

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

and

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

FORMAT FOR A PRIORITISED ACTION FRAMEWORK (PAF) FOR NATURA 2000

For the EU Multiannual Financing Period 2014-2020

Ireland

- A. Introductory overview of Natura 2000 network for territory
- A.1 Short introduction to the habitat types of Annex I and species of Annex II of the Habitats Directive and Annex I and migratory bird species for which Natura 2000 sites are designated

Ireland hosts 59 habitat types listed in Annex I and 26 species listed in Annex II of the Habitats Directive. 16 of the 59 Annex I habitats are priority habitats. Amongst these are active raised bog, active blanket bog, limestone pavements, orchid-rich calcareous grasslands, alkaline fens, turloughs, machair, fixed dunes and coastal lagoons. Other Annex I habitats include six marine habitats, saltmarshes, several lake types, heaths and scree/rock habitats.

Annex II species include plants such as slender naiad (*Najas flexilis*) and marsh saxifrage (*Saxifraga hirculus*); invertebrates include whorl snails (*Vertigo* spp.) and freshwater pearl mussel (*Margaritifera margaritifera*); fish species include lampreys (*Lampetra* spp. and *Petromyzon marinus*). Annex II mammals found in Ireland include otter (*Lutra lutra*) and lesser horseshoe bat (*Rhinolophus hipposideros*).

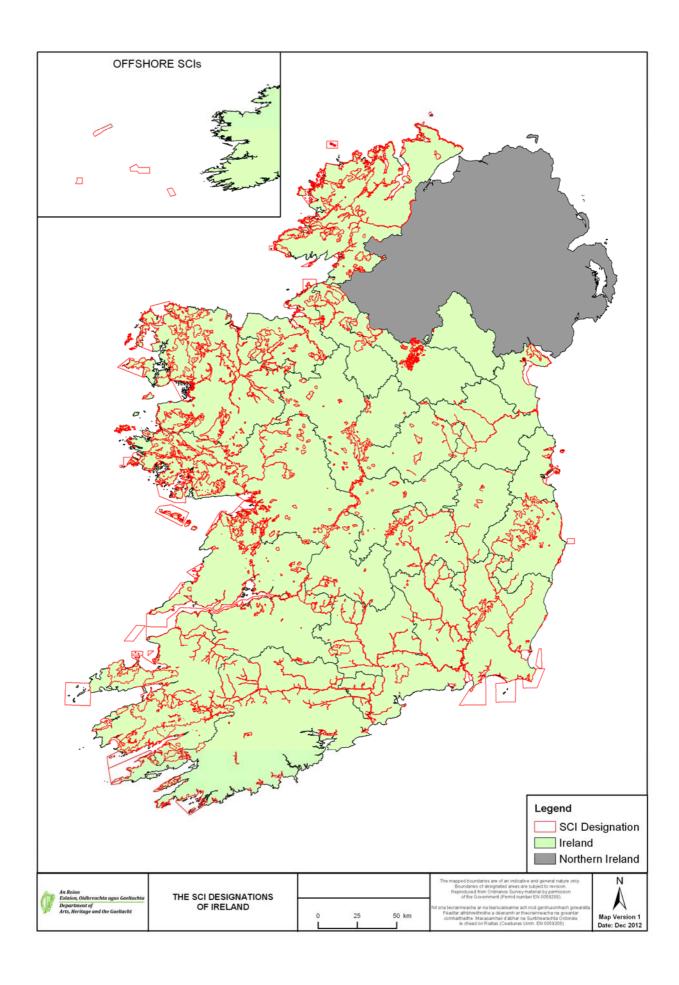
Within the framework of the Birds Directive, Ireland is of particular importance for migratory waterbirds and breeding seabirds. 25 species listed in Annex I of the Directive regularly occur including wintering whooper swan (*Cygnus cygnus*) and Greenland white-fronted goose (*Anser albifrons flavirostris*); breeding species such as corncrake (*Crex crex*) and terns (*Sterna* spp); as well as birds of prey including hen harrier (*Circus cyaneus*) and peregrine (*Falco peregrinus*).

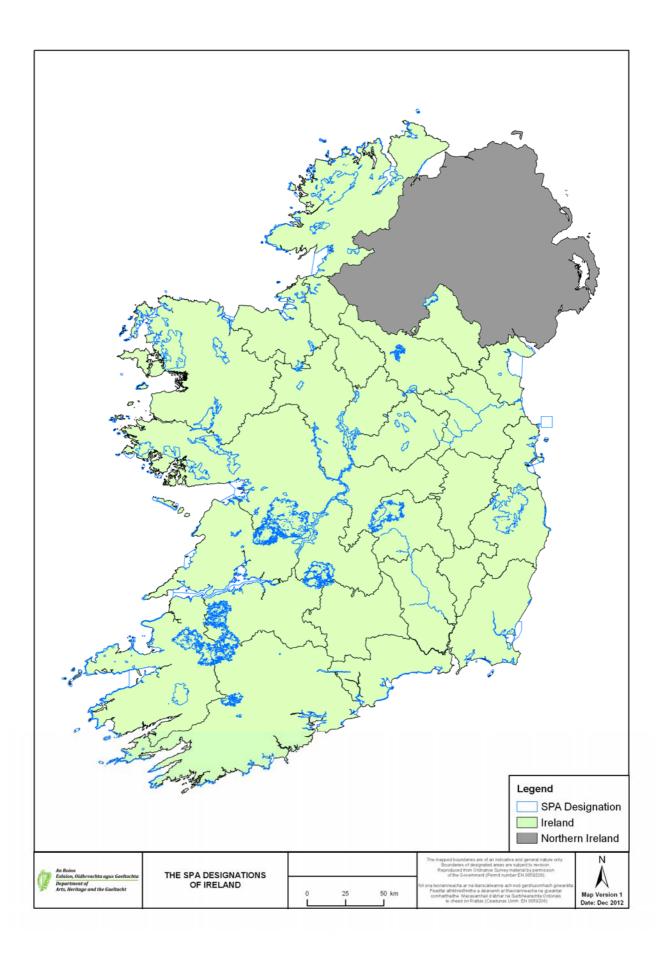
Further information is available at: http://www.npws.ie/protectedsites/

A.2 Number and area of Natura 2000 sites

Sites of Community Importance (SCIs)	There are 423 Sites of Community Importance in Ireland, with a total area of 11,007 km ² (this area includes marine elements). A further seven marine sites are currently being progressed.
Reference to Commission Decisions on SCIs	Atlantic Region Commission Decision:
	2011/63/EU of 10 January 2011 adopting, pursuant to Council Directive 92/43/EEC, a fourth updated list of sites of Community importance for the Atlantic biogeographical region (notified under document number C(2010) 9666)
	2010/43/EU of 22 December 2009 adopting, pursuant to Council Directive 92/43/EEC, a third updated list of sites of Community importance for the Atlantic biogeographical region (notified under document number C(2009) 10405)
	2009/96/EC of 12 December 2008 adopting, pursuant to Council Directive 92/43/EEC, a second updated list of sites of Community importance for the Atlantic biogeographical region (notified under document number C(2008) 8119)
	2008/23/EC of 12 November 2007 adopting, pursuant to Council Directive 92/43/EEC, a first updated list of sites of Community importance for the Atlantic biogeographical region (notified under document number C(2007) 5396)
	2004/813/EC of 7 December 2004 adopting, pursuant to Council Directive 92/43/EEC, the list of sites of Community importance for the Atlantic biogeographical region (notified under document number C(2004) 4032)
	Link to Decisions at http://ec.europa.eu/environment/nature/natura2000/sites_hab/biogeog_regions/index_en.htm
Special Areas of Conservation (SACs)	The process of designating the SCIs mentioned above as SACs will commence in early 2013 with the intention of being
	completed by the end of end 2014. SCIs are subject to full statutory protection in the interim.
Special Protection Areas (SPAs)	130 Special Protection Areas have been designated by Statutory Instrument in Ireland. A further 23 have been classified, giving a total of 153 in the network.
Total Natura 2000 terrestrial area	9529 km² (as of June 2011)
Total Natura 2000 marine area	3959 km² (as of June 2011)

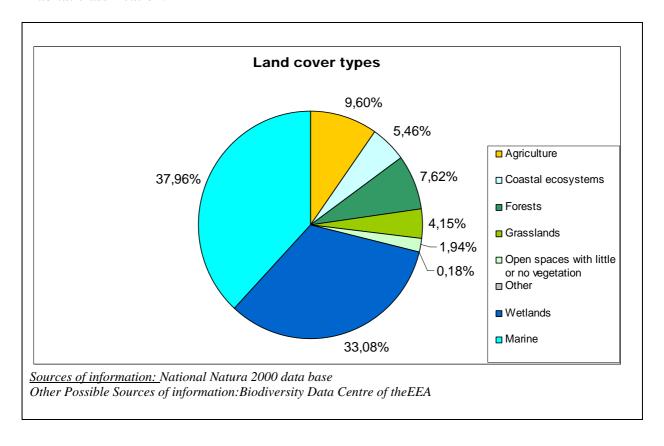
See the maps overleaf for SCI and SPA coverage. See http://webgis.npws.ie/npwsviewer/ for the National Parks and Wildlife Service map viewer.





A.3 Main land use cover and ecosystem categories for Natura 2000 sites

The following chart shows CORINE land classes. These do not correspond with Annex I habitat classification.



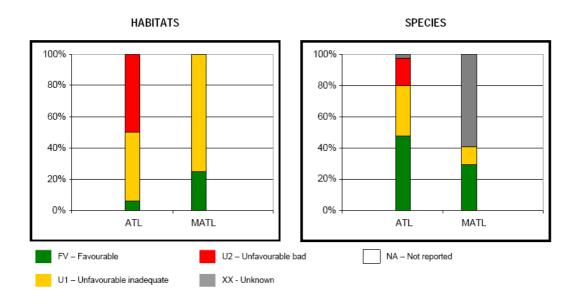
B. Status of the Habitats and Species

B.1 Most recent assessment of conservation status of species and habitat types for territory

The following is summary information from the 2007 Article 17 conservation status report for Ireland. It includes all Annex I habitats and species listed in Annexes II, IV and V of the Habitats Directive.

B.1.a Habitat and species of Habitats Directive

Overall assessment of conservation status by biogeographical region (% number)



The table below gives the percentage number of each habitat and species in each conservation status class. The figures in brackets indicate the actual number.

	HABITATS				SPECIES					
	FV	U1	U2	XX	NA	FV	U1	U2	XX	NA
Atlantic	5% (3)	44% (24)	51% (28)	0%	0%	48% (19)	33% (13)	18% (7)	3% (1)	0%
Marine Atlantic	25% (1)	75% (3)	0%	0%	0%	30% (8)	11% (3)	0%	59% (16)	0%
Ireland total	7% (4)	46% (27)	47% (28)	0%	0%	41% (27)	24% (16)	10% (7)	25% (17)	0%

 $FV-Favourable;\ U1-Unfavourable\ inadequate;\ U2-Unfavourable\ bad;\ XX-Unknown;\ NA-Not\ reported$

The following table shows conservation status for each parameter (%)

	HABITATS				SPECIES					
	FV	U1	U2	XX	NA	FV	U1	U2	XX	NA
Range	93%	0%	5%	2%	0%	64%	3%	5%	28%	0%
Area / Population	40%	31%	19%	10%	0%	39%	12%	10%	39%	0%
Structure / Habitat	14%	41%	40%	5%	0%	43%	24%	3%	30%	0%
Future Prospects	7%	51%	42%	0%	0%	48%	22%	5%	25%	0%

FV - Favourable; U1 - Unfavourable inadequate; U2 - Unfavourable bad; XX - Unknown; NA - Not reported

A low proportion of species were assessed as having a bad status. These species are all water dependent, reflecting water quality problems in most cases. A large proportion of cetaceans were assessed as having an unknown status as the distribution of these elusive species is still poorly understood. Although the range for most of the habitats was assessed favourably, the structure and functions and future prospects, in particular, will require considerable management effort to improve condition and reduce the impacts of pressures.

B.1.b Bird species of Birds Directive

The status of birds in Ireland was assessed in 2007 by RSPB (NI) and BirdWatch Ireland (Lynas et al., 2007). Seven quantitative criteria were used to determine population status. These included assessments of global and European conservation status, recent population decline (both in terms of numbers and distribution), historical population decline, breeding rarity, localised distribution and international importance. The red list includes species whose populations have declined by over 70% as well as those that are threatened globally.

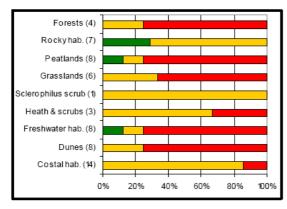
Birds Directive Annex I species on the Irish red list are: breeding corncrake (*Crex crex*), golden plover (*Pluvialis apricaria*) and nightjar (*Caprimulgus europaeus*); as well as wintering Bewick's swan (*Cygnus columbianus*). Other species on the red list include curlew (*Numenius arquata*), red grouse (*Lagopus lagopus*), barn owl (*Tyto alba*), pintail (*Anas acuta*) and knot (*Calidris canutus*). The last two species are regularly occurring migratory birds.

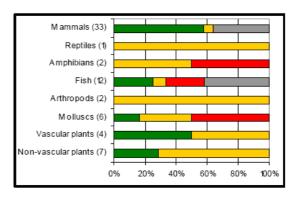
Those on the amber list include Annex I breeding species such as chough (*Pyrrhocorax pyrrhocorax*) and storm petrel (*Hydrobates pelagicus*) as well as a number of migratory wintering species.

Lynas, P, Newton, S.F. and Robinson, J.A. (2007). The status of birds in Ireland: an analysis of conservation concern 2008-2013. Irish Birds 8: 149-167

B.2 Overall assessment of conservation status by Habitat category / species group

The following graph shows overall conservation status of habitats and species (% number per category/group), as assessed during the last Article 17 reporting period (2001-2006) in Ireland. The species groups include those listed in Annexes IV and V, as well as Annex II.





(yy) = number of occurrences

The forests category comprises one habitat in poor status (bog woodland) and the remainder in bad status (old oak woodlands; residual alluvial woodlands; yew woodlands).

There are seven habitats classified as "rocky"; of these, two are assessed as being in favourable status (two cave habitats), while five are poor.

Of the eight peatland habitats, six are in bad status (including active blanket bog, active raised bog, two fen habitats, transition mires; petrifying springs), one in poor status (degraded raised bog) and one favourable (Rhynchosporion depressions).

Four of the six grassland habitats are assessed as bad (orchid-rich calcareous grassland; species-rich *Nardus* grassland; *Molinia* meadows; lowland hay meadows) and the other two (calaminarian grassland; hydrophilous tall herb) are poor.

Sclerophilus scrub comprises just one habitat in Ireland, *Juniper* scrub, which is in poor status.

The heaths and scrub category includes wet, dry and Alpine and Boreal heaths. The first is assessed as being in bad status, while the last two are poor.

Five of the freshwater habitats are permanent lakes and all of these are in bad status (lowland and upland oligotrophic lakes; hardwater lakes; natural eutrophic lakes and dystrophic lakes), as is floating river vegetation. Turloughs are assessed as poor, while Chenopodion rubri is in favourable status.

Of eight dune habitats, two are reported as poor status (embryonic shifting dunes; dunes with creeping willow). The remaining five (marram dunes; fixed dunes; decalcified *Empetrum* dunes; decalcified dune heath; humid dune slacks; machair) are assessed as bad.

In the context of the above graph, the "coastal" category also includes marine habitats. Of these 14 Annex I habitats, two are assessed as bad (coastal lagoons; halophilous scrub). The remainder are poor (sandbanks; estuaries; tidal mudflats and sandflats; large shallow inlets and

bays; reefs; annual vegetation of drift lines; perennial vegetation of stony banks; vegetated sea cliffs; *Salicornia* mud; *Spartina* swards; Atlantic salt meadows; Mediterranean salt meadows).

The conservation status of eight of the 26 marine mammals is favourable. This includes the four Annex II species (grey seal; harbour seal; bottlenose dolphin and harbour porpoise). The conservation status of 12 of the marine mammals is unknown, while six are regarded as vagrant. All bat species are assessed as being in good status, including the Annex II species lesser horseshoe bat. The status of the other Annex II mammal species, otter, is assessed as poor.

The single marine reptile species (leatherback turtle) is reported as poor, due to lack of information. Of the two amphibian species, natterjack toad is assessed as being in bad status, while the common frog is poor. None of these species are listed in Annex II.

There are seven fish species listed in Annex II of the Habitats Directive. Two are listed as being in bad status (twaite shad; Atlantic salmon), while one is unknown (allis shad) and three are good (Killarney shad; river lamprey; brook lamprey). The remaining lamprey species (sea lamprey) is reported as poor.

The two Annex II arthropods (marsh fritillary; white-clawed crayfish) are both reported to be in poor status.

All six mollusc species are listed in Annex II. One (Kerry slug) is in good status; two *Vertigo* species are poor and the remainder are bad (freshwater pearl mussel, Nore freshwater pearl mussel and Desmoulin's whorl snail).

Three vascular plant species are listed in Annex II. Two are in good status (Killarney Fern; marsh saxifrage), while the third (slender naiad) is reported as poor.

Of the non-vascular plants, two Annex II bryophyte species (slender green feather-moss; petalwort) are both in good status. The remaining species, listed in either Annex IV or V, are reported as poor.

B.3 Overview of pressures and threats to species and habitats

The following table gives an overview of the main pressures and threats as reported by the Article 17 process.

	HAB	ITATS	SPECIES		
Category of pressure / threat	Actual	Future	Actual	Future	
	pressures	threats	pressures	threats	
Agriculture, forestry	76	78	45	45	
Fishing, hunting and collecting	12	7	42	39	
Mining and extraction of materials	58	53	22	16	
Urbanisation, industrialisation and similar activities	37	42	22	27	
Transportation and communication	37	31	30	27	
Leisure and tourism (other than above)	36	34	22	25	
Pollution and other human impacts/activities	49	51	61	72	
Human induced changes in wetlands and marine environments	58	56	42	49	
Natural processes (biotic and abiotic)	66	68	28	36	

C. LEGAL AND ADMINISTRATIVE PROVISIONS FOR THE PROTECTION AND MANAGEMENT OF THE NATURA 2000 SITES

C.1 Relevant legal provisions

This section attempts to list the main primary and some secondary legislation; however, it is not a comprehensive list.

The European Communities (Birds and Natural Habitats) Regulations 2011

The Habitats Directive was originally transposed into Irish law by the European Communities (Natural Habitats) Regulations 1997, which were amended twice (in 1998 and 2005). These regulations have since been superseded by The European Communities (Birds and Natural Habitats) Regulations 2011, which also fully transposes the Birds Directive.

http://www.irishstatutebook.ie/2011/en/si/0477.html

Planning and Development Acts 2000-2010

This suite of legislation is the basis for the modern Irish planning code, setting out the detail of regional planning guidelines, development plans and local area plans as well as the basic framework of development management and consent systems. Secondary legislation (Planning and Development Regulations 2001-2011) prescribe the detail of the various processes and procedures that make up the planning code. The vast majority of development activities that can affect Natura 2000 are regulated by the planning system.

http://www.irishstatutebook.ie/2010/en/act/pub/0030/index.html

Foreshore Acts 1933 to 2011

The Foreshore Acts require that a lease or licence must be obtained from the Minister for the Environment, Community and Local Government for the carrying out of works or placing structures or material on, or for the occupation of or removal of material from, State-owned foreshore. This represents the greater part of the foreshore. The foreshore is the seabed and shore below the line of high water of ordinary or medium tides and extends outwards to the limit of twelve nautical miles (approximately 22.24 kilometres).

http://www.irishstatutebook.ie/2011/en/act/pub/0011/index.html

European Communities (Water Policy) Regulations 2003

These regulations transpose the Water Framework Directive into Irish law. http://www.irishstatutebook.ie/2003/en/si/0722.html

European Communities (Marine Strategy Framework) Regulations 2011

These regulations transpose the Marine Strategy Framework Directive into Irish law http://www.irishstatutebook.ie/2011/en/si/0249.html

European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011

These regulations (S.I. No. 456 of 2011) introduce a screening and consent system for onfarm activities that may have impacts on the environment.

http://www.irishstatutebook.ie/2011/en/si/0456.html

European Communities (Forest Consent and Assessment) Regulations 2010

These regulations (S.I. No. 558 of 2010) make provision for environmental assessment and development consent in respect of afforestation and forest road construction projects. http://www.irishstatutebook.ie/2010/en/si/0558.html

European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009

The purpose of the Pearl Mussel Regulations 2009 is to support the achievement of favourable conservation status for the freshwater pearl mussel. To that end the regulations set environmental quality objectives for the habitats of the freshwater pearl mussel populations in named catchments.

http://www.irishstatutebook.ie/2009/en/si/0296.html

European Communities (Natural Habitats and Birds) (Sea-Fisheries) Regulations 2009- 2012

These Regulations provide for the management of sea fisheries that may impact on Natura 2000 sites, including the production of Fisheries Natura Plans.

http://www.irishstatutebook.ie/2012/en/si/0237.html

Wildlife Acts 1976-2012

The Wildlife Acts are the principal national legislation providing for the protection and conservation of wildlife in Ireland including the regulation of certain activities that may affect habitats and species.

e.g. Wildlife (Amendment) Act 2000

http://www.irishstatutebook.ie/2000/en/act/pub/0038/index.html

C.2 Progress and perspectives for management planning for the sites

Progress in	A process for compiling detailed site-specific conservation objectives
establishing	(COs) for SACs and SPAs has been established. Conservation
conservation	objectives are based on the concept of favourable conservation status
objectives	(FCS) as per Article 1 of the Habitats Directive. A site-specific
J	conservation objective aims to define favourable conservation
	condition for a particular habitat or species at that site using
	appropriate attributes with targets. These attributes are linked to the
	Favourable Conservation Status parameters as laid out in the Habitats
	Directive (range, area and structure and functions for habitats; range,
	population and habitat for species).
	The CO-setting process has concentrated thus far on Natura 2000 sites that support aquaculture or fisheries, in order to facilitate implementation of Article 6 of the Directive. To date, detailed COs and supporting documents have been published for 29 Natura 2000 sites and work is ongoing.
	Generic objectives are available for sites that do not yet have detailed
	objectives. COs for all SACs and SPAs can be downloaded on a site-
	by-site from the NPWS website:
	http://www.npws.ie/protectedsites/
	Conservation objectives spatial data is also available for download:
	http://www.npws.ie/protectedsites/
	Conservation plans were completed for 45 Natura 2000 sites in 2000/2001 and many more draft plans were compiled. While these
	contain useful information, they do not conform with the
	Commission's current definition of a "comprehensive management
	plan" and the conservation objective-setting as described above has
	superseded this planning process.
% of sites with plans	
completed	
% of sites with plans	0
in preparation	
% of sites with no	0
plans Link to web sites with	Coo
	See http://www.npws.ie/protectedsites/conservationmanagementplanning/
plans & any guidelines	for further details
guideinies	101 furtifier details

More background information on plans and comment on other instruments/approach es for management planning, information on and plans for particular sectors (e.g. forestry etc.)

Fisheries:

The development of Fisheries Natura Plans is now a legislative requirement for the commercial fisheries sector in all marine Natura 2000 sites.

Forestry:

Forest Service Appropriate Assessment Procedure Information Note (March 2012)

This note provides information on the Appropriate Assessment Procedure (AAP) operated by the Forest Service of the Department of Agriculture, Food and the Marine when considering applications for development consent for forestry projects in relation to Natura sites, as required under S.I. No. 477 of 2011. Documentation also includes guidance on compiling Natura Impact Statements

http://www.agriculture.gov.ie/media/migration/forestry/grant and premium schemes/scheme circulars/ForestServiceAppropriateAssessmentProcedureInfoNote140312.pdf

Plans and projects:

Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities (2009)

This guidance has been produced to assist planning authorities when undertaking appropriate assessment of plans and projects:

 $http://www.npws.ie/media/npws/publications/codesofpractice/AA\%20\\ Guidance\%2010-12-09.pdf$

C.3 Relevant government and non-governmental plans

This list gives a selection of plans. It is not comprehensive.

General Biodiversity Plans:

National Biodiversity Plan

Actions for Biodiversity 2011-2016- Ireland's National Biodiversity Plan. Department of Arts, Heritage and the Gaeltacht.

http://www.npws.ie/publications/archive/Biodiversity%20Plan%20text%20English.pdf

Environmental Protection Agency Biodiversity Action Plan

http://www.epa.ie/downloads/pubs/biodiversity/EPA%20Bio%20AP_final.pdf

Bord na Móna Biodiversity Action Plan 2010-2015

 $http://www.bordnamona.ie/wp-content/uploads/2011/06/20101115114029_bnm-biodiversity-action-plan-final-may-2010-web1.pdf$

Habitats/Species Plans/Threat Response Plans:

All Ireland Species Action Plan – Bats (2008)

http://www.npws.ie/publications/archive/2008_Bat_SAP.pdf

All Ireland Species Action Plan - Killarney Fern (2008)

http://www.npws.ie/publications/archive/2008_KillarneyFern_SAP.pdf

All Ireland Species Action Plan - Red Squirrel (2008)

http://www.npws.ie/publications/archive/2008_Squirrel_SAP.pdf

All Ireland Species Action Plans - Irish Lady's-tresses, Pollan, Hare, Corncrake (2005)

http://www.npws.ie/publications/archive/2005 Group SAP.pdf

Conservation Plan for Cetaceans in Irish waters (2009)

http://www.npws.ie/publications/archive/2009 Cetaceans CP.pdf

Threat Response Plan - Kerry Slug (Geomalacus maculosus) (2010)

http://www.npws.ie/publications/archive/2010 Slug TRP.pdf

Threat Response Plan - Otter (Lutra lutra) 2009-2011

http://www.npws.ie/publications/archive/2009_Otter_TRP.pdf

Threat Response Plan - Vesper Bats 2009-2011

http://www.npws.ie/publications/archive/2009_%20Bat_TRP.pdf

Coillte Biodiversity Action Plans

Coillte (the State forestry company) has produced Biodiversity Action Plans for the following Habitats and Bird Directive species: lesser horseshoe bat, freshwater pearl mussel and hen harrier

http://www.coillte.ie/coillteforest/environment/nature_conservation/biodiversity_action_plans

Group Action Plans for Irish Birds

BirdWatch Ireland has developed the following group species action plans based on habitat requirements: Marine and seacliff birds; shore and lagoon birds; dune and Machair birds; lake, fen and turlough birds; riparian birds; lowland farmland birds; urban and suburban birds; woodland and scrub birds; upland birds; raised bog birds.

http://www.birdwatchireland.ie/Ourwork/SpeciesHabitatConservationinIreland/SpeciesAction Plans/tabid/946/Default.aspx

Ireland's Peatland Conservation Action Plan 2020 – halting the loss of peatland biodiversity

This plan was published by the Irish Peatland Conservation Council (IPCC) in 2009. The aim of the plan is to develop a national strategy for the conservation and management of all peatland types in Ireland.

http://www.ipcc.ie/a-to-z-peatlands/peatland-action-plan/

Commonage Framework Plans:

In 1999, Ireland commenced a programme of necessary measures to resolve the negative effects of overgrazing by sheep, primarily on commonage land in hilly areas. Approximately 60% of commonage is Natura 2000 land. All known commonage areas in Ireland were surveyed by teams of ecologists and agriculturalists to assess the sustainable use of these areas. To date in excess of 4,400 plans have been prepared, covering circa 440,000ha. Where necessary, destocking was prescribed to ensure recovery of the vegetation and this was implemented through agri-environmental schemes. Compliance with the relevant commonage framework plan is a condition of the Single Payment Scheme for farmers in commonage. Considerable recovery in the condition of commonage lands has been delivered since 1999.

In 2011, a review of all commonage framework plan recommendations was initiated. The review will provide the basis for the sustainable grazing of commonages in future, to avoid both overgrazing and undergrazing. It is envisaged that minimum and maximum stocking levels will be set down for each commonage by the Department of Agriculture, Food and the Marine in 2013, as an aid to fulfilment of good agricultural and environmental conditions (GAEC requirements).

Agri-environmental and Native Woodland plans:

Agri-environmental and Native Woodland Scheme plans are prepared for individual landowners and are intended to enhance biodiversity at a site level.

Farm plans under the Rural Environment Protection Scheme (REPS) and its successor, the Agri-environmental Options Scheme (AEOS), are delivered through the RDP and are accounted for in section D1. These are administered by the Department of Agriculture, Food and the Marine (DAFM).

The NPWS farm plan scheme is administered by the Department of Arts, Heritage and the Gaeltacht (DAHG). It has been closed to new applicants since April 2010. These plans are exclusively prepared in the Natura 2000 network and take the form of either generic prescriptions (e.g. for hen harrier, chough and corncrake) or bespoke measures that are tailored at farm level. The annual budget for this scheme is €5-6million and is sourced entirely from national budgets.

http://www.npws.ie/farmerslandowners/schemes/farmplanscheme/

The Native Woodland Scheme, a nationally funded support measure operated by the Forest Service of DAFM, was launched in 2001 and is aimed at protecting, enhancing and expanding Ireland's native woodland resource. *Element 1: Native Woodland Conservation* supports the restoration of <u>existing</u> native woodlands and the conversion of conifer forests to native woodland on sensitive sites. This element is especially relevant to woodlands that are designated as Special Areas of Conservation (SACs) or Natural Heritage Areas (NHAs). *Element 2: Native Woodland Establishment* supports the creation of <u>new</u> native woodlands on greenfield sites, with a particular focus on sites beside existing designated woodlands (e.g. SACs) and sites within sensitive water catchments. (Note, *Element 1* is currently suspended).

The scheme is implemented in partnership with a range of State and eNGO bodies including DAHG, Inland Fisheries Ireland, the Heritage Council and Woodlands of Ireland. http://www.agriculture.gov.ie/forestservice/grantandpremiumschemes/

River Basin District Management Plans:

In accordance with the EU Water Framework Directive, Ireland is committed to manage all waters through a catchment based process, and the River Basin Management Plan is the mechanism for achieving this.

Seven River RBDs have been identified in Ireland for the purpose of implementing the Directive. Three of these are shared with Northern Ireland (Shannon, Neagh Bann, and North Western) and four RBDs are wholly within the state (Eastern, South Eastern, South Western and Western).

Each River Basin Management Plan aims to protect all waters within the district and, where necessary, improve waters and achieve sustainable water use. Waters include rivers, canals, lakes, reservoirs, groundwaters, protected areas (including wetlands and other water-dependent ecosystems), estuaries (transitional) and coastal waters.

The implementation of these plans will bring incremental improvement leading to the majority of waters reaching at least "good status" by 2027 at the latest. Where waters are currently at less than good status, they must be improved until they reach good status and there must be no deterioration in the existing status of waters.

Local Authority Spatial Plans:

Local authorities (city, town and county councils) in Ireland must, by law, make a development plan every six years. These plans set the agenda for the development of the local authorities' area over the six year lifespan. Amongst other things, they must set out policies for the protection of the environment and heritage. For an example see: http://www.fingalcoco.ie/Planning/FingalDevelopmentPlan2011-2017/

Heritage Plans:

County and city Heritage Plans highlight the strategic importance of natural and built heritage and each plan outlines proposals for managing and promoting heritage at a county level. This includes Natura 2000. For an example see:

 $http://www.heritagecouncil.ie/fileadmin/user_upload/County_Heritage_Plans/clare-heritage-plan-2011-2017-10318.pdf$

D CURRENT EXPERIENCE WITH USE OF EU FINANCIAL INSTRUMENTS

D1 European Agricultural Fund for Rural Development (EAFRD)

Provide a summary of allocations under relevant provisions of rural development fund for Natura 2000 management, (as well as other relevant national/regional financing)

Fund	Provision	Level of Use
EAFRD	213 Natura 2000 payments 2007-	€45m
	12 and Health Check funds (AEOS)	
	213 Natura 2000 payments 2012-	€13m
	13 (projected) and Health Check	
	funds (AEOS)	
	214 agri-environment (2007-13)*	€1.149bn
	224 Forest Natura 2000	NU
	payments**	
	225 forest-environment	NU
	measures**	
Other relevant (na	tional/regional) payment schemes	213 National Matched (2007-13): €44m
for Territory		214 National Matched (2007-13):€80m

Summary of key Natura 2000 related measures being undertaken under fund:

To date and with the exception of Measures paid for specific actions for corncrake in the Shannon Callows, the Natura 2000 and commonage measures have been broad and not very targeted.

Key lessons learnt and obstacles encountered:

There is a need to identify the requirements to achieve favourable conservation status at site level and to design costed measures and options that address the management issues. The schemes need to be monitored to ensure not just compliance but also the outcomes (deliverables) of the respective measures, to allow for adaptive management. The provision of local advisory services and supports is also necessary.

^{*} this figure relates to the total budget under Measure 214

^{**} Since 2007, the forestry programme has been wholly funded by the Exchequer under State Aid approval from the Commission.

D.2 European Fisheries Fund (EFF)

Provide a summary of allocations under Axis 1-4 of EFF used for Natura 2000 management, (as well as other relevant national/regional funding)

Fund	Provision	Level of Use*
EFF	Axis 1	NU
	Axis 2	NU
	Axis 3	MI
	Axis 4	NU
Other (national/regional) payment schemes for		NU
Territory		

Summary of key Natura 2000 related measures being undertaken under fund:

Marine Environmental Protection Measure of the Seafood Development Operational Programme 2007-2013 administered by Bord Iascaigh Mhara (BIM) under Axis 3 and utilised to fund a number of studies on fisheries in Natura 2000 areas

Key lessons learnt and obstacles encountered:

D.3 Structural Funds and the Cohesion Fund

Provide a summary of allocations under relevant provisions of structural funds used for Natura 2000 management, (as well as other relevant national/regional funding)

Fund	Provision	Level of Use*
ERDF	Category 51	NU
	Category 55	NU
	Category 56	NU
	INTERREG	MI
European Social F	fund (ESF)	NU

Projects listed have at least some elements relating to Natura 2000 measures:

INTERREG IVA 3126- Controlling priority invasive non-native riparian plants and restoring native biodiversity

INTERREG IVA 3705- Practical Implementation of Freshwater Pearl Mussel Measures

INTERREG IVA 2866- Halting Environmental Loss Project (HELP)

INTERREG IVA 2862- Development of targeted ecological modelling tools for lake management

INTERREG IVA 3603- Geo-environmental Survey of the North of Ireland (GESI North)

INTERREG IVA 3677- To develop a standardised seabed survey specification to be used to acquire accurate and high-resolution seabed mapping data (INIS Hydro)

INTERREG IVA - Inch levels -Lough Foyle Project

Key lessons learnt and obstacles encountered:

Where estimates are available they should be provided. Otherwise indicate as VS Very significant; MU Moderate Use: MI Minor use: NU No use

^{*}VS Very significant; MU Moderate Use; MI Minor use; NU No use

D.4 LIFE+

Provide a summary of allocations under LIFE+ for Natura 2000 management,

Fund	Provision	Level of Use*
LIFE+	Nature and Biodiversity	€ 3,834,235

LIFE07 NAT/IRL/000342- Restoration of the Lower River Shannon SAC for sea lamprey, Atlantic salmon and European otter

LIFE09 NAT/IE/000222- Demonstrating Best Practise in Raised Bog Restoration in Ireland LIFE09 NAT/IE/000220- Restoration of the Upper River Blackwater SAC for the freshwater pearl mussel, Atlantic salmon, European otter and kingfisher

LIFE07 NAT/IRL/00034- Control of aquatic invasive species and restoration of natural communities in Ireland

Other LIFE projects that commenced prior to 2007 (but which ran beyond 2007) are also referenced below but are not included in the total figure for LIFE+ above,

LIFE04 NAT/IE/000125- BurrenLIFE: Farming for Conservation in the Burren

LIFE02 NAT/IRL/8490- Restoring Active Blanket Bog in Ireland

LIFE05 NAT/IRL/000182- Restoring Priority Woodland Habitats in Ireland

Key lessons learnt and obstacles encountered:

The LIFE instrument is an important priming tool for research that can inform the roll out of measures and prescriptions in Natura 2000. There are concerns however that matching funding is difficult to source for large projects; that the administration of projects is burdensome and that it is very difficult to guarantee AfterLIFE commitments at project submission stage

Where estimates are available they should be provided. Otherwise indicate as VS Very significant; MU Moderate Use; MI Minor use; NU No use

D.5 Other key funding sources

Fund	Level of Use*
7th Framework Programme for Research (FP7)	
2007-12	€1.8m
2013 (projected)	€0.18m
Public/Private Partnership financing schemes	NU
Use of innovative financing	NU
Other (specify)*	
EPA STRIVE programme (including ERTDI overlaps)	
2007-12	€2.335m
2013 (projected)	€0.284m
NPWS Farm Plan Scheme	€m per annum
Native Woodland Scheme (Forest Service, DAFM)	MU
DAFM CoFoRD programme	€3.8m
DAFM Research Stimulus Fund	€m
* the proportion of the total budget that can be linked	
to Natura 2000 has been crudely calculated	
Summary of key Natura 2000 related measures being un	ndertaken under fund:
Key lessons learnt and obstacles encountered:	
rey lessons learnt and obstacles encountered.	

Where estimates are available they should be provided. Otherwise indicate as VS Very significant; MU Moderate Use; MI Minor use; NU No use

E Current estimate of financial needs for management of Natura 2000 for the territory

The following are extracts from the Irish response to the 2008 questionnaire from the Commission and the figures have not been updated.

Financing Requiremen	ts for the Existing Natura 2000 sites	
Management Actions	Key Activities	Total cost
ONE OFF COSTS		€
Finalisation of Sites	Scientific studies, administration, consultation etc	15.980.000
Management Planning	Preparing management plans, establishing management bodies, consultation etc	10.930.000
	Subtotal: One-off costs management	26.910.000
Investment costs	Land purchase	6.000.000
	one-off (ie not regular annual) payment of compensation for development rights.	112.000.000
	Infrastructure needed for the improvement / restoration of habitat or species	54.400.000
	Infrastructure for public access,interpretation works, observatories and kiosks, etc (contributing to conservation)	16.000.000
	Subtotal: Investment	188.400.000
	Subtotal: One-off costs	215.310.000
RECURRENT COSTS	Key Activities	Total annual cost
Management planning	Running costs of management bodies	480.000
	Review of management plans	110.880
	Public communication	79.040
	Subtotal: management planning	669.920

Habitat management and Monitoring:

	Agric.	Forests	Other terrest.	Inland waters	Wetlands	Coastal	Marine	TOTAL
Conservation management measures— maintenance and improvement of habitats' favourable conservation status	51.400.000					800.000		52.200.000
Conservation management measures— maintenance and improvement of species' favourable conservation status	8.232.000					800.000		9.032.000
Implementation of management schemes and agreements with owners and managers of land or water for following certain prescriptions	60.000.000					2.400.000		62.400.000
Provision of services; compensation for rights foregone and loss of income; developing acceptability 'liaison' with neighbours	15.000.000							15.000.000
Monitoring	395.000	200.000	2.071.000	1.791.000	1.570.000	9.800.000		15.827.000
Maintenance of facilities for public access to and use of the sites, interpretation works, observatories and kiosks etc.								2.500.000
Risk management (fire prevention and control, flooding etc)								0
Surveillance of the sites								6.586.000
Subtotal: Habitat management & monitoring	135.027.000	200.000	2.071.000	1.791.000	1.570.000	13.800.000		163.545.000

Financing Requirements for new sites needed to complete the network of Natura 2000 sites:

Management Actions	Key Activities	Total Cost
ONE OFF COSTS		
Finalisation of Sites	Scientific studies, administration, consultation etc	11.815.000
Management Planning	Preparing management plans, establishing management bodies, consultation etc	200.000
	Subtotal: One-off costs management	12.015.000
Investment costs	Land purchase	
	one-off (ie not regular annual) payment of compensation for development rights.	
	Infrastructure needed for the improvement / restoration of habitat or species	
	Infrastructure for public access,interpretation works, observatories and kiosks, etc (contributing to conservation)	
	Subtotal: Investment	0
	Subtotal: One-off costs	12.015.000
RECURRENT COSTS	Key Activities	Total annual cost
Management planning	Running costs of management bodies	
	Review of management plans	
	Public communication	
	Subtotal: management planning	0

Habitat management and Monitoring:

	Agricultural	Forests	Other terrestrial	Inland waters	Wetlands	Coastal	Marine	TOTAL
Conservation management measures— maintenance and improvement of habitats ' favourable conservation status							1.500.000	1.500.000
Conservation management measures— maintenance and improvement of species ' favourable conservation status							1.500.000	1.500.000
Implementation of management schemes and agreements with owners and managers of land or water for following certain prescriptions							2.000.000	2.000.000
Provision of services; compensation for rights foregone and loss of income; developing acceptability 'liaison' with neighbours								0
Monitoring							350.000	350.000
Maintenance of facilities for public access to and use of the sites,interpretation works, observatories and kiosks etc.								0
Risk management (fire prevention and control, flooding etc)								0
Surveillance of the sites								0
Subtotal: Habitat management and Monitoring	0	0	0	0	0	0	5.350.000	5.350.000

What is the current total staff numbers employed and the total remuneration for staff undertaking Natura 2000 activities?

Staff numbers (FTE) 192
Total Remuneration (MEUR) 11.250.000

Please estimate the anticipated staff numbers employed and the total remuneration when the network is complete.

Staff numbers (FTE) 185
Total Remuneration (MEUR) 10.840.000

F STRATEGIC CONSERVATION PRIORITIES FOR NATURA 2000 FOR THE TERRITORY FOR PERIOD 2014-2020

F.1 Summary of priorities for period (and expected outcomes), for priority habitat types and species having regard to the need for measurable progress on the nature sub-target under EU 2020 biodiversity strategy and for ensuring good functioning of Natura 2000 network (SACs + SPAs)

The priorities listed below focus on improving habitats and species that are currently in bad status. However, ongoing management is important for other habitats and species to ensure their status does not decline. Achieving improved status depends on adequate resources being invested in specific management measures as well as in more general measures such as agrienvironmental schemes, stakeholder involvement and monitoring. Completion of a mapping programme of Natura 2000 habitats is an essential prerequisite for strategic habitat management.

Ireland supports 16 priority habitats listed in Annex I of the Habitats Directive. The following 13 were assessed as being in bad status in 2007:

Code Habitat name

- 1150 Coastal lagoons
- 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)
- 2140 Decalcified fixed dunes with Empetrum nigrum
- 2150 Atlantic decalcified fixed dunes (Calluno-Ulicetea)
- 21A0 Machairs
- 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia)
- 6230 Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas
- 7110 Active raised bogs
- 7130 Blanket bog (*active only)
- 7210 Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae
- 7220 Petrifying springs with tufa formation (Cratoneurion)
- 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)
- 91J0 Taxus baccata woods of the British Isles

Ireland has not selected any SACs for priority species as listed in Annex II of the Habitats Directive.

Species listed in Annex I of the Birds Directive that breed in Ireland, which are regarded as priorities for conservation measures include corncrake (*Crex crex*), dunlin (*Calidris alpine schinzii*), merlin (*Falco columbarius*), hen harrier (*Circus cyaneus*), tern species (*Sterna dougallii*, *S. albifrons*, *S. sandvicensis*, *S paradisaea* and *S. hirundo*), petrels (*Hydrobates pelagicus* and *Oceanodroma leucorhoa*), golden plover (*Pluvialis apricaria*), red-throated diver (*Gavia stellata*) and chough (*Pyrrhocorax pyrrhocorax*). Wintering Annex I species, such as whooper swan (*Cygnus cygnus*), Greenland white-fronted goose (*Anser albifrons flavirostris*) and barnacle goose (*Branta leucopsis*) also require ongoing specific conservation measures.

Meaningful stakeholder involvement is essential for successful management planning and the implementation of conservation management measures throughout Natura 2000 and beyond. Thus, consultation, communication, provision of information and training are considered to be priority measures that are inherently linked to conservation measures for habitats and species.

Peatlands:

The restoration of hydrology and conservation management of three peatland habitats (7110, 7130 and 91D0) will be a priority during the period 2014-2020. It is intended that the proposednational Peatland Strategy will provide a framework for all Ireland's peatlands, in particular Natura 2000 peatland habitats. The national SAC raised bog management plan, in turn, will set out an overall approach to managing Ireland's entire national SAC raised bog resource. As part of this, restoration plans for each of the 53 raised bog SACs will be prepared and implemented. It is intended that the approach adopted in relation to Ireland's blanket bog SAC resource will include management of traditional turf cutting as well as conservation and restoration measures. DAHG will seek to put in place targeted measures for peatlands and associated habitats to contribute to restoration and consolidation of Annex I habitats.

Overgrazing and undergrazing:

It is proposed that targeted agri-environmental measures will address both overgrazing and undergrazing issues on blanket bog and associated habitats.

Agri-environmental schemes:

Development of agri-environmental schemes that can offer targeted measures and deliver tangible outcomes for farmed land within Natura 2000 will be essential for improving the conservation status of these and other priority habitats such as limestone pavements (8240) and associated habitats; species-rich calcareous grassland (6210); fixed dunes (2130, 2140, 2150); machair (21A0); turloughs (3180); and species-rich *Nardus* grassland (6230) also require targeted agri-environmental measures. Targeted measures will also be necessary for some Annex I bird species such as corncrake and breeding waders and wintering geese and swans.

Woodland habitats:

The priority woodland habitats (91D0, 91E0, 91J0) require measures such as management of invasive alien species and control of grazing (including by deer). It is proposed that deer management in Natura 2000 will be part of an overall national deer management strategy. Fragmentation of Annex I woodland habitats needs to be addressed by encouraging woodland expansion both within and beyond Natura 2000.

Wetlands:

The ecological requirements of some wetland habitats, particularly blanket bog (7130) and groundwater dependant habitats such as *Cladium* fen (7210) are currently poorly understood. In order to improve their conservation status, it will be necessary to undertake baseline ecological work and to develop survey and assessment methods leading to investigations of parameters such as water quality and hydrology.

F.2 Summary of priorities for other habitats and species covered by nature Directives having regard to the need for measurable progress on nature subtarget under EU 2020 biodiversity strategy (Habitats and Birds Directives) and for ensuring good functioning of Natura 2000 network (SACs + SPAs)

Management of non-priority Annex I habitats, Annex II species and bird species are often linked to that of associated priority habitats, as outlined in section F1 and measures that have already been outlined there will not necessarily be mentioned in this section.

The non-priority Annex I habitats for which Ireland has selected SACs, which were listed as being in bad status in 2007 are as follows:

Code	Habitat name
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)
2120	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)
2190	Humid dune slacks
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae
	and/or of the Isoëto-Nanojuncetea
3140	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation
3160	Natural dystrophic lakes and ponds
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-
	Batrachion vegetation
4010	Northern Atlantic wet heaths with Erica tetralix
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)
7140	Transition mires and quaking bogs
7230	Alkaline fens

The Annex II species that were listed as being in bad status in 2007 are:

Old sessile oak woods with *Ilex* and *Blechnum* in British Isles

Code Species name 1016 Desmoulin's whorl snail (Vertigo moulinsiana) 1029 Freshwater pearl mussel (Margaritifera margaritifera) 1103 Twaite shad (Alosa fallax fallax) 1106 Salmon (Salmo salar) 1990 Nore pearl mussel (Margaritifera durrovensis)

Under the Birds Directive, Member States must designate SPAs for regularly occurring migratory species. Out of over 40 bird species for which Ireland has selected SPAs under Article 4.2, the majority have either been red or amber as listed in the Birds of Conservation Concern. This can be broadly broken down into breeding seabirds including manx shearwater (*Puffinius puffinius*), razorbill (*Alca torda*) and puffin (*Fratercula arctica*); wintering waterbirds including scaup (*Aythya marila*), pochard (*Aythya ferina*) and dunlin (*Calidris alpina*).

Farmed habitats, particularly heaths, grasslands, saltmarshes and dunes as well as their associated species will require targeted agri-environmental measures. Other Annex I habitats adjacent to farmed land such as lakes and fens can also benefit. It is proposed that specific

agri-environmental measures be developed for species, which are in poor/bad status, such as freshwater pearl mussel (*Margaritifera* spp.).

Freshwater Pearl Mussel:

Improving the status of freshwater pearl mussel is a priority and a strategy has already been outlined that aims to ensure the long-term survival of the species as well as maintaining its broad geographic range. Updating Water Framework Directive sub-basin management plans and the implementation of the measures within these plans will be essential elements for improving the status of the species during this period. The development of sub-basin management plans for other freshwater habitats and species listed in the Habitats Directive will identify measures necessary for improving their conservation status.

Protecting Marine Natura 2000:

As a diverse range of fishing activities and aquaculture occur in many marine Natura 2000 sites, a key activity in managing risks to designated features will involve more strategic planning of these activities, which may require constraints to and/or modification of existing practices. Scientific studies are required to assess and monitor impacts of activities and to support the design of mitigation measures.

F.3 Strategic priorities in relation to investments in Natura 2000 linked to green tourism and jobs, to support climate change mitigation and adaptation or other ecosystem benefits, for research, education, training, awareness and promotion of co-operation (including cross-border) linked to Natura 2000 management

Additional benefits of Peatland Conservation:

It is anticipated that restoration and maintenance of peatlands as outlined in F.1 will have benefits both in terms of arresting erosion and improving carbon storage and sequestration as well as providing higher capacity for water retention. The latter is a natural flood mitigation measure and also has the capacity to improve water quality by slowing water flows and reducing run-off.

At present, many communities who have been required to cease cutting turf do not see benefits from protecting important peatlands. It will be necessary it will be necessary to support conservation and restoration measures with additional management regimes, including appropriate development of facilities. Management measures include the maintenance of existing access routes and tackling illegal dumping. Infrastructural development will include putting in place new low impact walking routes, observation hides, information panels etc. Community involvement in delivering these initiatives will also be supported. Restoration and maintenance of peatlands will have benefits for tourism and recreation activities throughout the country.

Improving water quality:

Targeted agri-environmental measures and forestry measures will also improve water quality.

Coastal Protection:

Protection and improvement of coastal habitats will provide better resilience to coastal flooding.

Benefits to Commercial Fish Stocks:

Fisheries measures that aim to maintain and improve the status of Annex I marine habitats, Annex II species and marine birds will have benefits beyond Natura 2000 and can potentially benefit commercially exploited species.

Additional Opportunities under the RDP:

One of the three objectives in the European Union's Rural Development Policy post-2013 is the sustainable management of natural resources. The achievement of this objective is to be pursued through six Union priorities, including through "restoring, preserving and enhancing ecosystems dependent on agriculture", focusing on biodiversity (including Natura 2000 and High Nature Value farming) and the state of European landscapes. The proposals on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) outline the range of measures available to Member States including agri-environment schemes, thematic sub-programmes, co-operation measures and advisory services. The Commission's proposal states that agri-environment schemes are to give specific attention to the additional needs of farming systems that are of high nature value and this will be explored fully.

Benefits for Tourism and Recreation:

Provision of infrastructure to facilitate ecologically sustainable access along with information and publicity material will encourage greater use of certain areas. This will have knock-on benefits for local communities both via direct employment and wider services.

Co-operation with Northern Ireland:

Strategic planning between the Republic of Ireland and Northern Ireland will facilitate complementary planning, management and monitoring in Natura 2000 sites that are transboundary.

G Description of key measures to achieve priorities

G.1.a General Priority Measures for Natura 2000

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
1	Ongoing habitat	Information, training and publicity material at	All Natura 2000	EAFRD, ERDF, EMFF,
	management and	site level to raise awareness of conservation		LIFE, National public
	monitoring- 20, 21, 22	requirements. To be aimed at both the general		
		public and specific sectors with the intention of		
		positively changing attitudes and behaviours		
2	Management planning-	Setting detailed site-specific conservation	All Natura 2000	National public
	5, 8	objectives		
3	Ongoing habitat	Ongoing national habitat and species monitoring	All habitats and species listed in	National public
	management and	to facilitate Article 17 Habitats Directive and	the Birds and Habitats Directives	
	monitoring- 20, 21, 22	Article 12 Birds Directive reporting		
4	Ongoing habitat	Development of monitoring schemes to assess	All Natura 2000	EAFRD, ERDF, EMFF,
	management and	efficacy and value for money of management		LIFE, National public
	monitoring- 17, 19	measures		
5	Management planning-	Development of agri-environmental schemes	All farmed Natura 2000; also	EAFRD, ERDF, LIFE,
	5, 8	that pay farmers to manage habitats/habitats for	target areas for multiple benefits	National public
		species in favourable conservation condition,	such as HNV, freshwater pearl	
		including necessary scientific research	mussel catchments	
6	Ongoing habitat	Conservation and management practices in	Wider countryside that is	LIFE, EAFRD, National
	management and	wider farming countryside, which would be	ecologically linked to Natura	public
	monitoring- 12, 13, 14,	complementary and essential to the proper	2000	
	15, 16	functioning of the Natura network	41137 . 2000	EARD EDDE ELEE
7	Establishment of Natura	Establishment of pilot projects that develop and	All Natura 2000	EAFRD, ERDF, EMFF,
	2000- 4	demonstrate: best practice measures;		LIFE, National public, Private
		management advice; advisory services to		sources
		farmers; favourable conservation status;		
0	34	community involvement and stewardship	T 1N 2000 '.	EAEDD EDDE LIEE M.C.
8	Management planning-	Establishment and running of partnership	Targeted Natura 2000 sites	EAFRD, ERDF, LIFE, National
	6, 9	bodies/stakeholder groups to co-ordinate nature		public, Private sources
		conservation measures in wider landscape		
		encompassing SACs and SPAs		

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
9	Management planning-	Preparation of management plans for selected	Targeted Natura 2000 sites	ERDF, LIFE, National public
	5	SACs and SPAs; ensure objectives for		
		overlapping designations do not conflict		

^{*}Funding sources: EAFRD; ERDF, EFF; ESF, LIFE, National public, Private sources

G.1.b Priority Measures for Natura 2000 agricultural and forest habitats and species

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
10	Ongoing habitat management and monitoring- 15, 16, 17, 19, 20, 21	Agri-environmental measures to facilitate appropriate management of farmed upland habitats and associated habitats and species	Blanket bog, heaths, <i>Nardus stricta</i> grassland, slender naiad, hen harrier, peregrine falcon, merlin, ring ouzel, breeding waders, chough, red grouse, <i>Vertigo geyeri</i>	EAFRD, LIFE, National public
11	Ongoing habitat management and monitoring- 15, 16, 17, 19, 20, 21	Agri-environmental measures to facilitate appropriate management of farmed wet and dry grasslands and associated habitats, including coastal systems and associated species	Hay meadows, orchid-rich calcareous grasslands, turloughs, dunes, machair, saltmarshes, fens; corncrake, breeding waders, grey partridge, chough, geese and swans; marsh fritillary, <i>Vertigo</i> species	EAFRD, LIFE, National public
12	Ongoing habitat management and monitoring- 14, 15, 17, 18, 19, 20, 21	Planning and implementing agri-environmental measures for management of invasive species	Farmed Natura 2000	EAFRD, LIFE, National public
13	Management planning- 5, 8	Development of specific agri-environmental measures for species listed in Habitats and Birds Directive	Including natterjack toad, lesser horseshoe bat, freshwater pearl mussel, corncrake, breeding waders	EAFRD, ERDF, LIFE, National public
14	Ongoing habitat management and monitoring- 13, 15, 16, 17, 19, 20	Implementation of specific agri-environmental measures for species	Including natterjack toad, lesser horseshoe bat, freshwater pearl mussel, corncrake, breeding waders	EAFRD, ERDF, LIFE, National public

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
15	Investment costs- 24	Specific agri-environmental infrastructural measures for species, such as bat roost repair/restoration, new ponds for natterjack toads	Including natterjack toad, lesser horseshoe bat, breeding waders	EAFRD, LIFE, National public, Private sources
16	Management planning- 5, 8	Development of measures, within appropriate schemes, to improve conservation condition and consolidate existing woodland habitats and increase connectivity	Woodland habitats	EAFRD, ERDF, LIFE, National public
17	Ongoing habitat management and monitoring- 12, 13, 14, 15, 16, 17, 18, 19	Implementation of measures to restore/maintain peatlands and riparian habitats	Peatland habitats in afforested landscapes (planted and unplanted)	EAFRD, ERDF, LIFE, National public
18	Ongoing habitat management and monitoring- 12, 13, 14; 15, 16, 17, 18, 19	Implementation of measures to restore/maintain and expand woodland habitats of high conservation value in order to reduce fragmentation and encourage connectivity	Woodland habitats and associated species	EAFRD, ERDF, LIFE, National public
19	Ongoing habitat management and monitoring- 14, 15, 17, 18, 19, 20, 21	Planning and implementation of measures for management of invasive alien species in woodlands and adjacent habitats	Woodlands, heaths and associated habitats, Kerry slug	EAFRD, ERDF, LIFE, National public
20	Management planning- 5, 8	Development of specific forestry measures for species listed in Habitats and Birds Directive, including necessary scientific research	Including hen harrier, merlin, nightjar, freshwater pearl mussel, salmon, otter, Kerry slug, lesser horseshoe bat	EAFRD, ERDF, LIFE, National public
21	Ongoing habitat management and monitoring- 12, 13, 14, 15, 16, 17, 18, 19	Development of practical mitigation and alternative forestry practices in freshwater pearl mussel catchments	Freshwater pearl mussel, salmonid spp.	ERDF, LIFE, National public
22	Ongoing habitat management and monitoring- 13	Implementation of specific forestry measures/plans for species	Including hen harrier, merlin, nightjar, kingfisher, freshwater pearl mussel, salmon, otter	EAFRD, ERDF, LIFE, National public

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
23	Ongoing habitat	Deer management in Natura 2000 sites as part of	Woodlands, heaths and associated	EAFRD, LIFE, National
	management and	a national deer management strategy	habitats	public, Private sources
	monitoring- 14, 15, 17,			
	19, 20, 21			

^{*}Funding sources: EAFRD; ERDF, EFF; ESF, LIFE, National public, Private sources

G.1.c Priority Measures for Natura 2000 marine and coastal habitats and species

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
24	Ongoing habitat management and monitoring- 17	Monitoring and surveying, e.g. SCANS III	Cetaceans, seals, reefs	LIFE; EMFF; National public
25	Management planning- 5, 7, 8, 11	Preparation of sectoral (e.g. fisheries and aquaculture) management plans	Marine Natura 2000; marine birds	EMFF; National public
26	Ongoing habitat management and monitoring- 15, 17	Implementation of sectoral management plans. Habitat and species monitoring in relation to sectoral management plans and activities, identification and development of indicators of pressures and impacts and assessment of conservation status	Marine Natura 2000; marine birds	EMFF; National public
27	Ongoing habitat management and monitoring- 15, 16, 17, 19	Management of fisheries, aquaculture and other activities surrounding sensitive habitats and species	Marine Natura 2000; marine birds	EMFF; National public
28	Management planning- 5	Scientific studies to assess impact of fisheries, aquaculture and other activities and to support the design of mitigations against such impacts	Marine Natura 2000; marine birds	EMFF; National public
29	Management planning- 5	Scientific studies on connectivity between sites in the marine network	Marine Natura 2000	LIFE; EMFF; National public
30	Management planning- 5, 7	Development of restoration plans for limited number of lagoons (reported as being in bad condition)	Lagoons	LIFE, National public

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
31	Ongoing habitat management and monitoring- 12, 15, 16, 17, 18, 19, 21	Appropriate management regimes for lagoons, including implementation of restoration plans	Lagoons	ERDF, LIFE, National public
32	Investment costs- 24	Infrastructure for water management where necessary	Lagoons	ERDF, LIFE, National public
33	Management planning- 5	Scientific research in relation to the restoration of natural dynamics of coastal systems	Coastal systems with Annex I habitats	ERDF, LIFE, National public
34	Management planning- 5, 7			ERDF, LIFE, National public
35	Ongoing habitat management and monitoring- 12, 15, 16, 17, 18, 19, 21	Appropriate management regimes for sites selected for dune habitats, including, where necessary, implementation of restoration plans	Dune habitats	ERDF, LIFE, National public, Private sources
36	Investment costs- 24	Infrastructure necessary for dune restoration	Dune habitats	ERDF, LIFE, National public
37	Ongoing habitat management and monitoring- 17, 19	Monitoring and acquisition of additional information on breeding seabird colonies	Breeding seabirds	ERDF, National public, LIFE
38	Establishment of Natura 2000- 2, 3	Scientific studies to gather information in relation to aggregations of non-breeding marine birds to underpin SPA designations	Seabirds	LIFE, National public
39	Ongoing habitat management and monitoring- 13, 15, 18, 19, 20, 21	Implementation of measures for the provision of suitable habitat for and protection of colonial breeding birds and breeding seabirds, including control of mammalian predators	Colonial breeding birds (e.g. tern species) and breeding seabirds (e.g. storm petrel)	ERDF, LIFE, National public
40	Investment costs- 24	Specific infrastructural measures for colonial breeding birds and breeding seabirds, such as tern rafts, repair of built stone structures	Colonial breeding birds (e.g. tern species) and breeding seabirds (e.g. storm petrel)	ERDF, LIFE, National public, Private sources

^{*}Funding sources: EAFRD; ERDF, EFF; ESF, LIFE, National public, Private sources

G.1.d Priority Measures for Natura 2000 wetlands habitats and species (including peatlands)

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*	
41	Management planning- 5, 7, 8	Development and review of national raised bog management plan in the context of the National Peatlands Strategy	National raised bog resource	National public	
42	Management planning- 5, 6, 7, 8, 9, 10	Preparation of hydrological restoration plans for raised bog sites	Raised bog SACs	National public	
43	Ongoing habitat management and monitoring- 12, 15, 16, 17, 18, 19, 20, 21	Implementation of hydrological restoration plans for raised bog sites	Raised bog SACs	EAFRD, ERDF, LIFE, National public	
44	Investment costs- 23, 24	Infrastructure required for raised bog restoration. Land purchase if necessary	Raised bog SACs	EAFRD, ERDF, LIFE, National public	
45	Management planning- 5, 7, 8	Preparation of blanket bog peat cutting assessment in the context of the National Peatlands Strategy Blanket bog and related species		National public	
46	Ongoing habitat management and monitoring- 12, 15, 16, 17, 18, 19, 20, 21	Implementation of measures to manage or restore blanket bog damaged by peat cutting and other activities	Blanket bog SACs; Habitat for merlin, hen harrier, curlew, red grouse	EAFRD, ERDF, LIFE, National public	
47	Management planning- 5	Scientific studies to investigate ecological requirements, particularly water quality and hydrology	Selected water dependant habitats and species, particularly blanket bog; groundwater dependant habitats such as fens; hard-water lakes; <i>Vertigo</i> species	LIFE, National public	
48	Ongoing habitat management and monitoring- 12, 15	Implementation of necessary measures resulting from investigations of ecological requirements	Selected water dependant habitats and species, particularly blanket bog; groundwater dependant habitats such as fens; hard-water lakes; <i>Vertigo</i> species	EAFRD, ERDF, LIFE, National public	
49	Ongoing habitat management and monitoring- 17, 19	National fen survey	Fens and associated habitats	National public	

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
50	Ongoing habitat management and monitoring- 14, 15, 17, 19, 20, 21	Planning and implementing measures for management of invasive alien species in freshwater habitats	Lakes and rivers; freshwater crayfish	LIFE, National public
51	Management planning- 5, 8	Development and updating of Water Framework Directive sub-basin management plans	Freshwater Natura 2000	National public
52	Ongoing habitat management and monitoring- 12, 15, 16	Implementation of measures contained in Water Framework Directive sub-basin management plans	Freshwater Natura 2000	EAFRD, ERDF, LIFE, National public
53	Ongoing habitat management and monitoring- 13, 17, 18, 19, 20, 21	Implementation of measures for the conservation of fish species in freshwater	Salmon, twaite shad, lamprey species	ERDF, LIFE, National public
54	Investment costs- 25	Works necessary (e.g. removal of artificial barriers; construction of fish passes) to improve access for fish species	Salmon, twaite shad, lamprey species	ERDF, LIFE, National public, Private sources
55	Management planning- 5	Scientific studies to investigate ecological requirements of breeding and non-breeding waterbirds associated with freshwater lakes	Breeding and non-breeding waterbirds including pochard, goldeneye, common scoter	LIFE, National public
56	Ongoing habitat management and monitoring- 12, 15	Implementation of necessary measures for the conservation of breeding and non-breeding waterbirds associated with freshwater lakes	Breeding and non-breeding waterbirds including pochard, goldeneye, common scoter	EAFRD, ERDF, LIFE, National public

^{*}Funding sources: EAFRD; ERDF, EFF; ESF, LIFE, National public, Private sources

G.2 Other priority measures

G.2.a Priority Measures for securing ecosystem benefits of Natura 2000, especially in relation to climate change mitigation and adaptation

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
57	Management planning- 5	Modelling of future scenarios of climate change impacts on Natura 2000, including	All susceptible Natura 2000	ERDF, LIFE, National public
		vulnerability mapping		
58		Measures outlined in G.1.b and G.1.d for		
		maintenance and restoration of peatland		
		habitats will secure benefits in relation to		
		carbon storage and sequestration as well as		
		providing higher capacity for water retention		

^{*}Funding sources: EAFRD; ERDF, EFF; ESF, LIFE, National public, Private sources

G.2.b Priority Measures for promoting sustainable tourism and employment in relation to Natura 2000

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
59	Ongoing habitat	Provision of information and publicity material	All Natura 2000 including	EAFRD, ERDF, LIFE,
	management and	for awareness raising including establishing	targeted state-owned land	National public
	monitoring- 20	communication networks, producing		
		newsletters and setting-up and maintaining		
		websites etc.; Developing volunteer		
		programmes		
60	Ongoing habitat	Maintenance of facilities to encourage	All Natura 2000 including	EAFRD, ERDF, LIFE,
	management and	sustainable public access and use and to	targeted state-owned land	National public
	monitoring- 22	encourage appreciation of Natura 2000, such		
		as trails, carparks and interpretative material		
61	Investment costs- 25	Development of infrastructure to encourage	All Natura 2000 including	EAFRD, ERDF, LIFE,
		sustainable tourism and appreciation of Natura	targeted state-owned land	National public
		2000 such as trails, signage and visitor centres		

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
62	Management planning- 5	Scientific research to examine socio-economic	All Natura 2000	ERDF, LIFE, National public
		role, potential and impact of Natura 2000 in		
		providing employment and tourism		
		opportunities		

^{*}Funding sources: EAFRD; ERDF, EFF; ESF, LIFE, National public, Private sources

G.2.c Priority Measures to promote innovative approaches in relation to Natura 2000

Number	Type of activity	Description of measure	Target species/habitats/sites	Potential Financing sources*
63	Establishment of Natura 2000- 2, 4	Research and development of innovative techniques appropriate to Ireland to address inventory, assessment and surveillance requirements (e.g. radar, hyperspectral imagery, unmanned aerial systems)	All Natura 2000	EAFRD, ERDF, LIFE, National public
64	Management planning- 5, 6, 7, 8, 9	Co-operation between Republic of Ireland and Northern Ireland to ensure complementary management planning on cross-border Natura 2000 sites	-operation between Republic of Ireland and rthern Ireland to ensure complementary nagement planning on cross-border Natura Transboundary (RoI/NI) Natura 2000	
65	Ongoing habitat management and monitoring- 12, 13, 17, 18, 19, 20, 21	Implementation of agreed cross-border management measures	Transboundary (RoI/NI) Natura 2000	EAFRD, ERDF, EMFF, LIFE, National public
66	Investment costs- 25	Infrastructure required for management of cross-border Natura 2000 sites	Transboundary (RoI/NI) Natura 2000	EAFRD, ERDF, EMFF, LIFE, National public
67	Ongoing habitat management and monitoring- 15	Implementation of measures to better integrate modified forest landscapes with Natura 2000 with the aim of restoring extent and connectivity of Annex I habitats and habitats for species	Targeted state-owned land, particularly in peatland and afforested habitats (such as the Mayo Wilderness Project)	EAFRD, ERDF, LIFE, National public

^{*}Funding sources: EAFRD; ERDF, EFF; ESF, LIFE, National public, Private sources

G.3 Summary table of priority measures per habitat type and species

All habitats and species listed in Annex I and Annex II respectively of the Habitats Directive are listed; selected bird species listed in Annex I of the Birds Directive, as well as other significant species and species groups are also listed.

Measures are numbered as per the first column in the above tables. Measures that are not specific to particular habitats or species are not necessarily listed in this summary table.

Featur	re (habitat type or species)	Conservation status	Pressures and threats (codes	from HD Article 17 report)	Priority measure (from
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
1110	Sandbanks which are slightly covered by sea water all the time	U1	212 220 490 860	300 320 490 900 944 954	24, 25, 26, 27, 28, 29
1130	Estuaries	U1	200 220 400 420 490 502 504 701 802 810	200 220 400 420 490 502 504 701 802 810	24, 25, 26, 27, 28, 29
1140	Mudflats and sandflats not covered by seawater at low tide	U1	200 210 221 244 300 422 490 504 509 701	200 210 221 244 300 422 490 504 509 701	24, 25, 26, 27, 28, 29
1150	Coastal lagoons	U2	200 220 302 400 410 601 604 608 701 800	400 410 701 810 850 851 852 853 860 900	30, 31, 32
1160	Large shallow inlets and bays	U1	200 210 220 244 400 420 502 504 701 802	200 210 220 244 400 420 502 504 701 802	24, 25, 26, 27, 28, 29
1170	Reefs	U1	210 240 250 701 954 990	210 240 250 701 954 990	24, 24, 25, 26, 27, 28, 29
1210	Annual vegetation of drift lines	U1	140 302 622 623 690 720 871	140 302 622 623 690 720 871	33, 34, 35, 36
1220	Perennial vegetation of stony banks	U1	302 423 530 622 623 720 871 900	302 423 530 622 623 720 871 900	33
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	U1	120 140 150 180 311 403 420 502 601 608	120 140 150 180 311 403 420 502 601 608	33
1310	Salicornia and other annuals colonizing mud and sand	U1	140 402 622 800 802 954	140 402 622 900 954	33
1330	Atlantic salt meadows (Glauco- Puccinellietalia maritimae)	U1	140 400 402 419 422 423 490 501 622 800	140 402 422 423 800 802 871 900 954	11, 33
1410	Mediterranean salt meadows (Juncetalia maritimi)	U1	140 402 422 423 490 501 800 802 900	140 402 422 423 490 501 800 802 900	11, 33

\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Conservation status	Pressures and threats (codes from HD Article 17 report)		Priority measure (from
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	U2	140 501 622 623 900 954 990	140 501 622 623 900 954 990	11, 33
2110	Embryonic shifting dunes	U1	300 302 622 623 720 871 900	622 623 720 871 900 990	33, 34, 35, 36
2120	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")	U2	140 300 302 501 622 623 720 871 900	140 300 302 501 622 623 720 871 900 990	11, 33, 34, 35, 36
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	U2	102 120 140 141 150 171 180 300 400 402	102 120 140 141 150 171 180 300 400 402	11, 33, 34, 35, 36
2140	Decalcified fixed dunes with Empetrum nigrum	U2	140 150 171 301 971	140 150 171 301 971	11, 33, 34, 35, 36
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	U2	140 150 171 301 971	140 150 171 301 971	11, 33, 34, 35, 36
2170	Dunes with <i>Salix repens</i> ssp <i>argentea</i> (Salicion arenariae)	U1	140 150 160 171 430 622 720 954 971	140 150 160 171 430 622 720 954 971	11, 33, 34, 35, 36
2190	Humid dune slacks	U2	120 140 150 160 171 601 622 623 720 810	120 140 150 160 171 601 622 623 720 810	11, 33, 34, 35, 36
21A0	Machairs (in Ireland)	U2	120 140 150 171 300 400 403 421 423 430	140 402 601 607 623 720 871 900 990	11, 33, 34, 35, 36
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	U2	120 140 160 310 700 954	120 140 160 310 403 600 700 954	50, 51, 52
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoeto-Nanojuncetea	U2	120 140 160 310 700 954	120 140 160 310 403 600 700 954	50, 51, 52
3140	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp	U2	120 140 160 310 700 954	120 140 160 310 403 600 700 954	47, 48, 50, 51, 52

Feature (habitat type or species)		Conservation status	1 /		Priority measure (from
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	U2	120 140 160 700 954	120 140 160 403 600 700 954	50, 51, 52
3160	Natural dystrophic lakes and ponds	U2	140 150 160 180 310 311 810	140 150 160 180 312 810	50, 51, 52
3180	Turloughs	U1	810 709 403 140 301 311	709 403 140 301 890	11, 51, 52
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	U2	120 140 160 180 220 310 420 700 810 900	120 140 160 310 700 954	50, 51, 52
3270	Rivers with muddy banks with Chenopodion rubri pp and Bidention pp vegetation	FV	810 890	803 810 890	51, 52
4010	Northern Atlantic wet heaths with <i>Erica tetralix</i>	U2	140 160 161 180 502 512 800 810 900 954	140 160 161 180 410 502 512 800 810 900	10,
4030	European dry heaths	U1	140 141 160 161 180 120 300	140 141 160 161 180 120 300	10,
4060	Alpine and Boreal heaths	U1	140 180 301 500 510 513 530 610 622 623	140 180 301 500 510 513 530 610 622 623	10,
5130	Juniperus communis formations on heaths or calcareous grasslands	U1	120 140 141 180 600 800 990	140 141 151 180 930 954 990	11
6130	Calaminarian grasslands of the Violetalia calaminariae	U1	420 501 900	141 420 501 900	11
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	U2	120 140 141 301 954	120 140 141 301 954	11
6230	Species-rich <i>Nardus</i> grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	U2	120 140 160 954	120 140 160 954	10,

Feature (habitat type or species)		Conservation status	1 /		Priority measure (from
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	U2	140 141 810	140 141 810	11
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	U1	811 870 954	811 870 954	11
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	U2	102 140 141 150 400 502 800 810 852	102 140 141 400 810	11
7110	Active raised bogs	U2	150 160 161 180 310 311 312 810 954	150 160 180 312 810 954	41, 42, 43, 44
7120	Degraded raised bogs still capable of natural regeneration	U1	150 160 161 180 310 311 312 810 954	150 160 180 312 810 954	41
7130	Blanket bogs (if active bog)	U2	140 160 161 180 301 310 311 312 421 502	140 160 180 310 311 312 403 511 622 810	10, 17, 45, 46, 47, 48
7140	Transition mires and quaking bogs	U2	140 150 161 310 311 312 701 800 803 810	140 150 310 312 701 800 803 810 890	
7150	Depressions on peat substrates of the Rhynchosporion	FV	140 161 180 312 810 900	140 161 180 312 800 810 900 954	
7210	Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae	U2	140 150 161 310 311 312 701 800 803 810	140 150 310 312 701 800 803 810 890	47, 48, 49
7220	Petrifying springs with tufa formation (Cratoneurion)	U2	140 150 310 800 803 810 890	140 150 310 800 803 810 890	47, 48, 49
7230	Alkaline fens	U2	140 150 161 310 311 312 701 800 803 810	140 150 310 312 701 800 803 810 890	47, 48, 49
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	U1	140 301 390 501 530 610 624 702 720	140 501 530 610 624 702 720	10
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	U1	140 390 624	140 390 702	10

Feature (habitat type or species) Conse		Conservation status	tion status Pressures and threats (codes from HD Article 17 report)		Priority measure (from
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
8210	Calcareous rocky slopes with chasmophytic vegetation	U1	140 390 624	140 390 702	10
8220	Siliceous rocky slopes with chasmophytic vegetation	U1	140 301 390 501 530 610 624 702 720	140 390 501 530 610 624 702 720	10
8240	Limestone pavements	U1	141 171 301 390 403 500 690 740	141 171 390 850	11
8310	Caves not open to the public	FV	400 421 502 624 740 941	400 421 502 624 740 941	13, 14, 15
8330	Submerged or partially submerged sea caves	FV	701	701	24, 25, 26, 27, 28, 29
91A0	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	U2	140 160 400 500 954	140 160 400 500 954	16, 18, 19, 23
91D0	Bog woodland	U1	180 312 810	180 312 810	16, 18, 19, 23
91E0	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)	U2	160 400 500 810 954	160 400 500 810 954	16, 18, 19, 23
91J0	Taxus baccata woods of the British Isles	U2	140 954	140 954	16, 18, 19, 23
1013	Geyer's whorl snail (Vertigo geyeri)	U1	100 110 120 140 141 161 171 310 501 622 623 800 810 850	100 110 120 140 141 161 171 310 400 500 501 622 623 800 810 840 850 990	10, 11, 47, 48
1014	Narrow-mouthed whorl snail (Vertigo angustior)	U1	100 110 120 140 141 171 190 300 501 601 608 622 623 810 900	100 110 120 140 141 171 190 300 400 500 501 601 608 622 623 810 871 900 990	11, 47, 48
1016	Desmoulin's whorl snail (Vertigo moulinsiana)	U2	100 110 120 140 161 171 180 310 500 501 622 701 800 810 852	100 110 120 140 161 171 180 310 500 501 622 701 800 810 852 400 840 990	11, 47, 48
1024	Kerry slug (Geomalacus maculosus)	FV	101 110 140 151 160 162 180 403 502 954	101 110 140 151 160 162 180 403 502 702 954	19, 20

Feature (habitat type or species) Conservation status		Pressures and threats (codes from HD Article 17 report)		Priority measure (from	
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
1029	Freshwater pearl mussel (Margaritifera margaritifera)	U2	101 110 120 140 150 160 171 220 240 300 301 310 330 400 410 420 421 422 423 500	101 110 120 140 150 160 171 220 240 300 301 310 330 400 410 420 421 422 423 500	13, 14, 15, 20, 21, 22, 51, 52
1065	Marsh fritillary (Euphydryas aurinia)	U1	141 400 502	141 400 502	11
1092	White-clawed crayfish (Austropotamobius pallipes)	U1	140 220 310 330 420 500 701 810 820 830 952 963	140 310 220 420 502 701 952 954 963	50, 51, 52
1095	Sea lamprey (Petromyzon marinus)	U1	220 290 330 701 810 811 820 850 853	220 290 701 810 811 820 850 853	53, 54
1096	Brook lamprey (Lampetra planeri)	FV	220 290 330 701 810 811 820 850 853	220 290 701 810 811 820 850 853	53, 54
1099	River lamprey (Lampetra fluviatilis)	FV	220 290 330 701 810 811 820 850 853	220 290 701 810 811 820 850 853	53, 54
1102	Allis shad (Alosa alosa)	XX	212 213 220 701 850 964	212 220 701 850 964	53, 54
1103	Twaite shad (Alosa fallax)	U2	212 213 220 701 850 964	212 220 701 850 964	53, 54
1106	Atlantic salmon (Salmo salar)	U2	100 110 120 140 160 161 200 211 213 220 243 300 301 312 330 331 400 420 421 422	100 110 120 140 160 161 200 210 243 300 301 310 312 330 331 400 420 421 422 502	20, 21, 22, 53, 54
1303	Lesser horseshoe bat (<i>Rhinolophus hipposideros</i>)	FV	110 141 151 160 400 502 624 740	110 141 151 160 400 502 624 740 941	13, 14, 15, 20

Feature (habitat type or species) Conservation		Conservation status	s Pressures and threats (codes from HD Article 17 report)		Priority measure (from
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
1349	Bottlenose dolphin (<i>Tursiops</i> truncatus)	FV	210 212 213 701 710 790	210 212 213 701 710 790	24, 25, 26, 27, 28, 29
1351	Harbour porpoise (<i>Phocoena</i> phocoena)	FV	210 213 690 701 710 790 990	210 213 690 701 790 990	24, 25, 26, 27, 28, 29
1355	Otter (Lutra lutra)	U1	110 120 151 164 210 230 243 300 302 310 312 400 401 410 420 422 423 424 502 507	110 120 151 164 210 230 243 300 302 310 312 400 401 410 420 422 423 424 502 507	20, 22
1364	Grey seal (Halichoerus grypus)	FV	200 210 211 212 213 230 300 320 530 600 621 690 700 710 860 944 962 963	200 211 212 213 230 530 621 690 700 944 962 963	24, 25, 26, 27, 28, 29
1365	Harbour seal (<i>Phoca vitulina</i>)	FV	200 211 212 230 530 621 690 710 963	200 211 212 230 530 621 690 710 963	24, 25, 26, 27, 28, 29
1393	Slender green feather-moss (Hamatocaulis vernicosus)	FV	120 161 701 810	120 140 141 161 701 810	10
1395	Petalwort (Petalophyllum ralfsii)	FV	120 140 150 171 501 600 620 701 810 900	120 140 141 150 171 600 810 900 920	11
1421	Killarney fern (Trichomanes speciosum)	FV	120 140 164 250 501 620 701 702 850 990	140 164 250 620 690 701 702 850 990	18, 19, 20, 22
1528	Marsh saxifrage (Saxifraga hirculus)	FV	140 800 810	140 810	10
1833	Slender naiad (Najas flexilis)	U1	120 200 421 601 701 800 810 952 954	120 421 701 952 954	10, 51, 52

Feature (habitat type or species)		Conservation status	Pressures and threats (codes from HD Article 17 report)		Priority measure (from
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
1990	Nore freshwater pearl mussel (Margaritifera durrovensis)	U2	101 120 140 150 160 171 220 240 300 301 310 400 410 420 421 500 502 507 700 810	101 120 140 150 160 171 220 240 300 301 310 400 410 420 421 500 502 507 700 810	13, 14, 15, 20, 21, 22, 51, 52
5046	Killarney shad (Alosa killarnensis)	FV	701 853	701 853 954	53, 54
A001	Red-throated Diver (Gavia stellata)	Amber	N/A	N/A	55, 56
A002	Black-throated Diver (Gavia arctica)	Amber	N/A	N/A	55, 56
A003	Great Northern Diver (Gavia immer)		N/A	N/A	55, 56
A014	Storm Petrel (Hydrobates pelagicus)	Amber	N/A	N/A	39, 40
A015	Leach's Petrel (Oceanodroma leucorhoa)	Amber	N/A	N/A	39, 40
A037	Bewick's Swan (Cygnus columbianus)	Amber	N/A	N/A	11
A038	Whooper Swan (Cygnus cygnus)	Amber	N/A	N/A	11
A059	Pochard (Aythya farina)	Amber	N/A	N/A	55, 56
A065	Common scoter (Melanitta nigra)	Red	N/A	N/A	55, 56
A067	Goldeneye (Bucephala clangula)	Amber	N/A	N/A	55, 56
A082	Hen Harrier (Circus cyaneus)	Red	N/A	N/A	10, 22, 46
A098	Merlin (Falco columbarius)	Amber	N/A	N/A	10, 22, 46
A103	Peregrine (Falco peregrinus)	Amber	N/A	N/A	10,
A122	Corncrake (Crex crex)	Red	N/A	N/A	11
A140	Golden Plover (Pluvialis apricaria)	Amber	N/A	N/A	10, 11, 13, 14, 15

Feature (habitat type or species)		Conservation status	1 /		Priority measure (from
code	name	(from HD Article 17 report or BoCCI)	Pressures	Threats	section G of PAF; codes as per column one)
A160	Curlew (Numenius arquata)	Red	N/A	N/A	10, 11, 13, 14, 15
A170	Red-necked Phalarope (<i>Phalaropus lobatus</i>)	Red	N/A	N/A	56
A176	Mediterranean Gull (<i>Larus</i> melanocephalus)	Amber	N/A	N/A	32, 39, 40
A177	Little Gull (Larus minutus)	Amber	N/A	N/A	39, 40
A191	Sandwich Tern (Sterna sandvicensis)	Amber	N/A	N/A	39, 40
A192	Roseate Tern (Sterna dougallii)	Red	N/A	N/A	39, 40
A193	Common Tern (Sterna hirundo)	Amber	N/A	N/A	39, 40
A194	Arctic Tern (Sterna paradisaea)	Amber	N/A	N/A	39, 40
A195	Little Tern (Sterna albifrons)	Amber	N/A	N/A	39, 40
A224	Nightjar (Caprimulgus europaeus)	Red	N/A	N/A	19, 21
A229	Kingfisher (Alcedo atthis)	Amber	N/A	N/A	21
A282	Ring ouzel (Turdus torquatus)	Red	N/A	N/A	10
A346	Chough (Pyrrhocorax pyrrhocorax)	Red	N/A	N/A	10, 11
A395	Greenland White-fronted Goose (Anser albifrons flavirostris)	Amber	N/A	N/A	11
A396	Barnacle Goose (Branta leucopsis)	Amber	N/A	N/A	11
A466	Dunlin (schinzii) (Calidris alpina schinzii)	Amber	N/A	N/A	10, 11, 13, 14, 15
	Wintering waterbirds		N/A	N/A	25, 26, 27, 28, 29
	Breeding waders		N/A	N/A	10, 11, 13, 14, 15
	Breeding seabirds		N/A	N/A	25, 26, 27, 28, 29, 37
	Marine birds		N/A	N/A	24, 25, 26, 27, 28, 38

Section H: Monitoring, evaluation and updating of PAFs

It is envisaged that this (January 2013) version of the Irish PAF will be finalised in the first quarter of the year and will be reviewed regularly throughout the next financial period.

It is recommended (e.g. see measure 4 in G.1.a) that monitoring measures are built into all funding allocations, schemes, projects etc. so that progress and value for money can be adequately assessed. This will facilitate more strategic evaluation of management measures in the future.

The Article 17 status evaluation and reporting process for Natura 2000 in 2013 will provide updates on the status of Annex I habitats and Annex II species. The new process for reporting on status of species listed in the Birds Directive, as envisaged in 2014, will provide updated information on these species. The PAF will be updated as necessary with this information.