUS RIALTAIS AITIÚIL

DEPARTMENT OF THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT

CEANTAR SPEISIALTA CAOMHNAITHE

CANDIDATE SPECIAL AREA OF CONSERVATION

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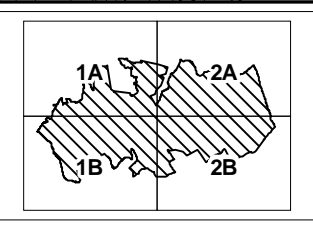
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INDICATIVE HABITAT MAP

Map to be read in conjunction with conservation plan.

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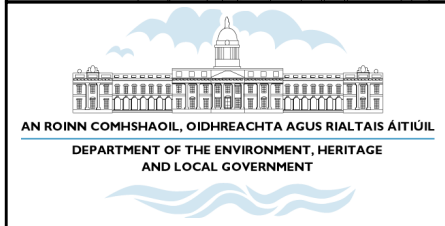
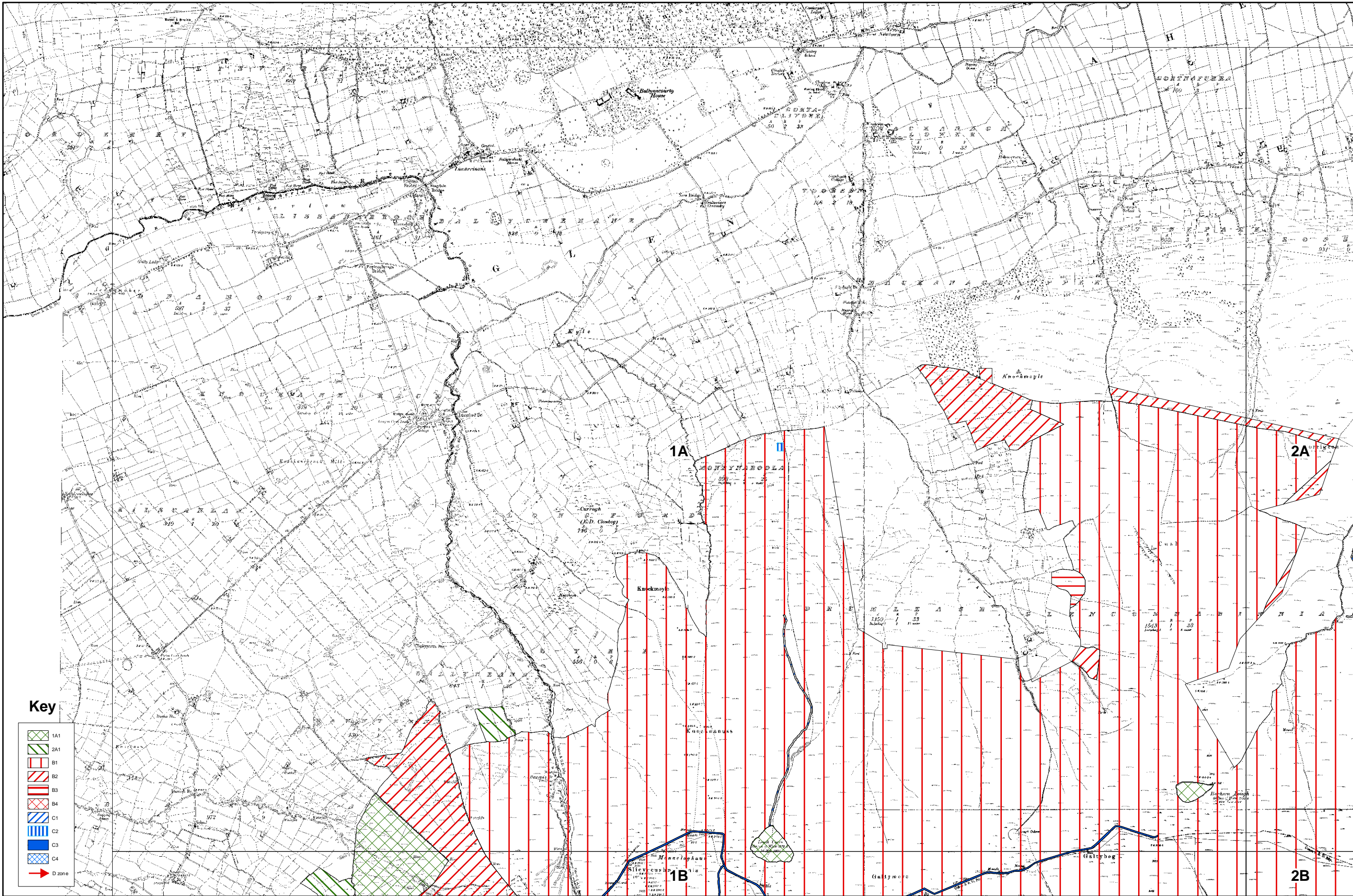
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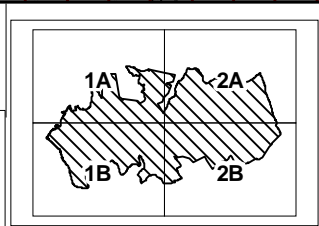


CEANTAR SPEISIALTA CAOMHNATHÉ
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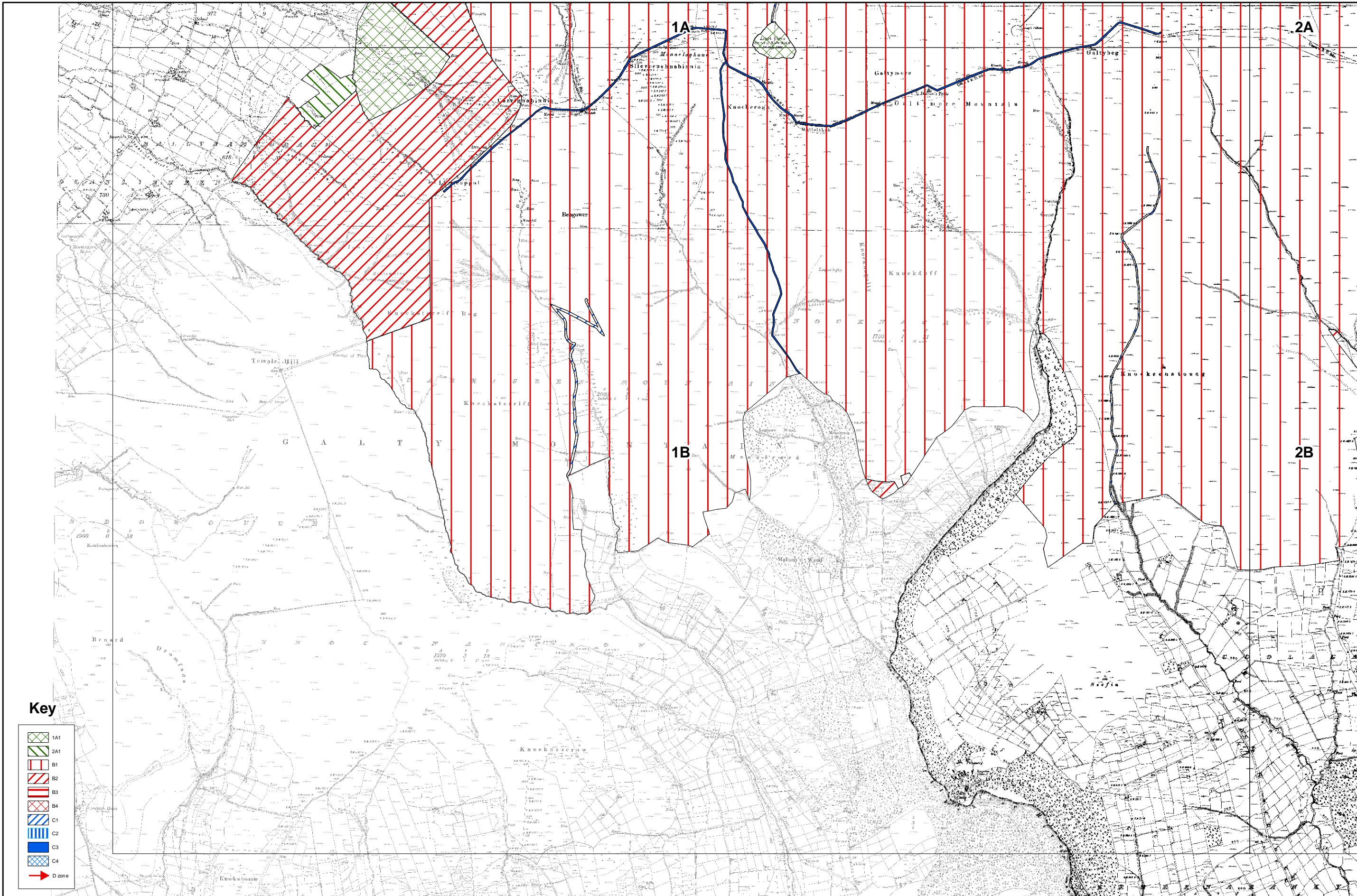
Map 3
MANAGEMENT ZONING MAP
Map to be read in conjunction with conservation plan.

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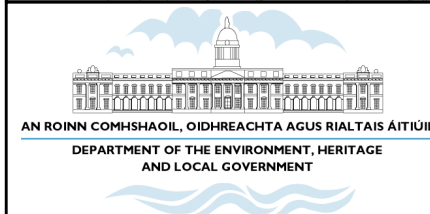
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Key

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- 2A1
- B1
- B2
- B3
- B4
- C1
- C2
- C3
- C4
- D zone



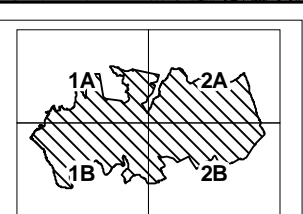
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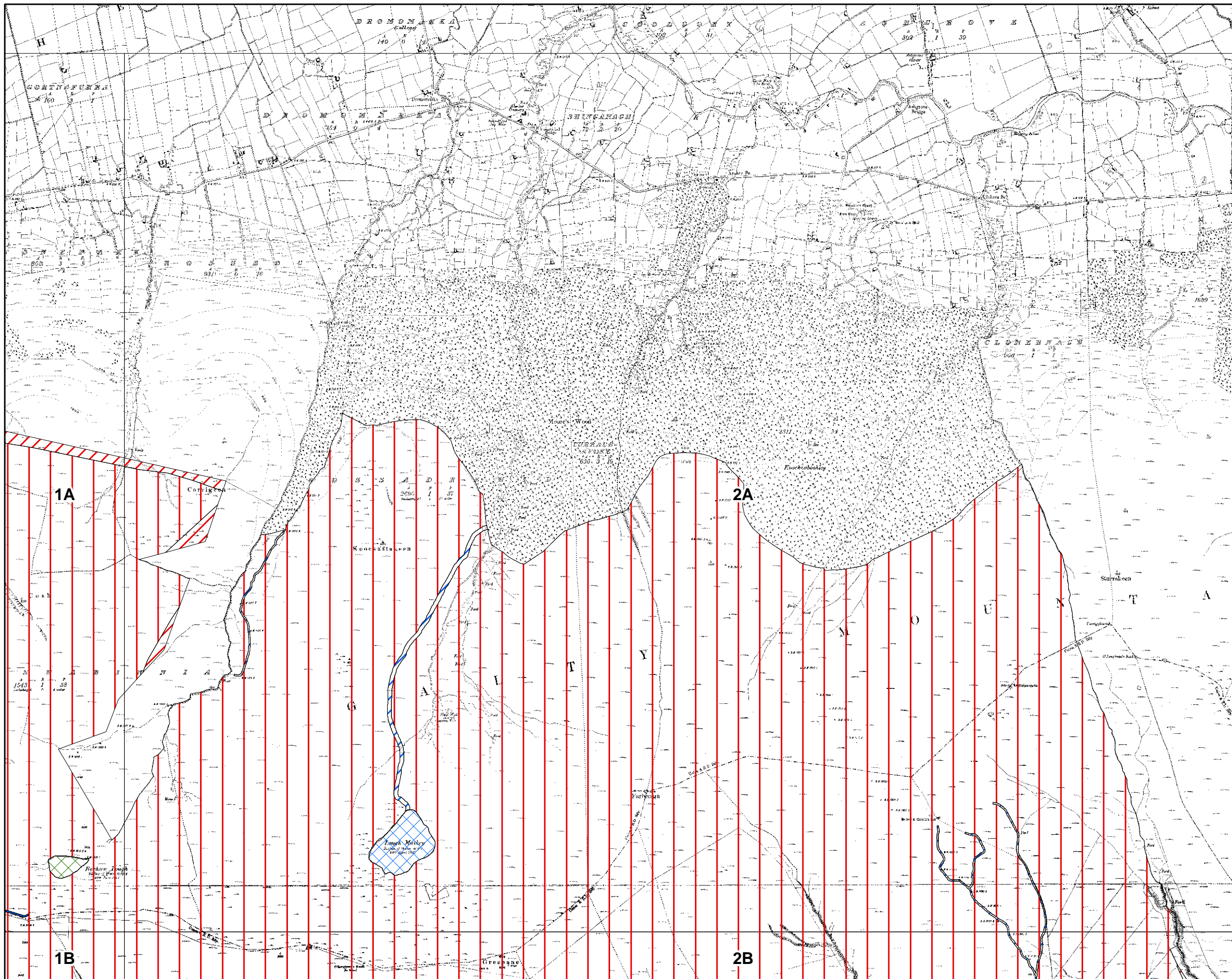
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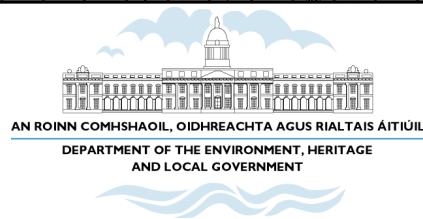


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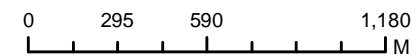


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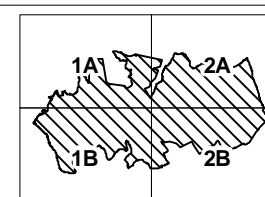
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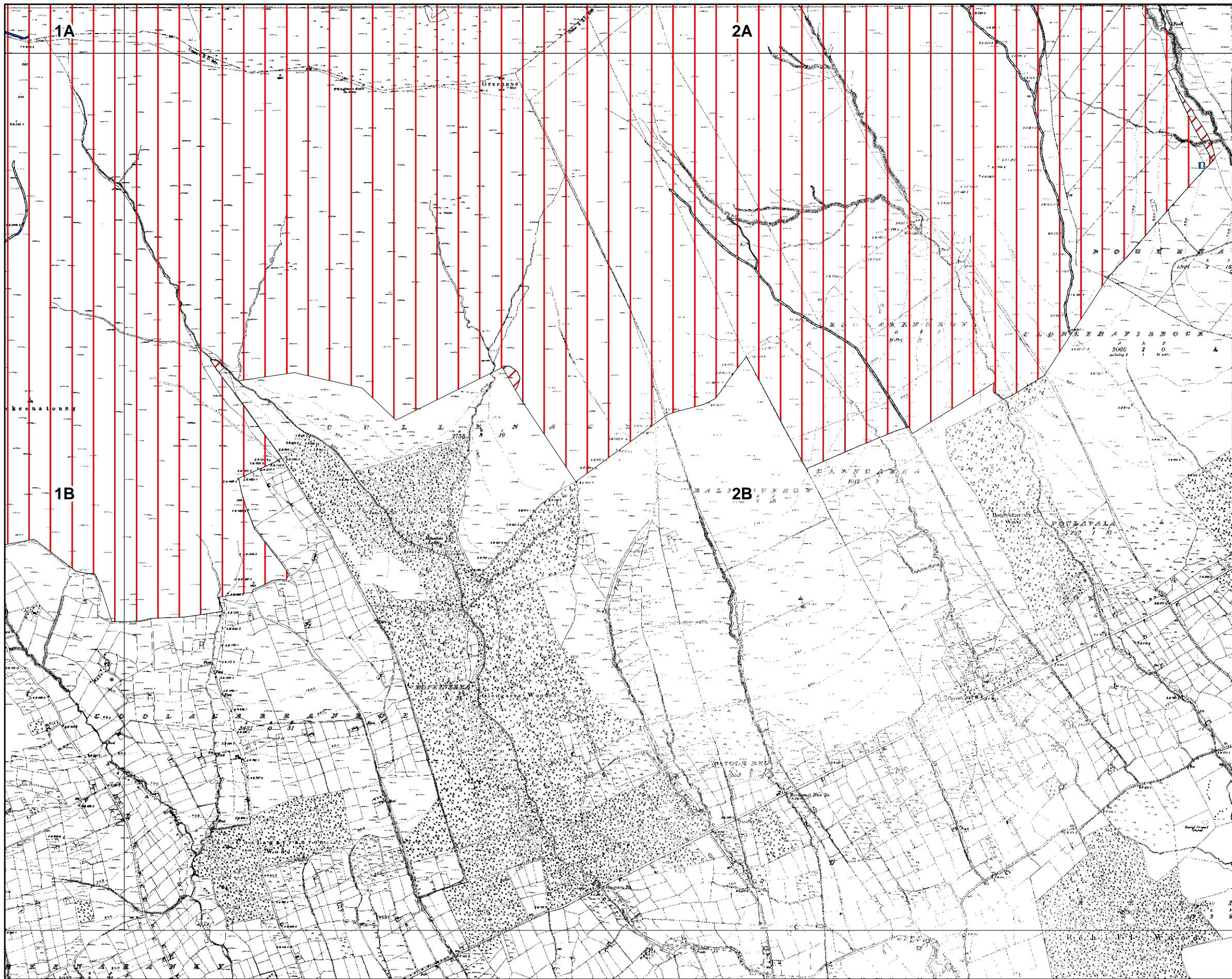


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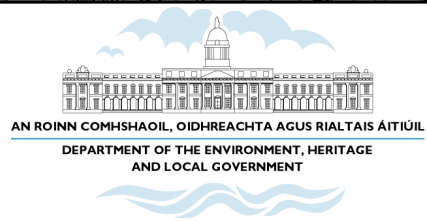
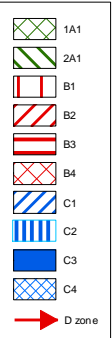
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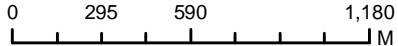


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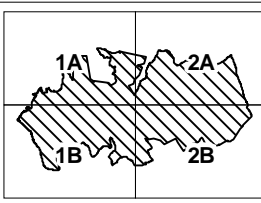
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