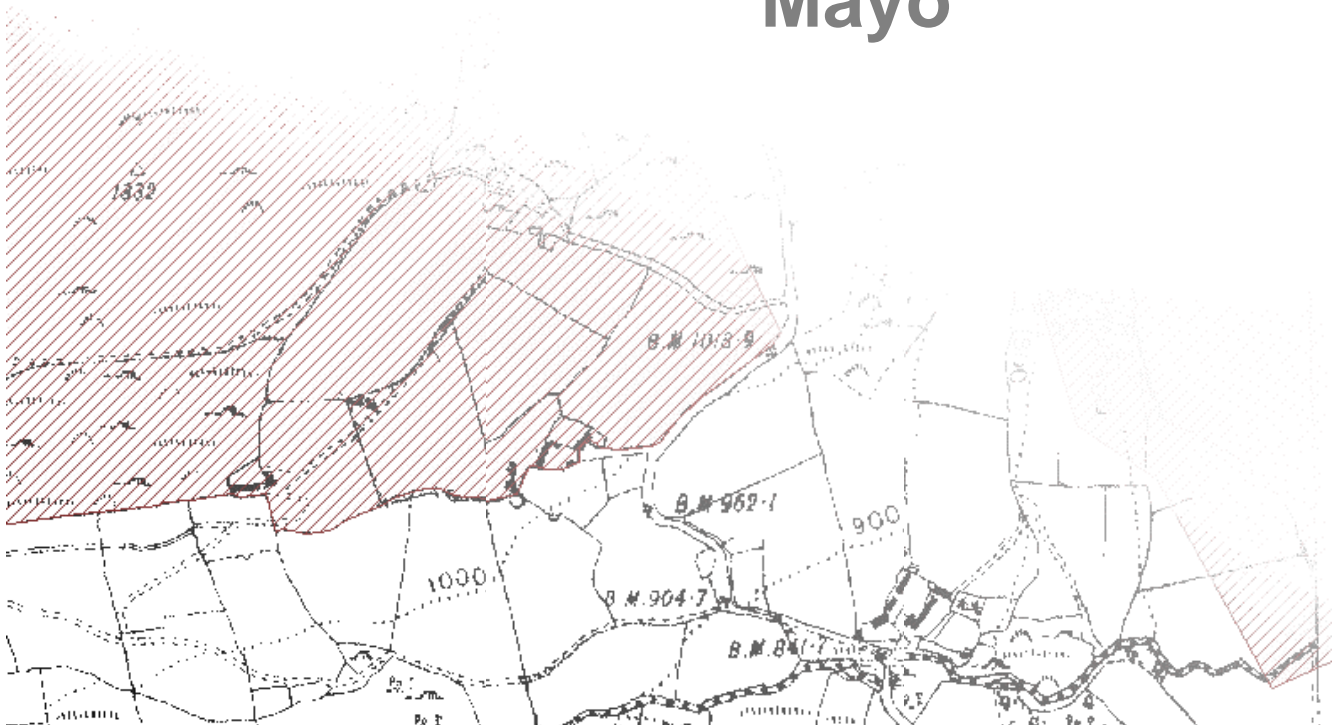


National Parks and Wildlife Conservation Plan for 2005-2010

Lough Hoe Bog cSAC

Site Code 633
Co.s Sligo &
Mayo



SUMMARY

Site Description

Lough Hoe Bog candidate Special Area of Conservation (cSAC) is an extensive area of primarily highland blanket bog, with limited areas of montane blanket bog and loughs. The cSAC is situated in the Ox Mountains in Counties Sligo and Mayo. The site supports approximately 40% blanket bog and 40% wet heath. The cSAC runs north-east to south-west on a broad, silica-rich, granite mountain ridge. The northern margin of the site encompasses Lough Talt, which is 13km from Tobercurry and 17km from Ballina.

The site has been selected as a cSAC due to the presence of a significant amount of *active blanket bog (a priority habitat) and oligotrophic (nutrient poor) lakes, which are both listed in Annex I of the EU Habitats Directive.

Within Lough Hoe Bog cSAC, the plateau top is covered by a layer of blanket bog with areas of shallow inter-connecting pools. The inter-connecting habitats with their high species diversity add to the scientific interest of the site. Hummocks are large and are formed from the mosses *Sphagnum papillosum* and Silver-haired Moss, with Ling Heather. The pools contain the bog moss *Sphagnum cuspidatum*, Hare's-tail Cottongrass and Bog Bean. In the drier areas, Deergass and Hare's-tail Cottongrass are abundant. The liverwort *Peltigera membranacea* has been recorded at this site.

There are numerous loughs on the plateau. Plant species colonising these loughs include Bottle Sedge, Water Lobelia, Bog Pondweed, Soft Rush and Bulbous Rush. The rocky lough shores are colonised by Common Yellow Sedge and Field Wood-rush. Floating mats of vegetation, consisting mainly of Bog Bean and Bog Pondweed, have developed at the ends of some loughs, while Common Reedmace, Reed, Bulrush and Water Horsetail are the main emergent species at the lough edges. There are three large rivers on the site, two in the south and the third (Lough Hoe River) to the north. Species common to these rivers include Mint, Selfheal, Bracken and Bog Pimpernel.

The site is further designated for the White-clawed Crayfish and *Vertigo geyeri*, a land snail, which are both listed on Annex II of the EU Habitats Directive. Arctic Charr, a Vulnerable Red Data Book species, has been recorded from Lough Talt.

Land Use

Peat cutting along with grazing by cattle and sheep are the major activities in evidence on the site. Despite localised peat erosion and poaching, the area has remained reasonably intact.

Some shooting of Red Grouse is carried out on the plateau within the site. Trout fishing by local anglers and visitors to the area occurs along the shores of Lough Talt.

Water is abstracted from Lough Talt, with the Lough being used as a reservoir. There is a small area of Norway Spruce on the northern shores of Lough Talt. A road, recently constructed on the southern shore of Lough Talt as an amenity walk, was funded by the European Regional Development Fund.

Main conservation issues

- Grazing
- Peat extraction
- Afforestation adjacent to the site

Main management objectives

- To maintain and, where possible, enhance the extent and quality of the priority habitat, active blanket bog
- To maintain and, where possible, enhance the extent and quality of all other habitats within the site
- To maintain and, where possible, increase the populations of White-clawed Crayfish, *Vertigo geyeri* (a Land Snail) and the Red Data Book species, Arctic Charr
- To continue effective liaison between NPW and interested parties on the management of the site

Main strategies to achieve objectives

- Implement grazing regime
- Regulate cutting of turf
- Maintain water quality
- Liaison/consultation with landowners and interested parties

ACKNOWLEDGEMENTS

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READER'S GUIDE

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

The **Site description** contains **general information** on the site's boundaries, ownership and organisations involved. It also contains sections on the **physical aspects** of the site such as 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 **Ecological Assessment** assesses the main ecological attributes of the site.

The **Objectives, Strategies and Zoning 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 will be used to achieve the objectives as outlined. In cases where more information is required, general strategies are usually applied. Where sufficient data and knowledge is available, specific management prescriptions are outlined for the timescale of the plan. 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, a list of **notifiable actions** relevant to each habitat within the site, and additional information on the 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 Site Designation

The reason for the proposal to designate this site as a SAC is the presence of:

HABITATS LISTED IN ANNEX I OF THE E.U. HABITATS DIRECTIVE	
<ul style="list-style-type: none"> • Priority Habitat No. 7130 - *Active blanket bog 	This is an Annex I priority habitat. The site comprises a comparatively large area of highland/montane blanket bog.
<ul style="list-style-type: none"> • Habitat No. 3110 - Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) 	The site contains numerous good quality examples of oligotrophic (nutrient-poor) lakes

*indicates priority habitat in Annex I of the Habitats Directive

SPECIES LISTED IN ANNEX II OF THE E.U. HABITATS DIRECTIVE	
<ul style="list-style-type: none"> • White-clawed Crayfish (<i>Austropotamobius pallipes</i>) 	This species was reported from Lough Talt.
<ul style="list-style-type: none"> • <i>Vertigo geyeri</i> 	This land snail species has been found at the north-eastern end of Lough Talt.

As part of his responsibility in relation to biodiversity and wildlife under the Wildlife Acts, the Minister's objective is to protect important habitats and species even though they may not appear in the Annexes of the Habitats Directive. This may mean that they are included in SAC conservation plans.

General Conservation Objectives

Under Article 6 of the EU Habitats Directive, DEHLG is required to ensure the favourable conservation status of all Annex I habitats and Annex II species within cSACs. By preparing, implementing and reviewing this plan on a five year basis, DEHLG aims to achieve the objectives of the Habitats Directive in relation to this site. The general objectives DEHLG will apply to achieve this are:

- to maintain the Annex I habitat(s) for which the cSAC is selected
- to maintain the Annex II species for which the cSAC is selected
- to liaise with the landowners, relevant authorities and interested parties
- to increase the scientific knowledge of the site through further scientific research and development of monitoring programmes

Specific conservation objectives and strategies are outlined in the section, **Objectives, Strategies and Zoning**.

Implications for landowners and other site users

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

In cases where users 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 an owner, occupier or user of a site wishes to carry out certain activities within the designated area (that are not covered by licence or consent from another statutory body), 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 VI). Local Authorities are obliged to ensure appropriate assessment of the implications of any development permission sought that may have an impact on a designated area.

The designation of the site or any conservation actions can be appealed by landowners or right-owners on a scientific basis. Details of the appeals procedure are also given in Appendix VII.

SITE DESCRIPTION

Location including site boundaries

The site is located 17km south of Tobercurry on the main Sligo to Ballina road (Maps 1, 2 and 3).

Grid Ref.: G 37 14

Latitude: 54° 01' 10" N

Longitude: 08° 58' 89" W

Area: 3189 ha

Altitude Range: 136 m to 417 m

(Map references are provided in Appendix II).

Legal Status

Ownership

Much of the site is commonage (90-95%), with the remainder of the site under multiple private ownership. There are also turbary right holdings on the site.

Designations of the Site

candidate Special Site Code: IE0000633

Area of Conservation
proposed Natural Site Code: 633
Heritage Area

Corine Biotope Site Code: 800000594

Management Infrastructure

Individuals and Organisations Involved

Landowners	Much of the site is commonage. The remainder of the site is under multiple private ownership.
National Parks & Wildlife (NPW) of the Department of Environment, Heritage and Local Government (DEHLG)	NPW is responsible for maintaining the nature conservation value of the site. The site is patrolled by local Conservation Rangers, with input from other staff as necessary (see Appendix IX for further details of NPW regional staff).
Planning Authorities	Sligo County Council and Mayo County Council are the relevant local authorities.

Local Authority Policy in relation to the Site

The Co. Mayo draft development plan (2002) states that *“It is an objective of the Council to protect and conserve areas designated as candidate Special Areas of Conservation, Special Protection Areas and proposed Natural Heritage Areas”* and *“It is an objective of the Council to protect and conserve the natural habitats and plant and animal species identified under the Habitats Directive, Birds Directive, Wildlife Act and Flora Protection Order or any other relevant legislation that may be implemented during the lifetime of the plan”*.

The Sligo County Development Plan (1999-2004) states *“Where are proposed development is located within or adjoining these heritage areas [cSACs, NHAs & SPAs] or is likely to have an injurious impact on the area, the County Council will seek the advice of relevant statutory authorities i.e. Dúchas – The Heritage Service, Irish Wildbird Conservancy, The Heritage Council, and shall generally be guided by their comments”*.

Physical Features

Climate

No meteorological measurements have been made on Lough Hoe Bog. Rainfall data from the nearby Tobercurry weather station for the years 1961 - 1990 indicate that the area receives approximately 1268mm of precipitation annually. For 30-year climatic data recorded from the nearest meteorological synoptic station at Claremorris, Co. Mayo (see Appendix III).

Geology & Geomorphology

The site contains many elements of geological interest, occurring as it does in the centre of the Ox Mountains, which contain some of the oldest rocks in Ireland. This upland, mostly bog-covered area, is cut by valleys occupied by Lough Talt and Lough Easky. These parts are underlain by schists and granites, and rock outcrops are less common than in the gneiss area to the east. Many of the Loughs in the Sligo area owe their existence to moraines (glacial sand and gravel ridges deposited at the ice margin during the last glacial period), and Lough Talt is held up by one such moraine. Meltwater erosion from the retreating glaciers has also cut some spectacular meltwater channels, including the channel north of Lough Talt, through which the main Tobercurry/Ballina road passes.

The site is the type locality for Lough Talt Adamellite, a late (c. 400 million years ago) adamellite pluton. There are also a number of distinct geological forms found within the site (see Appendix III for descriptions).

Soils and Soil Processes

A preliminary survey of the soils of County Sligo was carried by Walsh *et. al.* (1976). This found that there were 27 major land divisions within the county. One of these divisions occurs within the site. The soils are classed as blanket peat below and above the 150m (500ft.) contour line.

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, while all other habitats are as listed according to the NPW 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 is listed, with the relevant NHA category also shown. Annex I priority habitats are marked with an asterisk (*). The Gross Habitat map for the site is presented in Map 4. The percentage presented for each habitat type is based on the approximate geographic area of each habitat, as shown in Map 4.

Habitats Found within Lough Hoe Bog cSAC

ANNEX I HABITAT TYPE	CORRESPONDING NHA CATEGORY	% AREA
*Active blanket bog	Blanket bog	40%
Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	Lakes and ponds	4%
-	Wet heath	40%
-	Cutover bog	5%
-	Lowland wet grassland	3%
-	Lowland dry grassland	>1%
-	Rivers and streams	>1%
-	Fens and flushes	>1%
-	Scrub	>1%
-	Dense bracken	<1%
-	Commercial forest	<1% (not shown on habitat map)
-	Drainage ditches	<1% (not shown on habitat map)

Annex I Habitats:

***Active blanket bog** (40% of total site area)

*Active blanket bog occurs over a large area of the site and in several locations. It can be characterised at Derrynabaunshy as an area of highland blanket bog dominated by Deergrass (*Trichophorum caespitosum*), Hare's-tail Cottongrass (*Eriophorum vaginatum*), Purple Moor Grass (*Molinia caerulea*), Ling Heather (*Calluna vulgaris*) and Cross-leaved Heath (*Erica tetralix*). Other species present include Heath Rush (*Juncus squarrosus*), Common Cottongrass (*Eriophorum angustifolium*), Soft Rush (*Juncus effusus*), Bog Asphodel (*Narthecium ossifragum*), Tormentil (*Potentilla erecta*), Mat-Grass (*Nardus stricta*), Sweet Vernal Grass (*Anthoxanthum odoratum*) and the bryophytes *Rhytidiadelphus loreus*, *Polytrichum commune* and *Pleurozium schreberi*. Some low hummocks are located in this area, formed by *Sphagnum papillosum*, Deergrass and Purple Moor Grass. In other areas, rocky outcrops support *Racomitrium lanuginosum*.



Deergrass (*Trichosporum caespitosum*), Photo M. Dromey

A second area with blanket bog is also found at Derrynabaunshy. In parts of the blanket bog, small, shallow pools occur. The pools are often surrounded with the bog mosses *Sphagnum papillosum* and *Racomitrium lanuginosum*, along with Ling Heather and Cross-leaved Heath. The pools contain *Sphagnum cuspidatum*, but are mainly open water. Some of the interconnecting channels contain Common Cottongrass, Hare's-tail Cottongrass, Deergrass, Carnation Sedge (*Carex panicea*), Star Sedge (*Carex echinata*), *Rhytidiadelphus loreus* and *Hylocomnium splendens*. This part of the site, and more notably the area to the south-west of this, is marked by old turbary activities. There are old embankments and gullies which have largely been abandoned and re-vegetated with similar species to those mentioned as occurring above.

Oligotrophic waters containing very few minerals of sandy plains - *Littorelletalia uniflorae* (4% of total site area)

Another area containing blanket bog is found near Lough Doo. This is an area of highland blanket bog with large areas dominated by Purple Moor Grass, Ling Heather and Cross-leaved Heath. There are also areas with vegetation dominated by Hare's-tail Cottongrass, Common Cottongrass and Deergrass scattered throughout. This area of blanket bog is largely intact and the terrain is characterised by hummocks. There is some evidence of sheep grazing here.

Blanket bog also occurs between Loughs Anooran and Nablaneybaun, and features small pools containing mainly *Sphagnum cuspidatum* and Common Cottongrass.

There is a further area of blanket bog nearby that is dominated by Purple Moor Grass, Deergrass and Bog Asphodel.

Lough Talt contains emergent vegetation along the lough shore. Sparse Reed (*Phragmites australis*) and Bulrush (*Schoenoplectus lacustris*) occur in some of the bays, but never become dense enough to form a reedbed. Other species found growing in the lough include Mint (*Mentha aquatica*), Shoreweed (*Littorella uniflora*), Broad-leaved Pondweed (*Potamogeton natans*), Water Horsetail (*Equisetum fluviatile*) and Many-stemmed Spike Rush (*Eleocharis multicaulis*).

The White-clawed Crayfish, a species listed under Annex II of the EU Habitats Directive, and Brown Trout (*Salmo trutta*) have been seen in the lough.

Lough Doo appears to be infilling and is presently composed of, on its western half, an area of Scragh containing *Sphagnum recurvum*, Bog Bean, Mud Sedge (*Carex limosa*) and other species typical of scragh areas. On its eastern half, there is an area of open water with emergent species such as Water Horsetail. Several Willows are found on the northern side of the lough. There is no longer the expanse of water on the ground as indicated on the 6" Map. The Lough is surrounded by blanket bog dominated by Purple Moor Grass.

At the western end of Lough Hoe, Pondweed species (*Potamogeton* spp.), White Water-lily (*Nymphaea alba*), Reed, Water Horsetail, Bottle Sedge (*Carex rostrata*) and Bulrush are present.

Many other small loughs occur within the site (see Map 4 for details) and contain similar species to those described above.

Other Habitats

Wet Heath

Wet heath occurs at several locations around the site. The first of these is at Tawnyany, which consists of areas of uncut, peaty soils that have developed a heathy type pasture. These areas are rich in bryophytes and acid tolerant species. The species found in this area include *Polytrichum commune*, *Pleurozium schreberi*, *Rhytidiadelphus squarrosus*, Hard Fern (*Blechnum spicant*), Broad Buckler-fern (*Dryopteris dilatata*), Heath Rush, Common Cottongrass, Hare's-tail Cottongrass, Heath Wood-rush (*Luzula multiflora*), Mat-Grass, Sweet Vernal Grass, Bilberry (*Vaccinium myrtillus*), Rowan (*Sorbus aucuparia*) seedlings, Devil's-bit Scabious (*Succisa pratensis*), Heath Bedstraw (*Galium saxatile*) and Foxglove (*Digitalis purpurea*). This area is lightly grazed by sheep.

Wet Heath (contd)

A second area containing this habitat type occurs near Winny Langan's Lough, where wet heath is present on the steep slopes of the mountain plateau. These steep slopes have numerous rock outcrops and boulders. The Ling Heather cover here is very tall in places, with Bell Heather (*Erica cinerea*) being co-dominant in some places. Other species found here include Sheep's Fescue (*Festuca ovina*), Tormentil and Hard Fern.

A similar area of wet heath occurs on the plateau itself. The top of the mountain is a fairly uniform area of eroded bog with some areas of abandoned hand cutting. Heath type vegetation communities have developed here, but grazing and erosion are widespread, with large quantities of bare peat exposed. The most abundant species here are Ling Heather, Bell Heather, Heath Rush, Hare's-tail Cottongrass, Common Cottongrass, Deergrass and sparse *Sphagnum* species including *Sphagnum papillosum* and *Sphagnum capillifolium*.

Heath vegetation also occurs at Derrynabaunshy, on the steep slopes of the mountain. The vegetation is dominated by ericaceous species including Ling Heather, Bilberry, Soft Rush, Heath Rush, Mat-Grass, Cross-leaved Heath, Sheep's Fescue and Common Bent Grass (*Agrostis capillaris*). Bryophytes present include *Polytrichum commune*, *Hylocomnium splendens*, *Rhytidiadelphus loreus* and *Rhytidiadelphus squarrosus*. Bog Moss species are present, but only in scattered areas.

The final area where this habitat occurs consists of heath surrounding Lough Hoe, with communities dominated by Ling Heather or Purple Moor Grass. Other species found here include Great Wood-rush (*Luzula sylvatica*), Bilberry, Tormentil, Autumn Hawkbit (*Leontodon autumnalis*), Soft Rush and Heath Rush.



Polytrichum commune (Photo M. Dromey)

Cutover Bog

Cutover bog occurs on the northern slopes of Crummus and consists of old cutover bog in an area of upland blanket bog. The area consists of a thin layer of peat on rocky (gneiss) hillside with very diverse and intact vegetation. The flora here includes Hare's-tail Cottongrass, Deergrass, Ling Heather, Bilberry, and abundant Bell Heather and Round-leaved Sundew (*Drosera rotundifolia*). Mat-Grass and Heath Wood-rush are occasionally present. There is an excellent bryophyte cover with low but extensive hummocks of *Sphagnum capillifolium*, *Sphagnum subnitens* and *Sphagnum tenellum*, topped with occasional *Cladonia* species. Small flushes running down the slope contain Bog Pondweed (*Potamogeton polygonifolius*), Marsh Pennywort (*Hydrocotyle vulgaris*) and Scarlet Pimpernel (*Anagallis arvensis*), with *Sphagnum cuspidatum* and *Sphagnum auriculatum* var. *inundatum* in the pools.

A second area of this habitat occurs on the northern shores of Lough Talt and consists of very small areas of cutover bog along the lough shore. The boggy areas contain Purple Moor Grass, Wavy Hair-Grass (*Deschampsia flexuosa*), Bog Asphodel, Common Cottongrass, Ling Heather and some Gorse (*Ulex europaeus*) scrub.

The area of cutover at Derrynabaunshy consists of old neglected cutover bog now dominated by Purple Moor Grass and leggy Ling Heather. There are old embankments and ditches that have largely been abandoned and are now re-vegetated, or are re-vegetating.

A further area of cutover bog at Round Lough is adjacent to the road and shows evidence of grazing and poaching of the ground. Species occurring here include Hare's-tail Cottongrass, Common Cottongrass, Deergrass, Bog Asphodel, Carnation Sedge and Purple Moor Grass. Hummocks and banks are much drier and have a dense bryophyte and lichen cover. Species here include *Cladonia portentosa*, *Racomitrium lanuginosum*, *Sphagnum capillifolium*, *Sphagnum papillosum*, Heath Rush, Ling Heather and Cross-leaved Heath also occur on the hummocks.

Cutover also occurs at Culdaly. This is blanket bog that has previously been used for peat cutting (hand cutting) and also includes other areas which are currently used for machine cutting. The vegetation found here is similar to that described as occurring at Round Lough (see above for details). The topography is disturbed here, with peat embankments, drains and cutover areas.

There is also cutover near Lough Awaughran, in the area surrounding the lough. This area contains many banks, some of which are old and re-vegetating and others which are being actively cut.

A similar area occurs in Bunnyconnalan East, where old and active cutover occur together.

Lowland wet grassland

This habitat type occurs at Tawnany and consists of wet, rushy meadows that have had little agricultural improvement. The drier areas of the fields are very species diverse and include Yorkshire Fog (*Holcus lanatus*), Sweet Vernal Grass, Black Sedge (*Carex nigra*), Carnation Sedge, Heath Wood-rush, Compact Rush (*Juncus conglomeratus*), Tormentil, White Clover (*Trifolium repens*), Sheep's Sorrel (*Rumex acetosella*), Common Spotted Orchid (*Dactylorhiza fuchsii*) and Yellow Rattle (*Rhinanthus minor*). The wetter ends of the fields have some old cutover and have a slightly different flora, which includes Black Sedge, Carnation Sedge, Star Sedge, Butterwort (*Pinguicula vulgaris*), Bog Myrtle (*Myrica gale*), Deergrass, *Sphagnum papillosum*, Heath Wood-rush, Marsh Lousewort (*Pedicularis palustris*), Bog Asphodel and small shrubs of Goat Willow (*Salix caprea*).

Lowland wet grassland also occurs near Largan, with very abundant Water Horsetail, Cuckooflower (*Cardamine pratensis*), Meadowsweet (*Filipendula ulmaria*) and Yellow Iris (*Iris pseudacorus*). Some dense Bracken (*Pteridium aquilinum*) is also present.

Lowland wet grassland also occurs close to the area mentioned above, with very frequent *Leucanthemum vulgare* and Ragged Robin (*Lychnis flos-cuculi*). This area is somewhat poached by cattle.

Lowland wet grassland also occurs south-west of Winny Langan's Lough, and consists of lowland wet grassland on very peaty soils. These areas are dominated by Purple Moor Grass with some *Sphagnum papillosum* and *Sphagnum capillifolium* and other acid grassland/heath species including Ling Heather, Bell Heather, Bog Asphodel, Compact Rush, Hare's-tail Cottongrass and Deergrass. The Clubmoss *Hyperzia selago* was also seen here. This area is grazed by sheep, but is not damaged and no poaching was seen. Several Snipe (*Gallinago gallinago*) were observed here.

Lowland dry grassland

This is a relatively rare habitat type within the site. It is found at Gleneask and consists of calcareous dry grassland on the small peninsulas leading out from the northern shore of Lough Talt. Over 42 species of plants were identified within this small area (see Appendix IV for species list).

Rivers and streams

Streams and ditches occur throughout the site. At Lough Talt, there is a relatively fast-flowing stream which flows into the Lough at the north-western end. The banks support Heath Bedstraw, Wild Angelica (*Angelica sylvestris*) and Slender St. John's-wort (*Hypericum pulchrum*).

The area at Larbaun consists of streams and flushes running down the mountain side. Some Willow species (*Salix* spp.) occur on the rocky outcrops surrounding these channels. Short, rich grassland occurs adjacent to these streams. This area is rich in bryophytes, including *Rhytidiadelphus loreus*, *Polytrichum* spp., *Pleurozium* spp. and Liverwort species. Compact Rush is also common here.

At Derrynabaunshy there are flushes and old ditches that join streams which run from the plateau down the steep slopes and flank the north-western and south-eastern ends of the site. Blanket bog and heath surround the streams. Most common species include Ling Heather, Deergrass, Purple Moor Grass and there are scattered areas dominated by Heath Wood-rush.

Rivers and streams (contd)	There are also small rivers flowing down at the western end of the site at Carrowdoogan. The banks are covered with Marsh Violet (<i>Viola palustris</i>), Marsh Willowherb (<i>Epilobium palustre</i>), Heath Bedstraw, Common Marsh-bedstraw (<i>Galium palustre</i>), Jointed Rush, Soft Rush, <i>Sphagnum recurvum</i> and <i>Polytrichum commune</i> .
Fens and Flushes	<p>This habitat type occurs at several locations round the site. The first of these is at Tawnyany, which is a small area of fen with Black Sedge, Bottle Sedge, Star Sedge, Compact Rush, Bulbous Rush (<i>Juncus bulbosus</i>), Marsh Horsetail, Hare's-tail Cottongrass, Common Cottongrass, Marsh Pennywort and <i>Sphagnum auriculatum</i>. <i>Climacium dendroides</i> and Quaking Grass (<i>Briza media</i>) grow on the drier areas surrounding this, suggesting a calcareous input here.</p> <p>Flushes also occur nearby on the lower slopes of Crummus and consist of sedge flushes on the lough shore, which show a strong calcareous influence. The area contains some Pale Butterwort (<i>Pinguicula lusitanica</i>) and abundant Common Butterwort, Hare's-tail Cottongrass, Sharp-flowered Rush, Carnation Sedge, Star Sedge, Black Sedge, Common Yellow Sedge (<i>Carex demissa</i>), White Beak Sedge (<i>Rhynchospora alba</i>), Many-stemmed Spike-Rush with locally frequent <i>Cladonia</i> species and <i>Campylopus atrovirens</i> in very wet areas.</p> <p>The final area where this habitat occurs is also at Tawnyany. There is a rich sedge fen on the shores of Lough Talt that contains swards of Bottle Sedge, Bog Bean, Marsh-marigold (<i>Caltha palustris</i>) and Water Horsetail with very abundant Marsh Lousewort, Mint, Water-cress (<i>Rorippa nasturtium-aquaticum</i>) and some very large Common Spotted Orchid.</p>
Scrub	<p>This habitat type occurs at Largan and consists of rough pasture with large areas of Bracken. Scrub is developing here with species such as Ash (<i>Fraxinus excelsior</i>), Hazel (<i>Corylus avellana</i>), Blackthorn (<i>Prunus spinosa</i>), Goat Willow, Hawthorn (<i>Crataegus monogyna</i>) and Sycamore (<i>Acer pseudoplatanus</i>).</p> <p>The other area containing this habitat type is at Gleneask. This consists of areas of bog and scrub along the shores of Lough Talt and woodland scrub along the roadside. The boggy areas have Purple Moor Grass, Wavy Hair-Grass, Bog Asphodel, Common Cottongrass, Ling Heather and some Gorse scrub. The scrub adjacent to the road contains Holly (<i>Ilex aquifolium</i>), Rowan, Gorse, Hawthorn, Ash and Bramble (<i>Rubus fruticosus</i> agg.). This area is being invaded by extensive areas of Bracken. An adjacent area of freshwater marsh contains the Annex II species, the Land Snail <i>Vertigo geyeri</i>.</p> <p>There is also an area of scrub on a small island in Lough Talt. This consists of Rowan, Ash and Willow species. Common Gulls (<i>Larus canus</i>) nest on the island and Black-headed Gulls (<i>Larus ridibundus</i>) are also reported to use the island for nesting.</p>
Dense bracken	These are relatively small areas within the site. They are recorded as occurring in those areas listed as scrub (see above for details).
Commercial forest	This habitat occurs at Gortersluin and consists of a small commercial plantation of Norway Spruce (<i>Picea abies</i>) on the eastern shores of Lough Talt.
Drainage ditches	Drainage ditches make up a relatively small area of the site. They consist of ditches in the old cutover that have <i>Sphagnum</i> species growing in the channels, including <i>Sphagnum auriculatum</i> var. <i>inundatum</i> .

Notable Flora:

The Oak Fern (*Gymnocarpium dryopteris*), a species listed as vulnerable in the Irish Red Data Book of Vascular Plants, was recorded as being present on the site in 1872, but it is not known whether it still occurs on the site.

Fauna:

Invertebrates

The Land Snail *Vertigo geyeri*, a species listed under Annex II of the EU Habitats Directive, is recorded as being present on the site. The species was recorded in August 1994 (Cawley, 1996).



Vertigo geyeri (a land snail less than 2mm long)

Fish

The Arctic Charr (*Salvelinus alpinus*), a species listed in the Irish Red Data Book 2 - Vertebrates, as threatened, is recorded as occurring in Lough Talt as recently as 1986. Brown Trout have also been seen in Lough Talt.

Crustaceans

The White-clawed Crayfish, a species listed under Annex II of the EU Habitats Directive, is recorded as occurring in Lough Talt. Several year old specimens were found in the lough by regional staff in October 1997. This indicates that the species is breeding within the site (Dr. Ciaran O'Keeffe, *pers. comm.*).



White-clawed Crayfish (*Austropotamobius pallipes*)

Birds

The EU Birds Directive Annex I species, Golden Plover (*Pluvialis apricaria*), is present on the site and it is probable that they are breeding within the site (R. Lundy, *pers. comm.*).

The Common Gull and the Black-headed Gull were both recorded as having bred on the site. However, recent records suggest that they do not currently use the site as a breeding ground. The probable cause of this change was due to predation of the colony by American Mink (*Mustela vison*) several years ago (R. Lundy, *pers. comm.*).

Red Grouse (*Lagopus lagopus*) breed on the site. Snipe are also present.

Cultural Features

Land use and impacts on the site

Agriculture	<p>The major land use within the site is agricultural. This consists predominantly of sheep grazing on the higher grounds, with both sheep and cattle on the lower areas. The impacts of grazing on the commonage areas of this site have been assessed by the Commonage Framework Planning Project. The relevant Commonage Framework Plans are MA21 and SL5. The findings of these plans are reflected in the management strategies and zoning sections of this conservation plan.</p> <p>300 acres (121.5ha) in the site (on land adjoining the Mayo/Sligo border) is being fenced by hand (i.e. no machinery is being used). Part of this fencing has been completed.</p>
Peat cutting	<p>Hand cutting is seldom carried out on the site, and is only carried out by two individuals (see Appendix V – Turbary Zoning for details).</p> <p>Machines used for cutting turf within the site are the “Long Arm”, “Hopper” and “Sausage”. There is no commercial peat extraction occurring (Mr. R. Lundy, <i>pers. comm.</i>).</p>
Shooting	<p>Some shooting occurs on the plateau, with the quarry species being Red Grouse. The site is shot over by 3-5 people for 1-2 days each season during September (Mr. R. Lundy, <i>pers. comm.</i>).</p>
Fishing	<p>Fishing occurs within Lough Talt, and consists of trout fishing along the shores of the lough by local anglers and visitors to the area. Some trout fishing from boats also occurs during the summer months (Mr. R. Lundy, <i>pers. comm.</i>).</p>
Water abstraction	<p>Water is abstracted from Lough Talt. The use of the lough as a reservoir and associated fluctuations in water levels have certainly affected the vegetation in the lough (NHA survey).</p>
Forestry	<p>There is a small area of Norway Spruce on the northern shores of Lough Talt.</p>
Road construction	<p>There is a recently constructed road on the southern shore of Lough Talt. This was constructed by Sligo County Council as an amenity walk and was funded by the European Regional Development Fund.</p>

Land use adjacent to the site

Agriculture	<p>Agricultural usage adjacent to the site is of a similar nature to that found within the site <i>i.e.</i> grazing of sheep on higher ground and grazing of both sheep and cattle on ground at lower altitudes.</p>
Forestry	<p>There are extensive areas of forestry surrounding the site (see Map 2 for details).</p>
Peat extraction	<p>Machine and hand cutting occur in areas adjacent to the site.</p>
Recreation	<p>The Western Way, a long distance walking route, begins at the northern edge of the site. There is a large information sign at the start of the route. The number of walkers currently using the road is approximately four per day, but more people are expected to utilise it in the future (Mr. R. Lundy, <i>pers. comm.</i>).</p>

Past human use

Peat extraction along with sheep and cattle grazing were the main past land uses of the site.

Recorded Monuments and Other Features

There are no recorded national monuments known from the site.

ECOLOGICAL ASSESSMENT

Note: The following is an assessment of the ecological features of the site. It is largely based on information given in the explanatory notes which accompany the Natura 2000 form. Additional information, obtained since these notes were written may also have been used to make the assessment.

The majority of the *active blanket bog in Lough Hoe Bog cSAC occurs in the south-eastern half of the site. The north-western half of the site comprises higher ground, with heath vegetation and small pockets of blanket bog. The larger section of blanket bog on the site is undulating and the covering of peat is comparatively thin. The site lacks well-developed, extensive, interconnecting and Atlantic blanket bog pool complexes, with only a few small isolated examples of both pool types occurring. Lough Hoe Bog cSAC supports most typical blanket bog vegetation communities, but several of them are uncommon or poorly developed. Some areas of the site have been degraded by overgrazing, erosion and peat extraction. The habitat on the site is not of the highest quality and is much threatened by afforestation and peat cutting. However, it comprises a comparatively large area of highland/montane bog and forms part of a rapidly diminishing series of blanket bogs in the Ox Mountains.

OBJECTIVES, STRATEGIES AND ZONING

Conservation Objectives

The nature conservation objectives for this site are:

- | | |
|---------------------|---|
| Objective 1: | To maintain and, where possible, enhance the extent and quality of the priority habitat, *active blanket bog (40% of the site). |
| Objective 2: | To maintain and, where possible, enhance the extent and quality of other habitats occurring within the site. |
| Objective 3: | To maintain and, where possible increase the populations of the Annex II species; White-clawed Crayfish, the Land Snail <i>Vertigo geyeri</i> and the Red Data Book species Arctic Charr. |
| Objective 4: | To maintain effective liaison between NPW, relevant authorities and interested parties on the management of the site. |

Management Issues

Note: The main issues that may impact on the conservation of the site are outlined below. The constraints that these may pose and the management potential for the site are discussed.

- **Grazing**
- **Peat extraction**
- **Road construction**
- **Shooting**
- **Angling**
- **Afforestation adjacent to the site**
- **Water Abstraction**

Grazing

Overgrazing has damaged some areas within the site. Commonage Framework Plans MA21 and SL5 have set stock levels on the areas of commonage.

Peat extraction

Peat extraction affects the *active blanket bog. Peat extraction is occurring in several areas of the site and consists of both machine and hand extraction (see Appendix V – Turbary Zoning), although no commercial peat extraction is occurring within the site. Areas of cutover bog within the site have already suffered damage from peat extraction. These are, however, reverting to upland vegetation naturally. Peat extraction also occurs in areas adjacent to the site, and is of a similar nature to that occurring within the site.

Road construction

Sligo County Council have constructed an amenity road around the southern shores of Lough Talt.

Shooting

The site is used for rough shooting, with Red Grouse being the main quarry species particularly on the higher areas of the plateau.

Angling

Lough Talt is the largest lough within the site, and is used for angling. Current numbers of anglers using the site are unknown. The Annex II species, White-clawed Crayfish, and the Red Data Book species, Arctic Charr, also occur within the Lough.

Afforestation adjacent to the site

Afforestation is a major land-use adjacent to the site. It is not affecting the site greatly, as no streams flow on to the site from surrounding forested areas. However, afforestation below the bog can increase drainage of the *active blanket bog areas (Ms. C. Douglas, pers. *comm.*).

Water Abstraction

Loughs and ponds are a major feature of the site. Lough Talt is the most important lough present within the site and is in the greatest danger. Lough Talt is used as a reservoir to supply the local community.

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 (see Appendix VIII)
- enforcement of Regulations under the Habitats/Birds Directives and the Wildlife Acts

Establish a monitoring regime

The monitoring regime for the site will comprise:

Water quality monitoring

Water quality is monitored at regular intervals by the local authorities. NPW staff liaise with Sligo and Mayo County Councils, and will collate and review this information on a regular basis. NPW will also liaise with relevant bodies (n.b. the EPA and local authority) in relation to compliance with the EU Water Framework. In particular:

- To establish reference conditions necessary for monitoring the status of the qualifying habitat
- To ensure that the sampling regime is adequate to detect changes in the conservation status of the designated area

NPW will liaise with the local authorities and other relevant agencies in ensuring that the full ecological importance and sensitivity of the site is taken into account during the production of the River Basin District Management plan. In addition, NPW will liaise with the Local Authorities in ensuring that sewerage disposal systems for all new (and existing) dwellings within the lake catchment area are of appropriate standards.

Scientific monitoring

Monitoring of the favourable conservation status of the Annex I habitat and Annex II species present within the site will be done by, or on behalf of, the staff of the Monitoring Section of the NPW or staff working to NPW in accordance with the procedures laid down by that section. The work, if any, to be done on this site in that respect will be prescribed by that section.

Site surveillance

Patrolling of the site by the Conservation Ranger, with special attention to the Annex I habitat and Annex II species 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 are listed in Appendix VI of this plan. Permission from the Minister is required before these actions may be carried out within the designated area. For example, commercial peat moss or turf extraction is a notifiable action for blanket bog.

Specific Strategies

Objective 1.

To maintain and, where possible, enhance the extent and quality of the priority habitat, *active blanket bog (40% of the site).

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) MA21, SL5). 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 polluter pays principle does not apply to any commonage where the de-stocking percentage is less than 20%. The relevant CPs (i.e. MA21, SL5) recommend de-stocking levels between 0 and 55.5%, depending on the agricultural unit (i.e. the single stockproof area of land) concerned. The individual CPs should be consulted for further details.

The zoning map (Map 5) 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 land**

For non-commonage land, NPW will seek to ensure that sustainable grazing levels are established via REPS and DEHLG farm plans, using a similar methodology applied to commonage areas.
- 1.3. Control peat cutting**

Most areas of active turf cutting are not included in the cSAC. Where areas of active cutting lie within the less sensitive areas of the site, cutting may continue.

Machine cutting, other than the use of 'sausage machines', will normally be permitted.

On particularly sensitive areas of bog, a complete halt to cutting may be required. In such cases compensation will be determined on a case by case basis, but would be in the region of €784.40 per ha (€317.43 per acre). Also see turbary zoning plan (Appendix V).

Objective 2.

To maintain and, where possible, enhance the extent and quality of other habitats occurring within the site.

Strategies:

- | | |
|--|---|
| 2.1. Maintain areas of cutover bog | NPW will seek to implement a sustainable grazing regime and control peat cutting on cutover bog (see strategies 1.1 and 1.2). |
| 2.2. Maintain lakes and ponds | <p>For the majority of the loughs and ponds within the site (with the exception of Lough Talt), a policy of non-intervention will be implemented in order to preserve them as they exist today.</p> <p>With regard to Lough Talt, no other major abstraction should be planned and the NPW will require Environmental Impact Statements to be prepared for any future abstraction works planned. The water quality of the lough should be maintained (see general strategy – water quality monitoring).</p> |
| 2.3. Maintain rivers and streams | Rivers and streams will be maintained by a policy of non-intervention. In order to maintain water quality, NPW will not permit afforestation along the banks of rivers and streams within the site. |
| 2.4. Maintain other habitats of interest within the site | All other habitats will be maintained by a policy of non-intervention and implementation of a grazing regime (see also strategy 1.1). |

Objective 3.

To maintain and, where possible increase the populations of the Annex II species White-clawed Crayfish, the Land Snail *Vertigo geyeri* and the Red Data Book species Arctic Charr.

Strategies:

- | | |
|--|---|
| 3.1. Maintain population of White-clawed Crayfish | The population of the White-clawed Crayfish will be maintained by ensuring the present water quality within Lough Talt is sustained (see general monitoring strategies). NPW will place information signs at carparks along the road warning anglers about precautions to prevent the Crayfish Plague from being carried into the lough (e.g. thoroughly cleaning all fishing equipment when moving boats, tackle, etc. from other loughs). |
| 3.2. Maintain population of the Land Snail <i>Vertigo geyeri</i> | The land snail <i>Vertigo geyeri</i> , an Annex II invertebrate species, occurs within the site boundaries. NPW will strive to maintain the population through appropriate habitat management strategies that have the aim of maintaining and enhancing habitat, such as those mentioned under Objectives 1 and 2. |
| 3.3. Maintain population of Arctic Charr | This will be achieved through the maintenance of the present water quality within Lough Talt (see strategy 2.2 and the general monitoring strategies). |

Objective 4.

To maintain effective liaison between NPW, relevant authorities and interested parties on the management of the site.

Strategies:

- | | |
|--|--|
| 4.1. Liaise with interested parties | NPW will strive to maintain effective liaison with landowners (particularly through the Liaison Committee), relevant authorities and interested parties on achieving the objectives for conservation of the site. |
| 4.2. Monitor development applications | NPW will continue to monitor applications, including current applications, for planning permission and licenses for lands within and adjacent to the site. Appropriate bodies will be notified if developments are thought to conflict with conservation objectives. |
| 4.3. Liaise with REPS planners | REPS planners are required to consult with NPW staff when they are developing plans for land within the site. |

Zoning

Note: Zoning is the division of a nature conservation site and neighbouring lands into a number of sub-units. There are four types of zones identified (not necessarily all occurring within a site): A, B and C within the site and D outside the site but impacting on it. The relevant strategies are listed for each site.

Zone A: A Natural Zone

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

1A: NON-INTERVENTION AREAS

1A1: Loughs and ponds, rivers and streams, fens and flushes, scrub, dense bracken.
Strategies 2.2, 2.3, 2.4 and the general strategies apply.

2A: MAINTENANCE AREAS WITH LIMITED INTERVENTION

***2A1: *Active blanket bog, wet heath, lowland wet grassland, lowland dry grassland, cutover bog (Commonage agricultural units MA21q, SL5a, SL5b, SL5c).**

These areas have been identified in the Commonage Framework Plan as being undamaged. See Commonage Framework Plans for further details.

Strategies 1.1, 1.3, 2.1 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, wet heath, lowland wet grassland, lowland dry grassland, cutover bog (Commonage agricultural units MA21g, MA21m, MA21u, SL5d and SL5f)**

These areas have been identified in the Commonage Framework Plan as being moderately to severely over-grazed and requiring stock reductions. See Commonage Framework Plans for full details.

Strategies 1.1, 1.3, 2.1 and the general monitoring strategies apply.

***B2: *Active blanket bog, wet heath, lowland wet grassland, lowland dry grassland, cutover bog (Privately owned)**

Grazing assessments are required for these privately owned areas.

Strategies 1.2, 1.3. 2.1 and the general monitoring strategies apply.

***B3: *Active blanket bog, wet heath and cutover bog (Commonage agricultural unit SL5f)**

This area has been identified in the Commonage Framework Plan as being moderately to severely over-grazed and requiring stock reductions. See Commonage Framework Plans for full details. This area has also been subject to peat cutting and is identified as an area where peat cutting is to stop.

Strategies 1.1, 1.3, 2.1 and the general monitoring strategies apply.

B4: Lough Talt

Strategy 2.2. Maintain lakes and ponds.

Zone C: Intensive use Zone

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

C1: Cutover bog (where cutting can continue)

Strategy 2.1 applies. See Appendix V also.

Zone D: Impact Zone

Areas outside the site, which may have an impact on the site.

D1: New road alongside Lough Talt

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	Ensure grazing levels set by Commonage Framework Plans are adhered to.	NPW/ Landowners			
1.2.	Manage grazing on privately owned land	Conduct grazing assessments and implement grazing regimes.	NPW/ Landowners			
1.3.	Control peat cutting	Regulate cutting of turf. No cutting with sausage machines.	NPW/ Turbary rights holders			
2.1.	Maintain areas of cutover bog	Ensure grazing levels set by Commonage Framework Plans are adhered to. Regulate cutting of turf. No cutting with sausage machines.	NPW/ Landowners/ Turbary rights holders			
2.2.	Maintain lakes and ponds	Where appropriate, ensure that EISs for future abstraction works are prepared. Maintain water quality.	NPW/ Co. Councils			
2.3.	Maintain rivers and streams	Non-intervention. No afforestation permitted along banks of rivers and streams.	NPW			
2.4.	Maintain other habitats of interest within the site	Non-intervention. Ensure grazing levels set by Commonage Framework Plans are adhered to.	NPW/ Landowners			
3.1.	Maintain population of White-clawed Crayfish	Maintain water quality. Erect information signs.	NPW/ Anglers			
3.2.	Maintain population of the Land Snail <i>Vertigo geyeri</i>	Habitat management (see strategies 1.1-1.3 and 2.1-2.4).	NPW			
3.3.	Maintain population of Arctic Charr	Maintain water quality.	NPW			
4.1.	Liaise with interested parties	Maintain effective liaison with interested parties on achieving conservation objectives	NPW			
4.2.	Monitor development applications	Monitor applications for planning permission and licences for lands within and adjacent to site	NPW			
4.3.	Liaise with REPS planners	REPS planners must consult with NPW when developing plans for land within the site	REPS planners/ NPW			

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.

AMPHIBIANS – A vertebrate group whose members spend part of their life cycle in water and part on land e.g. Frog.

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 Birds Directive lists birds which may be hunted.

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

ANNEX III - of the EU Habitats Directive gives the criteria for selecting sites to be designated as SACs.

ANNEX IV - of the EU Habitats Directive lists animal and plant species of Community interest in need of strict protection.

ANNEX V - of the EU Habitats Directive lists animal and plant species of Community interest whose taking in the wild and exploitation may be subject to management measures.

ANNUALS - Plants which complete their lifecycle in one year, germinating in Autumn or spring, flowering fruiting and dying by the following Autumn.

AQUATIC ENVIRONMENT – Rivers, streams, lakes, ponds, springs and features that depend on natural waters e.g. marsh, bogs and wetlands.

ASIs - Areas of Scientific Interest. Areas that were identified in the 1970s as being of conservation interest. The NHA designation developed from ASIs.

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 NPW 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.

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.

COMMERCIAL FOREST - An NPW habitat classification which applies to plantations of coniferous trees, primarily Sitka Spruce, Lodgepole Pine, Douglas Fir, Japanese Larch and Norway Spruce. More than 90% of the canopy is formed by coniferous trees, although there may be broad-leaved trees, especially Birch present along the plantation edges.

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.

CORINE - An information and mapping system, developed within the context of the Commission of the European Communities biotope project, which is used as a tool for the description of sites of importance for nature conservation in Europe. It catalogues recognisable communities of flora and fauna. The primary objective of this catalogue is to identify all major communities whose presence contributes to the conservation significance of a site. Included in this list of communities are interesting but rare natural or near-natural communities as well as the more widespread semi-natural ones.

CUTOVER BOG - An NPW habitat classification that describes areas of bog which have been previously cut, although not down to the marl layer or bedrock. Cut-over areas are normally a mosaic of cut areas, face banks, pools, drainage ditches, uncut areas of peat, scrub, grassland etc.

DEHLG - Department of Environment, Heritage and Local Government

DENSE BRACKEN - An NPW 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.

DESICCATION - Drying out.

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.

DOMESTIC PURPOSES - Used in relation to the cutting of peat. Peat that is cut for domestic purposes is not for commercial sale and is cut at the rate of one year's supply for a household per year.

DRAINAGE DITCHES - An NPW habitat classification which refers to water channel systems with moving or stagnant water bodies, artificial in origin. Most ditches are cleared cyclically, although this category also includes ditches that are overgrown with wetland plants.

ENCROACHMENT - The invasion of a species (usually plants) into areas previously uncolonised. This term is often used when an undesirable species advances at the expense of a desirable species or habitat.

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

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.

EXOTIC SPECIES - Are those species which are considered to be non native.

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.

FENS AND FLUSHES - An NPW habitat classification. Fens are peatlands fed by calcium rich water, either from groundwater or from inflowing surface water. Flushes are wet areas maintained by the seepage of water down slopes of various gradient, and are usually local features. Both are characterised by an abundance of small Sedge forming species-rich mosaics with other species. Orchid species are particularly noticeable in fens and Butterworts are more typical of flushes.

FLORA - plant life.

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.

HAND CUTTING OF PEAT. - Refers to traditional cutting of peat using a slean or spade.

HEATH – An NPW 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 Dabioc'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.

HUMMOCK - A small hillock/mound. Often used to describe the surface of active bogs where the ground forms a pattern of mounds, hollows and pools. Such hummocks commonly comprise bog mosses.

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.

LAKES AND PONDS - An NPW 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.

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 NPW 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 NPW.

LIMESTONE - Sedimentary rock composed predominantly of calcium carbonate, often containing fossils.

LOWLAND DRY GRASSLAND - An NPW habitat classification describing grasslands which normally are below the 100m contour, on well drained soils and characteristically with a fairly complete cover of grasses.

LOWLAND WET GRASSLAND - An NPW habitat classification which refers to grasslands which normally below the 100m contour, with a vegetation characteristic of waterlogged soil. This category also includes rushy fields.

MANAGEMENT AGREEMENTS - The Wildlife Act, 1976, enables DEHLG to enter into voluntary management agreements with private landowners. Under these agreements landowners will manage their lands to ensure that desirable wildlife habitats and species are protected. Payment for such responsible management may be agreed. However, the number and type of such agreements will vary depending on the resources available to the National Parks and Wildlife at the time.

MECHANICAL PEAT EXTRACTION - Refers to the use of machinery to cut peat. This includes extrusion cutting such as by sausage machine (e.g. Difco) or any other type of mechanical cutter (e.g. Hopper).

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 (NPW) – 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.

NPW - National Parks and Wildlife

NRFB - Northern Region Fisheries Board.

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.

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.

PEAT CUTTING BY HAND. - See hand cutting of peat.

PEAT CUTTING BY MACHINE - See mechanical peat extraction.

pH - A quantitative expression for the acidity or alkalinity of a solution or soil. The scale ranges from 0-14: pH 7 is neutral, less than 7 is acidic and greater than 7 is alkaline.

PLATEAU - A wide, mainly level area of elevated land.

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

PRECIPITATION - Water moving from the atmosphere to the ground in the form of rain, fog, mist, snow or hail.

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.

PRIVATE OWNERSHIP - Land which is owned by one private landowner.

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.

REPTILES - Cold-blooded vertebrates, most of which are terrestrial, having dry horny skin with scales or plates. Most reptiles lay eggs that have a leathery skin, although some are ovoviviparous.

RIVERS AND STREAMS - An NPW 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 NPW, whose function here is to ensure that the favourable conservation status of the site is maintained and where possible improved.

SCRAGH - a floating mat of vegetation.

SCRUB - An NPW 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.

SEMI-IMPROVED GRASSLAND - An NPW habitat classification which refers to grasslands which have been lightly fertilised but not re-seeded. These grasslands may still support a rich assemblage of grasses and herbs.

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 NPW is responsible for ensuring that such areas are protected from significant damage.

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

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.

SUCCESSION - The non-seasonal, directional continuous pattern of colonisation and extinction on a site by populations.

SUPPLEMENTARY FEEDING - The practice of providing livestock with additional food, usually carried out in winter. This term is most often used when hay, silage or other foods are brought into a site to supply Cattle or Sheep with food during times when growing conditions are poor.

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

SWARD - Refers to the vegetation cover of low growing plants communities, such as grasslands.

TROPHIC STATUS - The nutrient status (i.e. a measure of the availability of nutrients).

TURBARY - Refers to the right to harvest turf.

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: REFERENCES

Map References:

- O.S. 1/2 inch (1:126,720) map: 7
O.S. Discovery (1:50,000) map: 24
O.S. 6 inch (1: 10,560) map: MA41, MA49, SL30, SL36

Data Bases :

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

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

Photographic Coverage:

GSI Aerial photo No. GSI G256. Date: 1977.

Department of Environment, Heritage and Local Government, HQ Ely Place, Aerial photo No.s 7699 & 7700, Flight Line 26. Date: 1995.

Relevant Legislation:

S.I. No. 94/1997: European Communities (Natural Habitats) Regulations, 1997.

Local Government (Planning and Development) Regulations, 2000.

Bibliography:

Anon. (1999). *Development Plan for the County of Sligo 1999-2004*. Sligo County Council.

Anon. (2002). *Draft Mayo County Development Plan 2002*. Mayo County Council.

Cawley, M. (1996). *Notes on some Non-marine Mollusca from Co. Sligo and Co. Leitrim, including a new site for Vertigo geyeri*. Lindholm Irish Naturalists Journal, Vol. 25, No. 5, 1996, pps. 183 – 185.

Curtis, T. & McGough, H. (1988). *Vascular Plants. The Irish Red Data Book 1*. Stationary Office, Dublin.

Douglas, C., Garvey, L., Kelly, L., O'Sullivan, A. & Van Doorslaer, L. (1989). *A Survey to locate Blanket Bogs of Scientific Importance in County Kerry and County Sligo*. Unpublished Report to the Wildlife Service, Dublin.

EU (1996). *Interpretation manual of European Union Habitats Version Eur 15*. European Commission DGXI - D.2, Brussels.

Long, C.B., MacDermot, C.V., Morris, J.H., Sleeman, A.G. & Tietzsch-Tyler, D. (1992). *Geology of North Mayo*. Geological Survey of Ireland.

MacDermot, C.V., Long, C.B. & Harney, S.J. (1996). *Geology of Sligo – Leitrim*. Geological Survey of Ireland.

- Moorkens, E. A. (1995). *Mapping of Proposed SAC sites for Vertigo angustior, V. moulinsiana and V. geyeri*. Unpublished Report for the NPW, Dublin.
- O'Connell, C. (1987). *The IPCC guide to Irish Peatlands*. Irish Peatland Conservation Council.
- Rohan, P. K. (1986). *The Climate of Ireland*. Meteorological Service, Dublin.
- Scannell, M.J.P., & Synnott, D.M. (1987). *Census Catalogue of the Flora of Ireland*. Government Publications Office, Dublin.
- Walsh, M., Lee, J. & Burke, P.J. (1976). *County Sligo Soils and their Grazing Capacity Farm and Food Research*, Nov. - Dec. 1976, pps 128 - 130, An Foras Taluntais.
- Webb, D.A., Parnell, J. & Doogue, D. (1996). *An Irish Flora*. Dundalgan Press, Dundalk.
- Whilde, A. (1993). *Threatened Mammals, Birds, Amphibians and Fish in Ireland. Irish Red Data Book 2 Vertebrates*. Wildlife Service, Dublin.

APPENDIX III: PHYSICAL PROCESSES AFFECTING THE SITE

Climate

CLAREMORRIS monthly and annual mean and extreme values 1961-1990													
TEMPERATURE (degrees Celsius)	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	year
mean daily max.	7.2	7.6	9.6	12	14.5	17	18.4	18.2	16.1	13.2	9.5	7.9	12.6
mean daily min.	1.4	1.3	2.3	3.3	5.5	8.2	10.2	9.8	8.1	6.3	3	2.3	5.1
mean	4.3	4.5	5.9	7.6	10	12.6	14.3	14	12.1	9.8	6.2	5.1	8.9
absolute max.	13.1	13.3	20.1	22.3	25.1	29.8	30.5	27.2	23.3	19.9	15.4	14.3	30.5
absolute min.	-11.7	-17.1	-8	-5.5	-3.1	-0.4	0.6	1.1	-1.2	-4	-5.3	-8.3	-17
mean no. of days with air frost	9.7	8.9	6.8	3.9	0.8	0	0	0	0	1.1	6.1	8.3	45.6
mean no. of days with ground frost	16	14.9	13.2	11.5	5.9	1	0.2	0.3	2	4.4	13.1	14.5	97
RELATIVE HUMIDITY (%)													
mean at 0900UTC	91	91	88	84	80	81	84	87	89	92	92	92	88
mean at 1500UTC	86	79	74	69	68	72	73	75	77	81	85	88	77
SUNSHINE (hours)													
mean daily duration	1.45	2.11	2.87	4.4	5.08	4.64	3.79	3.81	3.1	2.39	1.81	1.11	3.05
greatest daily duration	7.8	9.2	11.7	13.7	15.1	15.6	14.8	13.7	12.3	10.1	8.6	7	15.6
mean no. of days with no sun	11	8	6	3	2	2	3	3	4	6	9	12	69
RAINFALL (mm)													
mean monthly total	120.8	83.2	95.5	62.3	77.9	71.1	63.8	96.6	104.3	124.6	118.8	124.1	1143
greatest daily total	33.1	27.9	27.5	19.8	42	74.6	38.8	55	41.6	59.5	49.2	41	74.6
mean no. of days with $\geq 0.2\text{mm}$	22	17	21	17	18	16	17	19	19	22	21	22	230
mean no. of days with $\geq 1.0\text{mm}$	18	14	17	12	14	12	11	14	15	17	17	17	178
mean no. of days with $\geq 5.0\text{mm}$	9	6	7	4	6	4	4	6	7	8	8	8	78
WIND (knots)													
mean monthly speed	10	10	10.2	8.7	8.3	7.9	7.5	7.3	8	9	8.7	9.7	8.8
max. gust	96	85	74	57	62	54	66	54	91	70	70	79	96
max. mean 10-minute speed	59	48	45	36	41	36	39	33	60	46	40	51	60
mean no. of days with gales	1.2	0.9	1	0.1	0.1	0.1	0	0	0.2	0.4	0.5	0.7	5.2
WEATHER (mean no. of days with..)													
snow or sleet	6.5	5.4	4.7	1.9	0.3	0	0	0	0	0.1	1.7	3.5	24.1
snow lying at 0900UTC	2.6	1.4	0.7	0.2	0	0	0	0	0	0	0.3	1.1	6.3
hail	4.2	3.3	5.7	3.6	1.9	0.4	0	0	0.7	1	3	2.7	26.5
thunder	0.4	0.2	0.2	0.3	0.5	0.9	0.9	0.4	0.2	0.4	0.3	0.5	5.1
fog	4.4	2.7	1.9	2.4	1.7	2.3	2.3	4.1	4.1	4.6	3.6	3.7	37.9

Geology and Geomorphology

There are a number of distinct geological forms found within the site. These are as follows:

1. Leckee Quartzitic Formation

Pale coloured psammitic schists and quartzities with rare thin calc-silicate bands.

2. Corradrihy Formation

Semi-peltic, feldspathic semi-peltic, psammitic and feldspathic psammitic schists; minor quartzites, marbles, calc-silicate schists and metavolcanic amphibolites. Dark psammitics predominate.

3. Carrick O'Hara Formation

Semi-peltic often feldspathic schists; minor psammitic and feldspathic psammitic schists; tuffaceous amphibolite.

4. Muscovite Granite

Foliated, coarse, equigranular tonalite.

5. Ox Mountains Granodiorite

Foliated, coarse-grained, equigranular, granodiorite occupying two thirds of the Ox Mountains Granodiorite body.

6. Lough Talt Adamellite

Coarse-grained, foliated, non-porphyritic, pink and white biotite monzogranite.

APPENDIX IV: SPECIES LIST FOR LOWLAND DRY GRASSLAND

The species list for lowland dry grassland includes:

Common Name	Latin Name	Common Name	Latin Name
Water Forget-me-not	<i>Myosotis scorpioides</i>	Colt's-foot	<i>Tussilago farfara</i>
Yorkshire Fog	<i>Holcus lanatus</i>	Wild Carrot	<i>Daucus carota</i>
Small Sweet-grass	<i>Glyceria declinata</i>	Timothy	<i>Phleum pratense</i>
Meadow Buttercup	<i>Ranunculus acris</i>	Meadow Vetchling	<i>Lathyrus pratensis</i>
Daisy	<i>Bellis perennis</i>	Silverweed	<i>Potentilla anserina</i>
Sheep's Fescue	<i>Festuca ovina</i>	Marsh Horsetail	<i>Equisetum palustre</i>
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Marsh Pennywort	<i>Hydrocotyle vulgaris</i>
Black Medick	<i>Medicago lupulina</i>	Yellow Iris	<i>Iris pseudacorus-</i>
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	-	<i>Clymacum derdroides</i>
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Carnation Sedge	<i>Carex panicea</i>
Red Clover	<i>Trifolium pratense</i>	Bottle Sedge	<i>Carex rostrata</i>
Common Ragwort	<i>Senecio jacobea</i>	Bog Bean	<i>Menyanthes trifoliata</i>
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Broad-leaved Pondweed	<i>Potamogeton natans</i>
Common Twayblade	<i>Listera ovata</i>	Ling Heather	<i>Calluna vulgaris</i>
Meadow Foxtail	<i>Alopecurus pratensis</i>	Bilberry	<i>Vaccinium myrtillus</i>
Quaking Grass	<i>Briza media</i>	Heath Wood-rush	<i>Luzula multiflora</i>
False Oat-grass	<i>Arrhenatherum elatius</i>	Ragged Robin	<i>Lychnis flos-cuculi</i>
Mountain Everlasting	<i>Antennaria dioica</i>	Kidney Vetch	<i>Anthyllis vulneraria</i>
Mint	<i>Mentha aquatica</i>	Hawkweed	<i>Hieracium species</i>
Meadowsweet	<i>Filipendula ulmaria</i>	Glaucous Sedge	<i>Carex flacca</i>
Creeping Bent	<i>Agrostis stolonifera</i>		

APPENDIX V: TURBARY ZONING PLAN

Introduction

The purpose of this turbary zoning plan is to produce a simplified zoning map (Map 6) and prescriptions dealing with turbary areas within the site.

The accompanying map shows where turf cutting occurs within the site. Appropriate management zoning was prescribed for each area on an individual basis in accordance with the maintenance of the Favourable Conservation Status of the priority habitat, *active blanket bog.

Zoning

The following turbary zoning system applies to areas of turbary within the site.

Zone A1

Old banks which have become totally revegetated and / or flooded. Cutting should not restart.

Zone B1

Bank cutting that is adversely affecting surrounding blanket bog. Cutting should be stopped / no re-start.

Zone C5

Sausage machine and bank cutting occurring together. Sausage machine cutting should stop, but bank cutting can continue.

N1

Wet Grassland / re-vegetated cutover bog with patchy Ling Heather (*Calluna vulgaris*) and clumps of Rushes (*Juncus* species). This is very old cutover and would more properly be described as wet grassland.

Zone: N/A

N2

Old and active machine and hand cut turf. This cutting can continue to the base of the slope. The slope is very rocky and is approximately 100m from the track at GPS co-ordinates 3526 1559.

Zone: C5

N3

Large area of old banks and active cutting. Some sausage machine but mainly hopper cutting. This cutting can continue up to head of slope shown on map by dotted line. All cutting north of this line is to stop.

Zone: C5

N4

Active machine cutting at GPS 3624 1122. This cutting should be stopped as there is a large expanse of untouched bog to the north.

Zone: B1

N5

Active machine cutting to the east of the Lough. Cutting can continue in this area south as far as the present boundary as this is all cutover. No extension to the north or west to be permitted.

Zone: C5

N6

Old turbary. Do not restart cutting.

Zone: A1

N7

Old turbary. Do not restart cutting.

Zone: A1

N8

Old turbary. Do not restart cutting.

Zone: A1

APPENDIX VI: NOTIFIABLE ACTIONS

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

- Notifiable Action 2.2. - Dry lowland grasslands
- Notifiable Action 2.3. - Wet lowland grasslands
- Notifiable Action 3.1. - Blanket bog
- Notifiable Action 3.2. - Heath (including juniper scrub)
- Notifiable Action 4.1. - Raised bog, cutaway bog and bog woodland
- Notifiable Action 4.2. - Fens, transition mires, petrifying springs
- Notifiable Action 5.2. - Scrub
- Notifiable Action 6.1. - Rivers or streams
- Notifiable Action 6.2. - Lakes, ponds, canals
- Notifiable Action 7.1. - Ditches, hedges, cereals and intensive grasslands, walls, buildings, waste ground, bare soil, parkland grassland, bracken
- Notifiable Action 8.3. - River lamprey, sea lamprey, brook lamprey, salmon, twaite shad, fresh water pearl mussels, white-clawed crayfish
- Notifiable Action 8.5. - *Vertigo* species, shining sickle moss

HABITAT TYPE 2.2

DRY LOWLAND GRASSLANDS

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<u>SECTION A</u>	<u>SECTION B</u>
<p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p>Please note that the activities listed in <i>Section B overleaf</i> may, and in most cases do, require a Minister for the Marine and Natural license or consent from another statutory authority (e.g. the local planning authority, the Resources, or the Minister for Agriculture and Food).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>

HABITAT TYPE 2.2

DRY LOWLAND GRASSLANDS

<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</p> <p>adding lime/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 mowing grass before the 30th June (<i>Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply</i>)</p> <p>burning of vegetation /ploughing or cultivation of lands which have not been so managed for the last 20 years</p> <p>reclamation, infilling, or land drainage/ reseeding, planting of trees or any other species use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or low 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>

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 2.3

WET LOWLAND GRASSLANDS

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>
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HABITAT TYPE 2.3

WET LOWLAND GRASSLANDS

<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</p> <p>adding lime/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 mowing grass before the 30th June (<i>Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply</i>)</p> <p>burning of vegetation</p> <p>reclamation, infilling, ploughing or land drainage/ reseeded, planting of trees or any other species use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or low 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>

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>
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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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<u>SECTION A</u>	<u>SECTION B</u>
<p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>

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 4.1

RAISED BOG, CUTAWAY BOG AND BOG WOODLAND

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>
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HABITAT TYPE 4.1

RAISED BOG, CUTAWAY BOG AND BOG WOODLAND

<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/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>adding lime/adding fertiliser of any sort</p> <p>creation of new tracks or paths</p> <p>burning areas of vegetation reclamation, infilling, or ploughing /reseeding, planting of trees or any other species/cutting trees or removing timber</p> <p>drainage works on the bog or within the local water catchment area</p> <p>cutting turf or peat moss 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. botanical 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>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 4.2

FENS, TRANSITION MIRES, PETRIFYING SPRINGS

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<u>SECTION A</u>	<u>SECTION B</u>
Please note that the activities listed in <i>Section A</i> below are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.	<p>Please note that the activities listed in <i>Section B</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>

HABITAT TYPE 4.2

FENS, TRANSITION MIRES, PETRIFYING SPRINGS

<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)</p> <p>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</p> <p>adding lime within 50m of the fen or a water course running into it</p> <p>adding fertiliser of any sort within 50m or a water course running into it</p> <p>extracting water for irrigation or other purposes</p> <p>mowing grass before the 30th June (Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply)</p> <p>supplementary feeding of stock</p> <p>operation of boat angling or shore angling business</p> <p>restocking with fish.</p> <p>reclamation, infilling, ploughing or land drainage within 50m of the fen</p> <p>reseeding, planting of trees or any other species within 50m of the fen</p> <p>use of any pesticide or herbicide within 50m of fen</p> <p>dumping, burning or storing any materials within 50m of the fen</p> <p>alteration of the banks, bed or flow of watercourses within the fen or running into or out of it</p> <p>harvesting reed or willow</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 fen</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>

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

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

SECTION A

Please note that the activities listed in Section A overleaf are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

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 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</p> <p>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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

SECTION A

Please note that the activities listed in *Section A overleaf* are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

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 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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<u>SECTION A</u>	<u>SECTION B</u>
<p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>

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.

HABITAT TYPE 7.1

DITCHES, HEDGES, CEREALS AND INTENSIVE GRASSLANDS, WALLS, BUILDINGS, WASTE GROUND, BARE SOIL, PARKLAND GRASSLAND, BRACKEN, CAVES, OR QUARRIES

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<u>SECTION A</u>	<u>SECTION B</u>
Please note that the activities listed in Section A overleaf are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.	<p>Please note that the activities listed in Section B overleaf may, and in most cases do, require a licence 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>

HABITAT TYPE 7.1

DITCHES, HEDGES, CEREALS AND INTENSIVE GRASSLANDS, WALLS, BUILDINGS, WASTE GROUND, BARE SOIL, PARKLAND GRASSLAND, BRACKEN, CAVES, OR QUARRIES

<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>disturbance of bats</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 sports pitches, caravan or camping facilities.</p> <p>developing roads or car parks</p> <p>construction of fences, buildings and embankments</p> <p>afforestation</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 8.3

RIVER LAMPREY, SEA LAMPREY, BROOK LAMPREY, SALMON, TWAITE SHAD, WHITE-CLAWED CRAYFISH, FRESH WATER PEARL MUSSEL

(It is an offence under Wildlife Act 1976 to kill, injure or disturb these species)

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<u>SECTION A</u>	<u>SECTION B</u>
<p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>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.</p>

HABITAT TYPE 8.3

RIVER LAMPREY, SEA LAMPREY, BROOK LAMPREY, SALMON, TWAITE SHAD, WHITE-CLAWED CRAYFISH, FRESH WATER PEARL MUSSEL

<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>fishing for fresh-water pearl mussels</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans) within 30m of the river or stream</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 30m of the river or stream/adding lime within 30m of the river or stream</p> <p>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</p> <p>reseeding, planting of trees or any other species within 30m of the river or stream</p> <p>removal of trees or any aquatic vegetation within 30m of the river/stream</p> <p>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/ivers 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).</p> <p>alteration of the banks, channel, bed or flow of the river or stream/harvesting or burning of reed or willow./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>culture of crayfish</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 8.5

VERTIGO SPECIES, SHINING SICKLE MOSS

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.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

SECTION A

Please note that the activities listed in Section A below are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

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 8.5

VERTIGO SPECIES, SHINING SICKLE MOSS

<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</p> <p>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</p> <p>restocking with fish.</p> <p>reclamation, infilling, ploughing or land drainage within 50m of the lake, pond or canal</p> <p>reseeding, planting of trees or any other species within 50m of the lake, pond or canal</p> <p>removal of trees or any aquatic vegetation within 50m of the river/stream.</p> <p>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 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>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 VII: 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 VIII: SUMMARY OF 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 IX: NATIONAL PARKS AND WILDLIFE MANAGEMENT STAFF

Co. Sligo:

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Divisional Manager

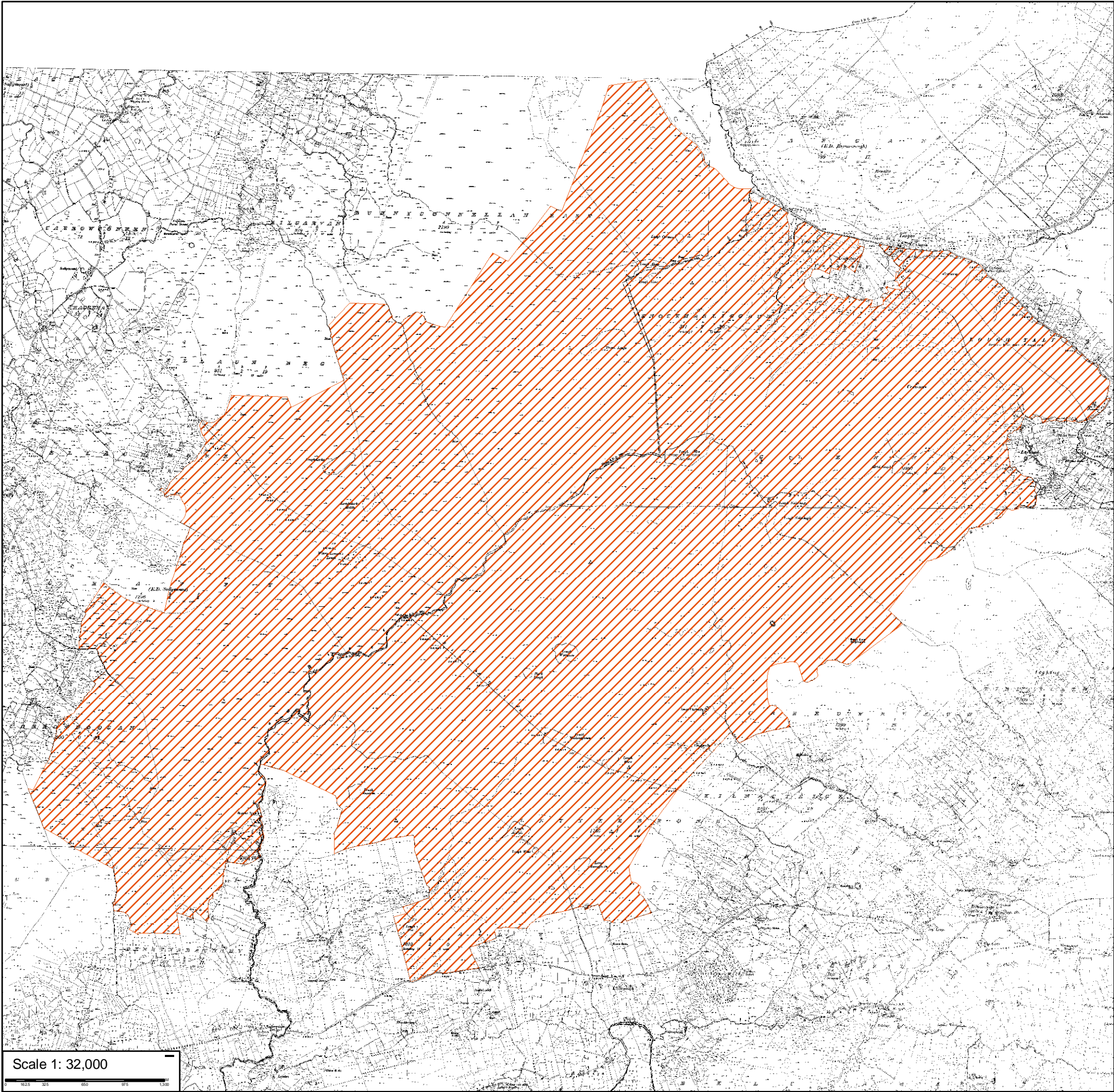
Dr. Michael Sweeney,
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National Parks and Wildlife

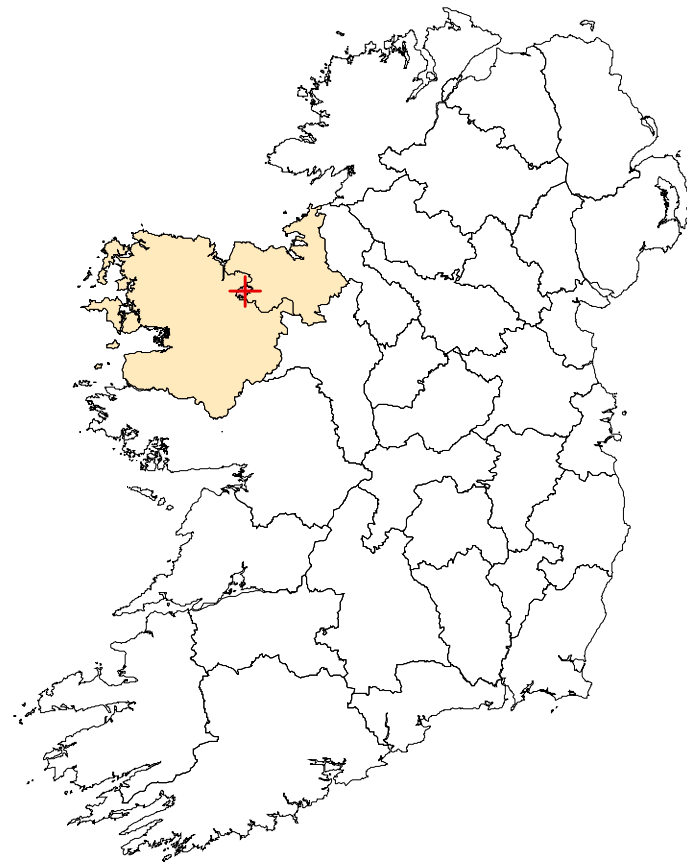
Dept. of Environment, Heritage and Local Government,
7 Ely Place,
Dublin 2.
Phone Lo Call 1890 202021, (01) 8882000
Fax (01) 8883272
www.npws.ie



CEANTAR SPEISIALTA CAOMHNAITHE
CANDIDATE SPECIAL AREA OF CONSERVATION

LOUGH HOE BOG 000633
Version 1.00
(Co's. Mayo & Sligo)

Féadtar athruithe a chur ar an gceantair / Sites subject to revision
(Ní thaispeántar suimh gur de spéis géolaiach amháin iad) / (Sites solely of geological interest not shown)
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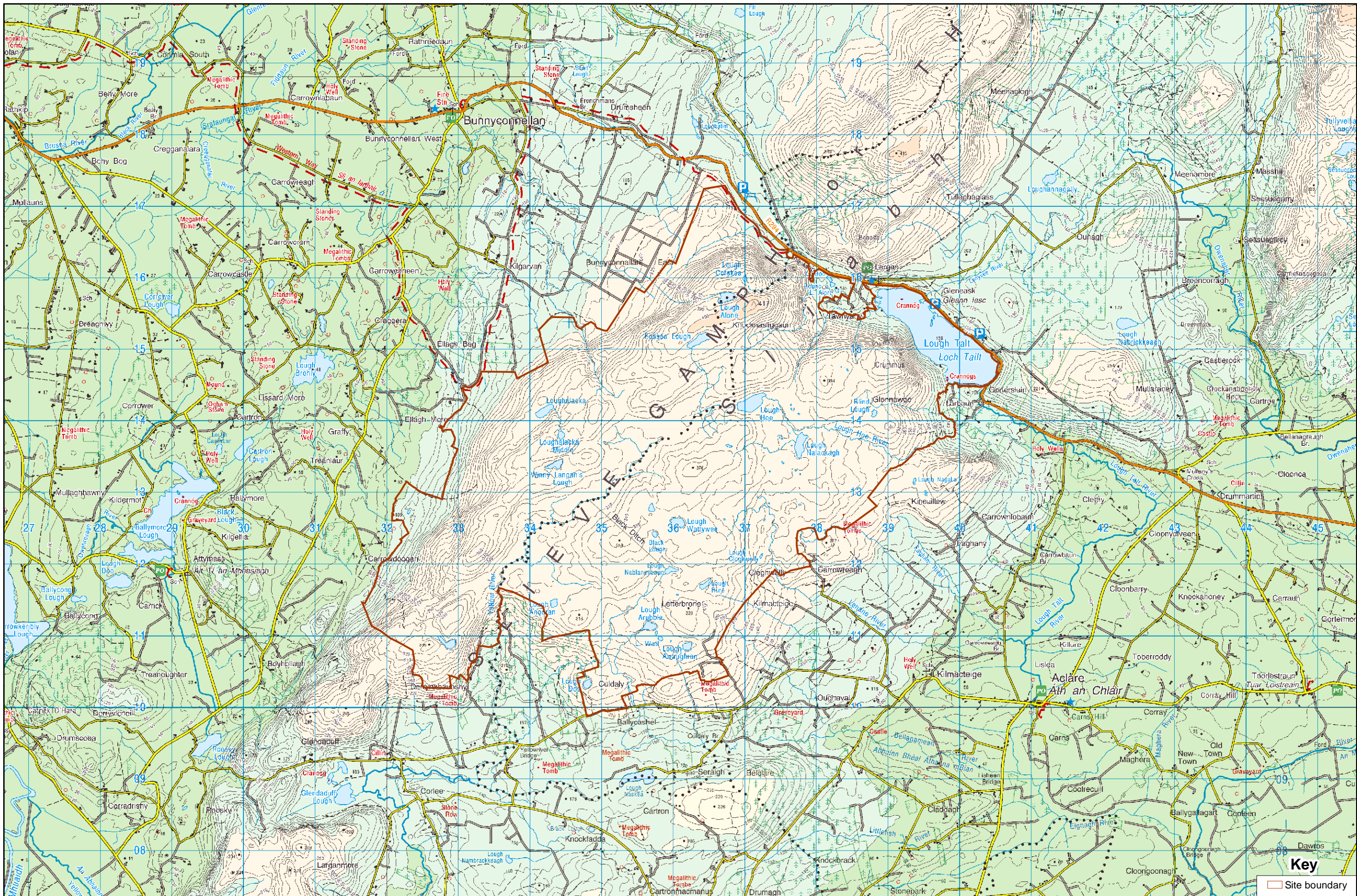


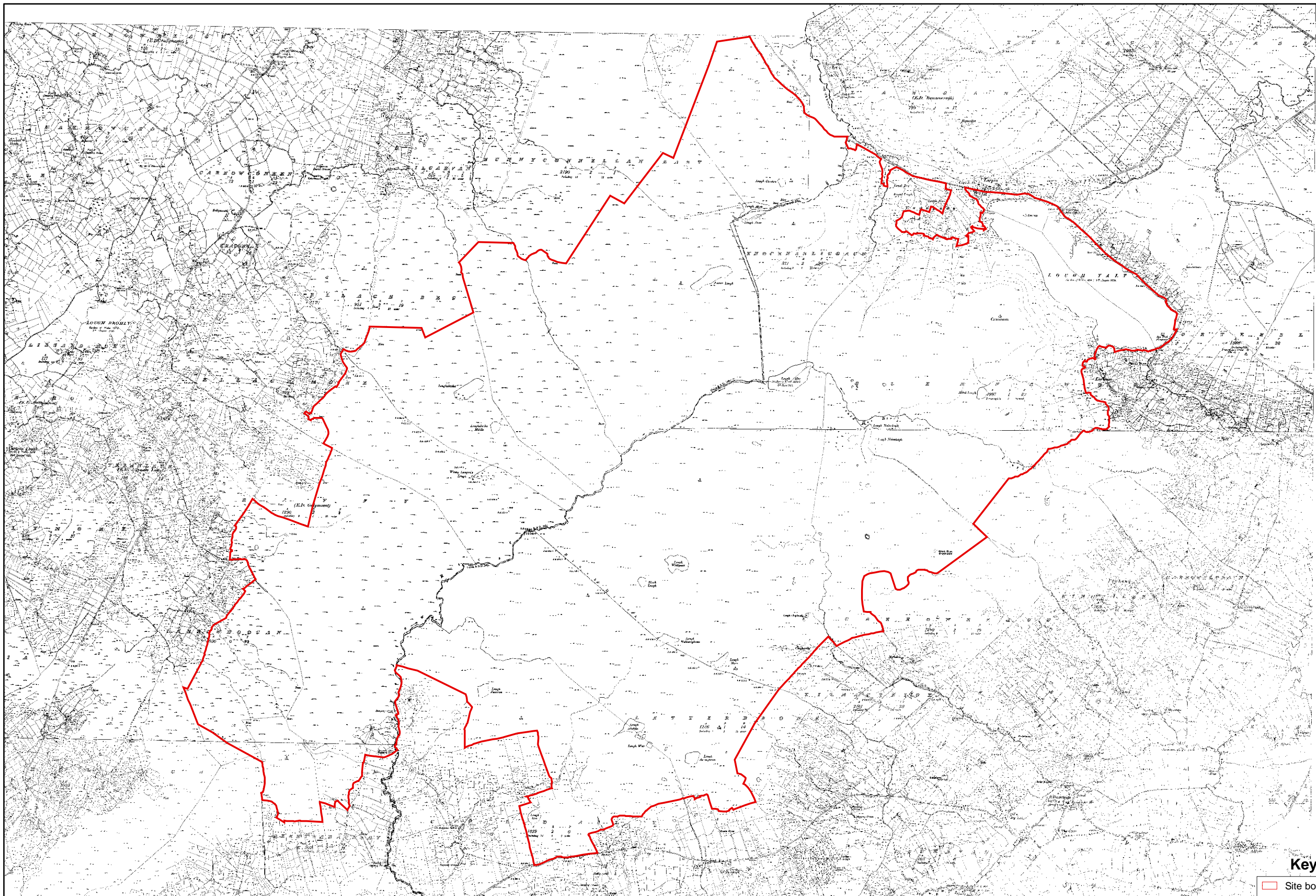
Map 1
LOCATION MAP: LOUGH HOE BOG cSAC 000633



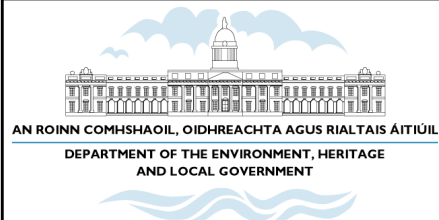
Department of Environment, Heritage and Local Government
An Roinn Comhshaoil, Oidhreachta agus Rialtais Áitiúil

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





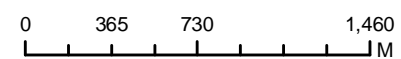
Key
Site boundary



CEANTAR SPEISIALTA CAOMHNATHE
CANDIDATE SPECIAL AREA OF CONSERVATION

Féadtar athruithe a chur ar na gceantair / Sites subject to revision
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Macasamhail d'ábhar na Suirbhéireachta Ordonáis le cead ón Rialtas (Ceadúnas Uimh 5953)

LOUGH HOE BOG
SHEETS MA 040 & 049, SL 030 & 036

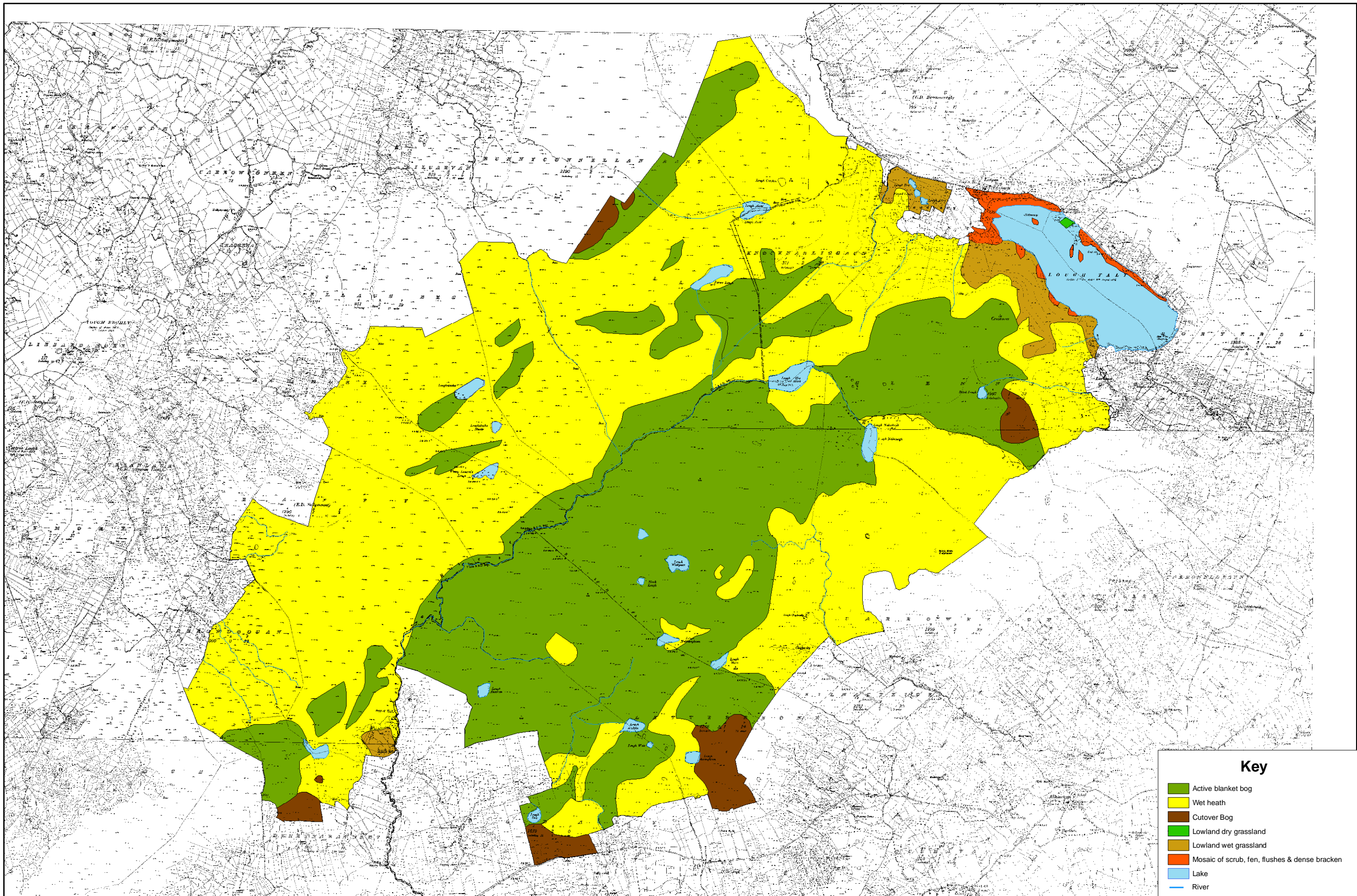


Scale 1: 32,000

Map 3
SITE BOUNDARIES

Map to be read in conjunction with conservation plan.

SITE CODE
000633
Version 1.00



Key

Active blanket bog

Wet heath

Cutover Bog

Lowland dry grassland

Lowland wet grassland

Mosaic of scrub, fen, flushes & dense bracken

Lake

River

CEANTAR SPEISIALTA CAOMHNAITHE

CANDIDATE SPECIAL AREA OF CONSERVATION

The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Reproduced from Ordnance Survey material by permission of the Government (Permit number 5953).
Níl sna teorainneacha ar na léarscáileanna ach nod garshuíomhach ginearálta. Féadfar athbhreithnithe a déanamh ar theorainneacha na gceant comharthaithe. Macasamhail d'ábhar na Suirbhéarachta Ordonáis le chead ón Rialtas (Ceadúnas Uimh. 5953)

LOUGH HOE BOG

SHEETS MA 040 & 049, SL 030 & 036

03456901380

03456901380

M

Scale 1: 32,000

Map 4

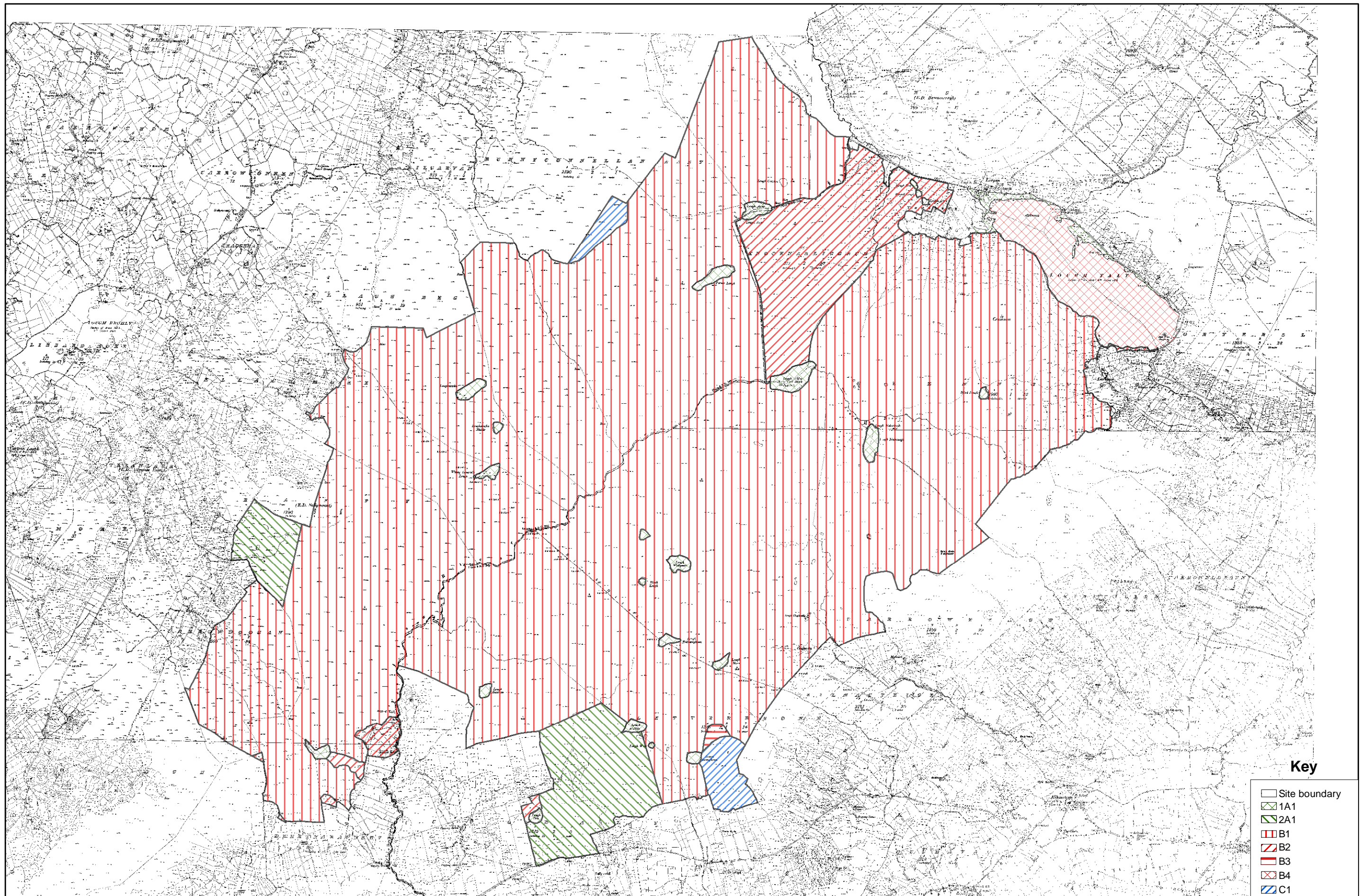
INDACTIVE HABITAT MAP

Map to be read in conjunction with conservation plan.

SITE CODE

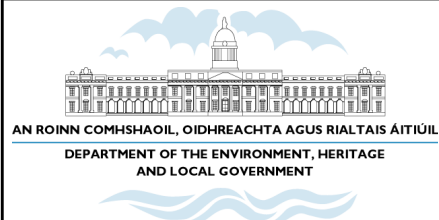
000633

Version 1.00



Key

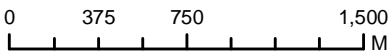
- Site boundary
- 1A1
- 2A1
- B1
- B2
- B3
- B4
- C1



CEANTAR SPEISIALTA CAOMHNATHE
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LOUGH HOE BOG
SHEETS MA 040 & 049, SL 030 & 036



Scale 1: 32,000

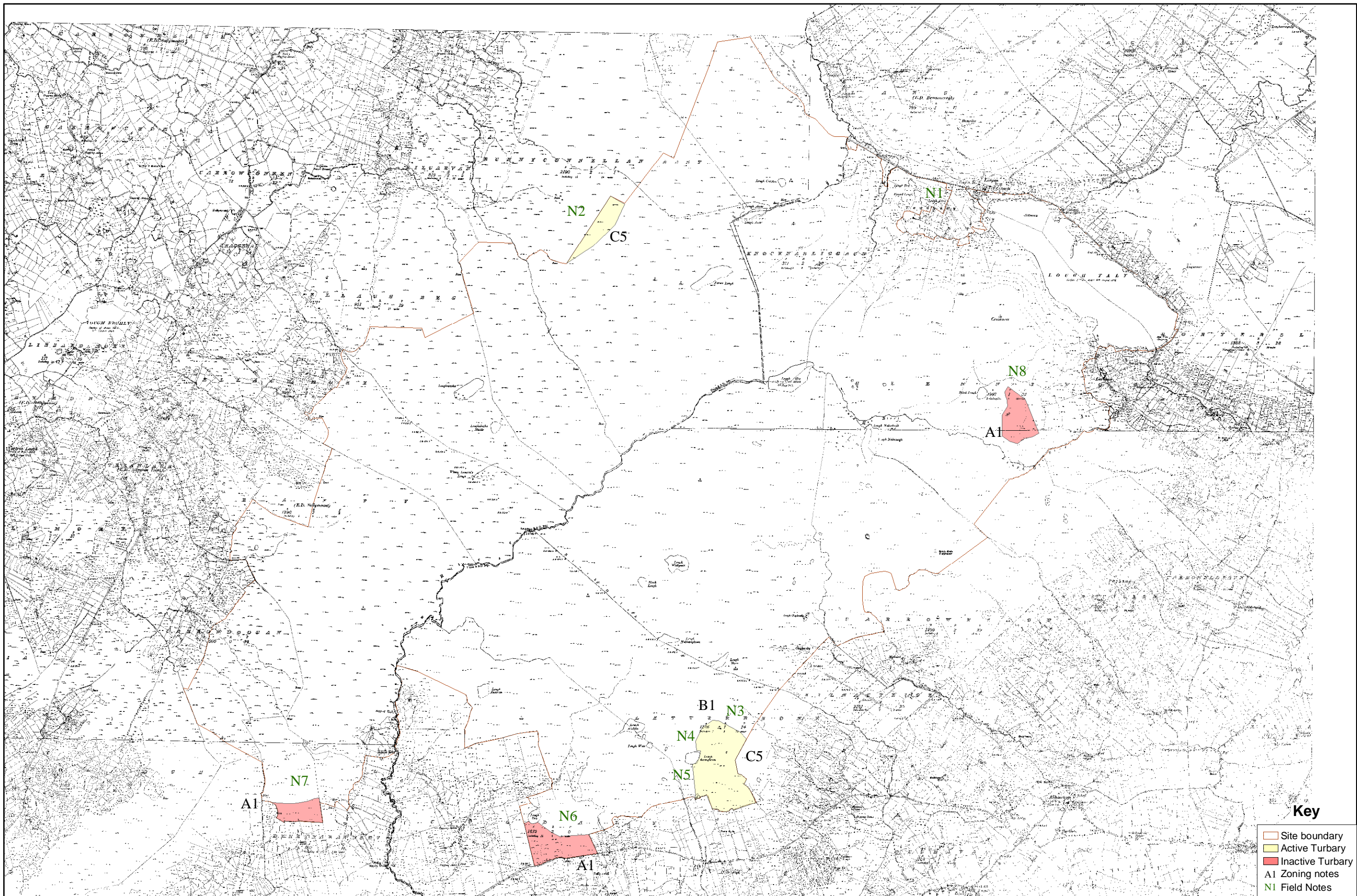
Map 5
MANAGEMENT ZONING MAP

Map to be read in conjunction with conservation plan.

SITE CODE

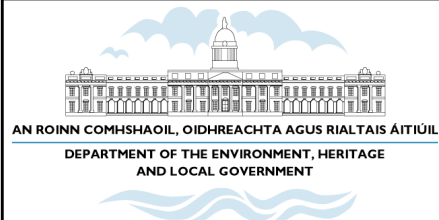
000633

Version 1.00



Key

- Site boundary
- Active Turbary
- Inactive Turbary
- A1 Zoning notes
- Field Notes



CEANTAR SPEISIALTA CAOMHNATHE
CANDIDATE SPECIAL AREA OF CONSERVATION

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LOUGH HOE BOG
SHEETS MA 040 & 049, SL 030 & 036

0 375 750 1,500
M

Scale 1: 32,000

Map 6
TURBARY ZONING MAP

Map to be read in conjunction with conservation plan.

SITE CODE
000633

Version 1.00