

Draft Integrated Local Economic and Community Plan Habitats Directive Assessment Screening Statement

Planning Policy & Projects Unit September, 2015

TABLE OF CONTENTS

1.0	Introduction	2
1.1	Background	2
1.2	Purpose of the Report	2
1.3	Legislative Context	2
2.0	Description OF LECP	3
3.0	The LECP and the County Development Plan	4
4.0	HDA Screening	4
4.1	Introduction	4
4.2	Management of the 'Natura 2000' Sites.	5
4.3	Natura 2000 Site and the Plan Area	5
4.4	Assessment Criteria	6
5.0 Cd	onclusions	10
5.1 Fir	nding of No Significant Effects Matrix	10

1.0 Introduction

1.1 BACKGROUND

The Local Government Reform Act 2014¹ provides a stronger and clearer role for local government in economic development and community development. This is key element in achieving the vision set out in the Action Programme for Effective Local Government, Putting People First (DECLG, 2012) which states that 'local government will be the main vehicle of governance and public service at local level, leading economic, and social and community development'².

The Local Economic and Community Plan (LECP) is prepared in accordance Section 44 of the Local Government Reform Act 2014 and consists of two elements: A local economic element (prepared and adopted by the local authority) and a community development element (prepared and adopted by the Local Community Development Committee (LCDC).

The purpose of the LECP is to identify objectives and implement actions to strengthen and develop the economic and community dimensions of County Tipperary over a six year period. In this regard, the delivery of objectives and/or actions may be by Tipperary County Council or by public bodies in partnership with economic and community stakeholders.

1.2 PURPOSE OF THE REPORT

This is a Habitats Directive Assessment (or Appropriate Assessment) Screening Report of the Draft *Integrated* Local Economic and Community Plan³. The purpose of this report is to evaluate whether or not LECP is likely to have significant affects on the integrity of Natura 2000 sites (*i.e.* Special Areas of Conservation (SAC) and Special Protection Areas (SPA).

Special Areas of Conservation (SAC) are designated under the EU's Habitats Directive by statutory instrument under the Habitats Regulations 1997 and Special Protection Areas (SPA) are designated by statutory instrument under the EU's Birds Directive 1979.

1.3 LEGISLATIVE CONTEXT

The Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna – the 'Habitats Directive' provides legal protection for habitats and species of European importance. The Directive was transposed into Irish law by the European Communities (Natural Habitats) Regulations, SI 94/1997.

¹ Hereafter the Act

².Page 1 Action Programme for Effective Local Government, Putting People First (DECLG October 2012)

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for Plans or Projects affecting Natura 2000 sites.

Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public".

In formulating the LECP, Tipperary County Council as the Competent Authority must comply with the EU Habitats and Birds Directives and the Planning and Development (Amendment) Act 2010, European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) and the Environment (Miscellaneous Provisions) Act 2011.

2.0 DESCRIPTION OF LECP

The purpose of the LECP is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of Tipperary, both by itself directly and in partnership with other economic and community stakeholders.

The process for the preparation of the LECP was underpinned by a number of guiding principles including:

- Sustainability
- Promotion and mainstreaming of equality
- Community development principles
- Maximizing returns from resources by avoiding unnecessary overlap and duplication and by achieving synergies through co-operation and collaboration
- Participative planning
- Community consultation and engagement
- Accessibility and ownership

Following a public and stakeholder consultation process, a framework of high level economic and community priorities was established⁴. Each high level priority (or goal) within the economic and community elements will be achieved through the implementation of specific, time bound and measurable actions.

3.0 THE LECP AND THE COUNTY DEVELOPMENT PLAN

The LECP does not sit directly within the hierarchy of spatial planning policy but rather sits as an entity considerate of the spatial framework provided by a County Development Plan However, the LECP 'must be consistent with the core strategy and the objectives of the development plan'.⁵

Tipperary County Council has at present two county development plans, namely; the North Tipperary County Development Plan 2010 and South Tipperary Development Plan, 2009⁶. The Development Plans provide a framework for strategic land use planning framework while also addressing wider social, economic and environmental considerations.

The North and South Tipperary Development Plans were subject to Appropriate Assessment, which determined that the Plans would not have significant effects on integrity of the Natura 2000 network. In this respect, it should be noted that all plans, projects and programme arising from the LECP will be consistent with objectives of the relevant county development plan.

Furthermore, individual plans and projects that may arising from the implementation of the LECP, will be screened to determine if Appropriate Assessment is required and to ensure that such plans or projects would not have an adverse impact on the integrity of the Natura 2000 Network.

4.0 HDA SCREENING

4.1 INTRODUCTION

This Screening Report has been prepared taking cognisance of the following guideline documents:

(a) Appropriate Assessment Guidance for Planning Authorities (DEHLG, 2010).

⁵ DECLG: Circular LG1/2015;AL 1/2015 – Local Economic and Community Plans 21st January, 2015

⁴ Refer to Draft Integrated Local Economic and Community Plan for full list.

⁶ Extended pursuant to the provisions of the Electoral, Local Government and Planning and Development Act 2013

(b) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EU, 2001)

The Screening Process will identify the likely impacts upon the Natura 2000 sites, either alone or in combination with other plans and projects and considers whether these impacts are likely to be significant.

This Screening Assessment will:

- Determine whether the LECP is directly connected with or necessary to the management of the site;
- Describe the LECP and other plans and projects that, 'in combination' have the potential to have significant effects on a European site;
- Identify the potential effects on the European site and;
- Assess the significance of any effects on the European site.

4.2 Management of the 'Natura 2000' Sites.

For a Plan to be 'directly connected with or necessary to the management of the site', the 'management' component must refer to management measures that are for conservation purposes, and the 'directly' element refers to measures that are solely conceived for the conservation management of a site.

The LECP is a framework plan for the promotion and facilitation of economic, community and local development for County Tipperary and is not directly connected to the management of any Natura 2000 sites.

4.3 NATURA 2000 SITE AND THE PLAN AREA

Figure 1.1 illustrates the SACs and SPAs in County Tipperary and those within proximity to the county boundary that have been identified for consideration. The SACs and SPAs and listed in Appendix A and a site description and outline of qualifying interests is provided. Please note that this information was sourced from www.npws.ie. and the Natura Impact Reports perpared for the North and South Tipperary County Development Plans.

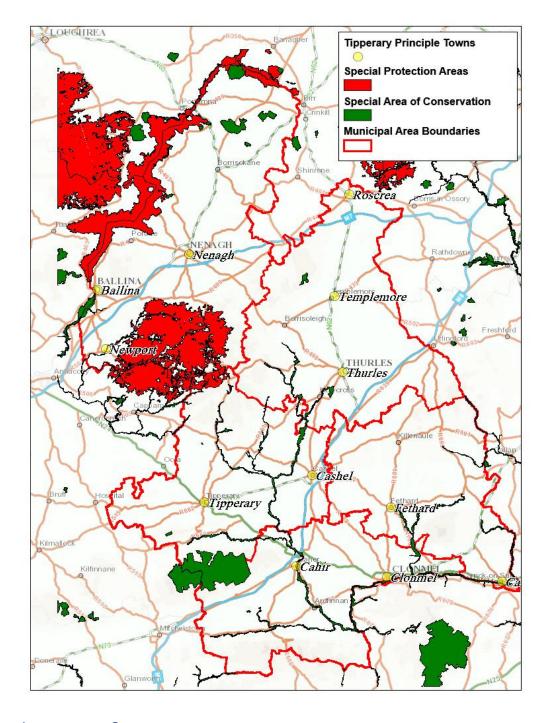


Figure 1.1 Natura 2000 Sites

4.4 ASSESSMENT CRITERIA

Having regard to the European and national level guidance documents, as referenced above, a screening matrix has been developed to facilitate assessment. The LECP is assessed against the criteria as set out below.

Individual elements of the plan (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site

The North and South Tipperary County Development Plans provide the overarching spatial framework for County Tipperary. The LECP will be consistent with the applicable county development plan.

Where plans or projects may arise (directly or indirectly) from the LECP (consistent with the development plan objectives) which may impact upon sensitive or designated sites, because of their proximity or scale, a Natura Impact Assessment screening and/or Environmental Assessment (e.g. EIA, EIR) will be sought, where deemed necessary.

Therefore no projects, which would give rise to significant adverse direct, indirect or secondary impacts on the integrity of the Natura 2000 sites, arising from the size or scale of the project, shall be permitted on the basis of this LECP (either individually or in combination with other plans or projects)⁷.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in			
combination with other plans or projects) on the Natura 2000 site by virtue of:			
Size and scale	The LECP does not set a framework for projects or activities with		
	regard, to specific size, scale and location. The North and South		
	Tipperary County Development Plans, sets the spatial framework		
for location of development and land uses (with the appropria			
	consideration and respect given to ecologically important sites).		
	Where it is considered that potential developments arising		
	(directly or indirectly) from the LECP may impact on designated		
	sites, because of their proximity or scale, a Natura Impact		
Statement and/or Environmental Impact Statement will be so			
	where deemed necessary.		
Land-take	The LECP does not does not involve any land take within Natura		

⁷ Except as provided for in Article 6(4) of the Habitats Directive, viz. there must be:

(b) Imperative reasons for overriding public interest, including those of a social and economic nature; and,

⁽a) No alternative solution available;

⁽c) Adequate compensatory measures to ensure that the overall coherence of Natura 2000 is protected.

	2000 sites.
Distance from the	The LECP will cover County Tipperary as an entire plan area and
Natura 2000 site or key	will not relate to specific locations. There will be no further
features of the site	encroachment upon Natura 2000 sites.
Resource requirements	The policies and objectives of the County Development Plans
(water abstraction etc.)	ensure that resource requirements are identified to meet
	anticipated development over the plan period.
	No projects giving rise to significant adverse direct, indirect or
	secondary impacts upon the integrity of any Natura 2000 sites,
	arising from their resource requirements will be proposed,
	facilitated or permitted on the basis of the LECP.
Emissions (disposal to	The policies and objectives of the County Development Plan and
land, water or air)	Regional Waste Management Plans will ensure that emissions
	and waste issues will be appropriately mitigated with regard to
	any impacts on Natura 2000 sites.
Excavation	These will be no excavation requriements arising from actions
requirements	proposed in the LECP.
Transportation	The County Development Plans provide a sustainable framework
requirements	for transportation and accessibility. Any individual transportation
	plans or projects that may arise from actions contained in the
	LECP will be screened to determine whether Appropriate
	Assessment is required.
Duration of construction,	N/A
operation,	
decommissioning, etc.	
Other	N/A

Describe any likely changes to the site arising as a result of:

Reduction of habitat	The LECP does not relate to a project specific location. The
area:	LECP does not provide, or include for any additional land for
	development and therefore does not involve any additional land
	take.
	Any project resulting from the LECP shall be required to be
	consistent with the County Development Plan objectives and
	shall be subject to HDA Screening Assessment.
Disturbance to key	As above.
species;	
Habitat or species	As above
fragmentation;	
Reduction in species	As Above
density;	
Changes in key	As above.
indicators of	
conservation value	
(water quality etc.);	
Climate Change	No projects giving rise to significant adverse changes in
	climatologically conditions affecting the Natura 2000 sites shall
	be permitted on the basis of the provisions of the LECP (either
	individually or in combination with other plans or projects).

Describe any likely impacts on the Natura 2000 site as a whole in terms of:		
Interference with the	The objectives of the LECP will not impact on the relationships	
key relationships that	that define the structure of Natura 2000 sites.	
define the structure of		
the site;		
Interference with key	As above.	
relationships that		
define the function of		
the site.		

Provide indicators of significance as a result of the identification of effects set out above in terms of

Loss	N/A
Fragmentation	N/A
Disruption	N/A
Disturbance	N/A
Change to key	N/A
elements of the site	

5.0 CONCLUSIONS

5.1 FINDING OF NO SIGNIFICANT EFFECTS MATRIX

Plan Name	Draft Local Economic and Community Plan
Natura 2000	Natura 2000 sites as illustrated on Map 1.1 and listed in Appendix A
sites identified	
for Screening	
Description of	Set out in Section 3.0 of this report and in the Draft Integrated LECP.
Plan	
Is the plan	The LECP is not directly connected with or necessary for the
necessary for	management of the Natura 2000 sites in the County.
the	
management of	
Natura 2000	
sites	
Describe how	In general, any development that may result from the implementation of
the plan (alone	the objectives of the LECP could lead to a number of impacts depending
or in	on where the development is sited, the scale of development and types
combination) is	and quantities of emissions. However, all objectives must be devised so
likely to affect a	as not to conflict with the policies and objectives of the Offaly County
Natura 2000	Development Plan 2014-2020 for which both an AA Screening and full
site.	SEA were completed. The LECP will not be in conflict with the policies or
	objectives of the development plan and will therefore avoid the need for
	development that would be likely to significantly and adversely affect the
	integrity of any Natura 2000 site within and outside the County Boundary.

	In achieving consistency with the objectives of the County Development		
	Plan, any action/objectives developed as part of the LECP shall		
	required to conform to National and European regulations and legislation		
	for the prevention of environmental effects which would adversely in		
	on the integrity and conservation objectives of Natura 2000 sites. T		
	along with the acknowledgement of the County's natural heritage policies		
	contained within the county development plans will ensure that no		
	development objective will be created that will significantly adversely		
	impact on Natura 2000 sites.		
Screening	It is concluded that the LECP will not give rise to significant impact on the		
Conclusion	Natura 2000 network. Therefore, it is determined that Appropriate		
	Assessment is not required.		
List of Agencies	The Draft LECP and HDA Screening Report will be referred to statutory		
Consulted	consultee and made available to the general public during the public		
	consultation process. All comments and submissions relating to this		
	document, will be considered after the consultation process has		
	concluded and will inform the final screening report.		

Appendix A

Site Name	Qualifying Interests	Site Description
Galtee	4030 - European dry heaths	Situated in east Limerick and South Tipperary,
Mountains	4060 - Alpine and Boreal	the Galtee Mountains are Ireland's highest
SAC	heaths	range of inland mountains. Heath is the main
000646	6230- Species-rich Nardus	habitat type with both dry heath and alpine
R82, R92	grasslands, on siliceous	heath found within the site. Upland Mat-grass
	substrates in mountain areas	(Nardus stricta) grassland occurs on steep
	(and submountain areas, in	slopes, particularly in the west. Blanket bog is
	Continental Europe)	more localised and occurs mainly at high
	7130 - Blanket bogs (* if	altitudes. The north-facing cliffs are of primary
	active only)	importance as they support arcticalpine
	8210 - Calcareous rocky	communities with some rare plant species. The
	slopes with chasmophytic	Rare Small-white orchid (Pseudorchis albida),
	vegetation	Mountain Rock-cress (Cardaminopsis petraea)
	8220 - Siliceous rocky	and Alpine Saw-wort (Saussurea alpina) have
	slopes with chasmophytic	been recorded from the site. These species are
	vegetation	included in the Red Data Book and the former
		are legally protected under the Flora Protection
		Order (1987). Other typical mountain plants are
		also found on the site. The site also supports
		breeding Peregrine, a species listed on Annex I
		of the EU Birds Directive. Overgrazing by
		sheep, Afforestation and frequent burning are
		considered significant threats to some areas of
		heath and grassland.
Philipston	7140 - Transition mires and	Philipston Marsh is a small marsh near
Marsh	quaking bogs	Philipston House, south of Cappagh White in
SAC		Co. Tipperary. It represents one of only two
001847		examples of calcareous fen and mire vegetation
R84		in the Mulkear River catchment and is thus a
		rare habitat in this locality. Philipston Marsh is a
		candidate SAC for the presence of the transition
		mire, a habitat listed on Annex I of the E.U.
		Habitats Directive. This area supports a very

		species-rich mosaic of fen and transition mire
		plant communities, amongst which are found
		several uncommon species, including
		Broadleaved Cottongrass (Eriophorum
		latifolium), Marsh Helleborine (Epipactis
		palustris), Fen Bedstraw (Galium uliginosum),
		Lesser Tussock-sedge (Carex diandra) and
		Longstalked Yellow-sedge (C. lepidocarpa).
Anglesey	6230 - *Species-rich Nardus	Anglesey Road is a steep-sided valley which
Road SAC	grasslands, on siliceous	extends approximately 1.8 km along the
002125	substrates in mountain areas	Multeen River to the north of Hollyford village.
R95	(and submountain areas, in	Among the common grasses are Bents
1100	Continental Europe)	(Agrostis spp.), Crested Dog's-tail (Cynosurus
	Continental Europe)	cristatus), Sheep's Fescue (Festuca ovina) and
		Wavy Hair-grass (Deschampsia flexuosa). On
		the steep valley sides and in stream gullies
		scrub comprised of Willow (Salix spp.), Downy
		Birch (Betula pubescens), Rowan (Sorbus
		aucuparia), Hazel (Corylus avellana), Hawthorn
		and Ash (Fraxinus excelsior) have developed.
		Anglesey Road is of particular importance for
		the good quality examples of species rich,
		unimproved upland grassland found. This habitat is becoming increasingly rare in Ireland
		g
		and Europe and is listed on Annex I of the EU
	0000	Habitats Directive.
Lower	3260 - Water courses of	This site consists of the freshwater stretches of
River Suir	'	the River Suir immediately south of Thurles, the
SAC	the Ranunculion fluitantis	tidal influence extends as far as the confluence
002137	and Callitricho-Batrachion	with the Barrow/Nore immediately east of
	vegetation	Cheekpoint in Co. Waterford and many
	6430 - Hydrophilous tall herb	tributaries including Clodiagh in Co. Tipperary.
	fringe communities of plains	The site is a candidate SAC selected for the
	and of the montane to alpine	presence of the priority habitats on Annex I of
	levels	the E.U. Habitats Directive - alluvial wet
	91A0 - Old sessile oak	woodlands and Yew Wood. The site is also

woods with Ilex and Blechnum in the British Isles 91E0* - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)

91J0 - Taxus baccata woods of the British Isles

Freshwater pearl mussel (Margaritifera margaritifera), White-clawed crayfish (Austropotamobius pallipes), Sea lamprey (Petromyzon marinus), Brook lamprey (Lampetra planeri), River lamprey (Lampetra fluviatilis), Allis shad (Alosa alosa), Twaite shad (Alosa falax), Salmon (Salmo salar), Otter (Lutra lutra)

selected as a candidate SAC for floating river vegetation, Atlantic salt meadows, mediterranean salt meadows. old oak woodlands and eutrophic tall herbs, all habitats listed on Annex I of the E.U. Habitats Directive. The following species listed on Annex II of the directive are present - Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Crayfish, Twaite Shad, Atlantic salmon and Otter. The legally protected (Flora (Protection) Order, 1999) Meadow Barley (Hordeum secalinum) and Opposite-leaved Pondweed (Groenlandia densa) also occur within the site.

The site is of particular conservation interest for the presence of a number of Annex II animal species, including Freshwater Pearl Mussel (Margaritifera margaritifera and M. Freshwater durrovensis), Crayfish (Austropotamobius pallipes), Salmon (Salmo salar), Twaite Shad (Alosa fallax fallax), and Otter (Lutra lutra). This is one of only three known spawning grounds in the country for Twaite Shad. Parts of the site have also been identified as of ornithological importance for a number of Annex I (EU Birds Directive) bird species, including Greenland White-fronted Goose (10), Golden Plover (1490), Whooper Swan (7) and Kingfisher.

River
Barrow
and River
Nore SAC
002162
S24, S34,
S35

3260 - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
6430 - Hydrophilous tall herb fringe communities of plains

This site consists of the freshwater stretches of the Barrow/Nore River catchments as far upstream as the Slieve Bloom Mountains and it also includes the tidal elements and an estuary. The site is a candidate SAC selected for alluvial wet woodlands and petrifying springs, priority habitats on Annex I of the E.U. Habitats and of the montane to alpine levels

91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0* - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)

Freshwater pearl mussel (Margaritifera margaritifera), Hard water Pearl mussel durrovensis), (Margaritifera White-clawed crayfish (Austropotamobius pallipes), Allis shad (Alosa alosa), Twaite shad (Alosa falax), Sea lamprey (Petromyzon marinus), Brook lamprey (Lampetra planeri), River lamprey (Lampetra fluviatilis), Salmon (Salmo salar), Otter (Lutra lutra)

Directive. The site is also selected as a candidate SAC for old oak woodlands, floating river vegetation, estuary, tidal mudflats, Salicornia mudflats, Atlantic salt meadows, Mediterranean salt meadows, dry heath and eutrophic tall herbs, all habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive - Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Nore Freshwater Pearl Mussel, Crayfish, Twaite Shad, Atlantic salmon, Otter, Vertigo moulinsiana and the plant Killarney Fern. This is the only site in the world for the hard water form of the Pearl Mussel M. m. durrovensis and one of only a handful of spawning grounds in the country for Twaite Shad.

The freshwater stretches of the River Nore main channel is a designated salmonid river. The rare Red Data Book fish species Smelt (Osmerus eperlanus) also occurs in estuarine stretches of the site. The site is of ornithological importance for a number of E.U. Birds Directive Annex I including Greenland White-fronted species Swan, Bewick's Swan, Goose. Whooper Bartailed Godwit, Peregrine and Kingfisher.The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, overgrazing within the woodland areas, and invasion by non-native species, for example Cherry Laurel and Rhododendron (Rhododendron ponticum). The water quality of the site remains vulnerable.

Lower River Shannon SAC 002165 R84, R85, R86, R95, R96 3260 - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation

91E0* - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)

Freshwater pearl mussel (Margaritifera margaritifera), White-clawed crayfish (Austropotamobius pallipes), Sea lamprey (Petromyzon marinus), Brook lamprey (Lampetra planeri), River lamprey (Lampetra fluviatilis), Salmon (Salmo salar), Otter (Lutra lutra)

The Lower Shannon SAC extends 120 km from Killaloe to Loop Head/ Kerry Head. The site thus encompasses the Shannon, Feale, Mulkear and Fergus Estuaries, the freshwater lower reaches of the River Shannon (between Killaloe and Limerick), the freshwater stretches of much of the Feale and Mulkear catchments and the marine area between Loop Head and Kerry Head. The site has been selected as a SAC for the presence of lagoons and alluvial wet woodlands, both habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for floating river vegetation, Molinia meadows, estuaries, tidal mudflats, Atlantic salt meadows, Mediterranean salt meadows. Salicornia mudflats, sand banks, perennial vegetation of stony banks, sea cliffs, reefs and large shallow inlets and bays all habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive - Bottlenosed Dolphin, Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Atlantic salmon and Otter.

A good number of Red Data Book species are also present, perhaps most notably the thriving populations of Triangular Club-rush. A number of species listed on Annex I of the E.U. Birds Directive are also present, either wintering or breeding. Indeed, the Shannon and Fergus Estuaries form the largest estuarine complex in Ireland and support more wintering wildfowl and waders than any other site in the country. Most of the estuarine part of the site has been designated a Special Protection Area (SPA), under the E.U. Birds Directive, primarily to

protect the large numbers of migratory birds present in winter.

Blackwate
r River
(Cork /
Waterford)
SAC
002170
R90

3260 - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation

6430 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0* - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)

91J0 - Taxus baccata woods of the British Isles

Freshwater pearl mussel (Margaritifera margaritifera), White-clawed crayfish (Austropotamobius pallipes), Sea lamprey (Petromyzon marinus), Brook lamprey (Lampetra planeri), River lamprey (Lampetra fluviatilis), Allis shad (Alosa alosa), Twaite shad (Alosa (Salmo falax), Salmon salar), Otter (Lutra lutra)

The River Blackwater is one of the largest rivers in Ireland, draining a major part of Co. Cork and five ranges of mountains. The extent of the Blackwater and its tributaries in this site, flows through the counties of Kerry, Cork, Limerick, Tipperary and Waterford. The site is a candidate SAC selected for alluvial wet woodlands and Yew wood, both priority habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for floating river vegetation, estuaries, tidal mudflats, Salicornia mudflats, Atlantic salt meadows, Mediterranean salt meadows, perennial vegetation of stony banks and old Oak woodlands, all habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive - Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Crayfish, Twaite Shad, Atlantic Salmon, Otter and the plant, Killarney Fern.

The site is also important for the presence of several Habitats Directive Annex II animal species, including Sea Lamprey (Petromyzon marinus), Brook Lamprey (Lampetra planeri), River Lamprey (L. fluviatilis), Twaite Shad (Alosa fallax fallax), Freshwater Pearl-mussel (Margaritifera margaritifera), Otter (Lutra lutra) and Salmon (Salmo salar). The Awbeg supports a population of White-clawed Crayfish (Austropotamobius pallipes). This threatened species has been recorded from a number of locations and its remains are also frequently

found in Otter spraints, particularly in the lower reaches of the river. The freshwater stretches of the Blackwater and Bride Rivers are designated salmonid rivers. Several bird species listed on Annex I of the E.U. Birds Directive are found on the site, including Long-eared Owl and Barn Owl. Moanour 6230 - * Species-rich Nardus Situated approximately 7 km south west of Mountain Tipperary town, this site lies on the northgrasslands, on siliceous SAC substrates in mountain areas western slope of Moanour Mountain, an outlying 002257 (and submountain areas, in ridge of the Galtee Mountains. It lies entirely R82, R83 Continental Europe) above the 220 m contour line, with a maximum (only small height of 335 m. The site represents probably section the only part of this mountainous ridge that R83) retains semi-natural vegetation, the remainder having been afforested. The lower western part of the site is dominated species-rich Nardus grassland, a habitat that is listed on Annex I of the E.U. Habitats Directive with priority status. This is characterised by the presence of Heath Bedstraw (Galium saxatile), Sheep's Fescue (Festuca ovina), Tormentil (Potentilla erecta) and Mat Grass (Nardus stricta), as well as such species as Common Bent (Agrostis capillaris), Greenribbed Sedge (Carex binervis) and Pill Sedge (C. pilulifera). Bryophytes are well represented, with a range of bog mosses (Sphagnum capillifolium, S. cuspidatum, S. compactum). At the summit of Moanour Mountain, the wet heath habitat grades in places to shallow blanket bog. Devilsbit This upland site is situated approximately 6 km The main habitats found Mountain, within the site are upland north-west of Templemore. It comprises the Kilduff summit of Devilsbit Mountain and much of the grassland, heath and Site code: eastern side of the ridge which extends woodland. Grassland patchy in its distribution and 000934 northwards to Kilduff Mountain. Most of the site

largely confined to mineral soils on the lower slopes. It is relatively herb-rich, with many calcifuge species occurring. Heath dominates the upper slopes and the summit of Devilsbit Mountain. The central wooded area is a relict of Small former planting. groves of mature Beech (Fagus sylvatica) and Oak (Quercus sp.) trees persist the higher slopes. Naturallyregenerating Alder (Alnus glutinosa) woodland with Willow (Salix spp.) dominates wet а area traversed by streams near the eastern boundary of the site. Elsewhere on the site, woodland is mixed and comprises Beech, Alder, Ash (Fraxinus excelsior), Hazel (Corylus avellana) and Hawthorn (Crataegus

Populations of the Rare,
Small-white Orchid
(Pseudorchis albida),
protected under the Flora
Protection Order (1987),
occur in areas of
unimproved grassland.

monogyna).

lies above 250 m and the highest point is 480 m. Devilsbit Mountain is composed of Silurian grits.

The site is heavily grazed by cattle and sheep. Agricultural improvement and afforestation are the main threats, particularly to those areas of unimproved grassland found within the site.

Associated species include
Sheep's-Fescue (Festuca
ovina), Great Wood-rush
(Luzula sylvatica), Devil's-bit
Scabious (Succisa
pratensis) and Bracken
(Pteridium
aquilinum).

Peregrine, a species listed on Annex I of the EU Birds Directive, breeds within the site.

Keeper Hill Site code: 001197

The site is of interest mainly due to the presence of intact blanket bog and species-rich **Nardus** grassland, both priority habitats under the EU Habitats Directive. The mountain blanket bog is dominated by Cottongrasses (Eriophorum spp.), Deergrass (Scirpus caespitosus), Purple Moorgrass (Molinia caerulea), and Heather (Calluna vulgaris). The moss layer is well developed with a deep Sphagnum cover. The relatively uncommon Sphagnum russowii been reported from this habitat. Other species recorded include Crowberry (Empetrum nigrum), Bog

Keeper Hill, Slievekimalta, situated between the Silvermines and Slieve Felim Mountains, 13 km south of Nenagh. Reaching an altitude of 695 m, this rounded, rather steep peak of Old Red Sandstone is notably higher than any of the surrounding upland areas. The site includes the summit and slopes above 250 m which have not yet been afforested. Landuse within the site consists of some peat cutting to the north-west of the summit and some track development. Grazing is minimal and confined to the lower grassy slopes to the north of the site. The site is almost entirely surrounded by coniferous forest plantations and this remains the greatest threat.

Asphodel

(Narthecium ossifragum) and the moss Racomitrium lanuginosum.

Heath occurs where the depth of peat is shallow. This is found at the summit, where peat has eroded, on the steep slopes and also in mosaic with blanket bog. The heath is predominantly wet

heath, with Ling Heather, Cross-leaved Heath (Erica tetralix), Purple Moor-grass (Molinia

caerulea), Bilberry (Vaccinium myrtillus) and Heath Rush (Juncus squarrosus) being the dominant species. Bog mosses (Sphagnum spp.) are well represented. On the higher areas, Cowberry (Vaccinium vitis-idaea) and Crowberry (Empetrum nigrum), species indicative of alpine heath, occur. On the lower slopes the heath forms a mosaic with wet grassland and here patches of Gorse (Ulex europaeus) scrub occur.

Upland grassland occurs on mineral soils on the lower slopes and is especially welldeveloped on the southern and northern slopes. Here Nardus species-rich grassland occurs, with Sheep's Fescue (Festuca ovina), Mat-grass (Nardus stricta), Common Bent (Agrostis capillaris), Tormentil (Potentilla erecta) and Heath Bedstraw (Galium saxatile). In wetter areas, rushes (Juncus effusus and articulatus) become dominant.

Peregrine Falcon, a species listed in Annex I of the EU Birds Directive, breeds within the site.

Red Grouse occur amongst the tall heather east of the summit.

Silvermine s Mountains West Site code: 002258 The main habitats that occur on this mountain are heath (mostly wet heath but some dry heath) and unimproved upland grassland. The wet heath is particularly well developed with tall stands of Heather (Calluna vulgaris) and a high cover of bog mosses (Sphagnum spp.). Other species of wet heath include Deergrass (Trichophorum cespitosum), (Eriophorum bog cottons angustifolium and E.

Silvermines Mountains West is situated to the north of Keeper Hill, about 10 kmsouth of Nenagh, Co. Tipperary. Reaching an altitude of 489 m, this rather steepridge of Old Red Sandstone is visibly very prominent in the landscape as viewedfrom the Nenagh to Limerick road. The site includes the summit and slopes,mostly above 200 m, to the west of an extensively afforested area south of thetown of Silvermines. Silvermines Mountains West is a candidate SAC selected for both wet heath and dry heath, habitats listed on Annex I of the E.U. Habitats Directive.

The vegetation at this site is in good condition, with low grazing pressure throughout and no

vaginatum), Purple Moorgrass (Molinia caerulea), Cross-leaved Heath (Erica tetralix), Tormentil (Potentilla erecta) and Heath Rush (Juncus squarrosus).

Smaller areas of more species-rich wet heath with Hard Fern (Blechnum spicant),

Mat-grass (Nardus stricta) and Great Wood-rush (Luzula sylvatica) also occur. From east to west there is a gradation from wet to dry heath, and from peaty to mineral soil. Dry heath, characterised by Autumn Gorse (Ulex gallii) and Bell Heather (Erica cinerea), is also found on the more ground steeply sloping below the summit ridge and on outcropping rock (Ulex exposures. Gorse europaeus) has invaded dry heath areas on the sides of some of the streams and on disused mineworkings on the northern side of the site. Patchy remnants of blanket bog occur on the summit plateau in places and there is evidence of extensive former peat-cutting here.

grassland

is

Upland

signs of overgrazing. One fifth of the site was burned in 2003and there is evidence of former burning in another fifth. Former peat-cutting has occurred on the summit plateau and parts of the slopes. Afforestation, which northern widespread to the east of the site, remains the greatest threat. The site is of conservation heath and grassland importance for its vegetation, and as a foraging area for Hen Harrier, and is one of the only extensive unplanted uplands remaining in north Tipperary.

widespread on the lower mountain slopes, in many of the upper fields and on the steep south-facing slopes. Grassland also extends up onto the ridge at the western end of the site. Common species that characterise this acid grassland vegetation include Sheep's Fescue (Festuca ovina), Mat-grass, Common Bent (Agrostis capillaris), Crested Dog's-tail (Cynosurus cristatus), Germander Speedwell (Veronica chamaedrys), Tormentil, Heath Bedstraw (Galium saxatile) and a range of mosses such as Rhytidiadelphus squarrosus, Hylocomium splendens and Brachythecium rutabulum. Parts of the lower southern slopes are covered with dense Bracken (Pteridium aquilinum). A number of small streams and flushes descend the slopes. These can support a richer vegetation, with plants such as rushes (Juncus effusus and J. articulatus), sedges (Carex nigra,

panicea, C. lepidocarpa, C. echinata, C. ovalis. C.pulicaris) and a variety of herbs, including Meadowsweet (Filipendula ulmaria), Ragged-Robin (Lychnis flos-cuculi), Bog Pimpernel (Anagallis tenella), Water Mint (Mentha aquatica) and Marsh Violet (Viola palustris).

The site is also important for birds. Up to 11 pairs of Hen Harriers are known to use these uplands as part of a wider range between Silvermines and Slieve Felim, to the south. The Silvermines provide useful foraging habitat for some of these birds.

s Mountains Site code: 000939

Silvermine

The site is of interest as it supports species-rich Nardus grasslands on siliceous substrates, an EU Habitats Directive Annex I priority habitat. This grassland occurs in two separate locations on either side of the road which cuts through the site. Typical species associated with the habitat and recorded at the site include Heath Bedstraw (Galium saxatile), Sheep's Fescue (Festuca ovina),

This small site is situated on the northern slopes of the Silvermine Mountains, 1km south-east of Silvermines village. It slopes steeply uphill from 240 m in the north-west corner to 400 m at the southern boundary. The geology of the area is sandstone of different ages - the older Silurian on the central part of the mountain while the outer parts are composed of yellowish and red sandstones of Devonian age.

Landuse within the site is confined to low density grazing by cattle, sheep and perhaps horses.

Bitter Vetch (Lathyrus montanus) Milkwort (Polygala serpyllifolia), Butterfly-orchid Lesser (Platanthera bifolia), Greater **Butterfly-orchid** chlorantha), Lousewort (Pedicularis sylvatica), Tormentil (Potentilla erecta), Mat Grass (Nardus stricta) and Small White Orchid (Pseudorchis albida).

Heath is the most extensive habitat of the site and is dominated by Heather (Calluna vulgaris), Purple Moor-grass (Molinia caerulea) and Bilberry (Vaccinium myrtillus) and occurs mainly on peaty soils. Localised, flushed, wet areas dominated rushes by (Juncus effusus and J. acutiflorus) with Marsh Arrowgrass (Triglochin palustris), Meadow Thistle (Cirsium dissectum) and Common Butterwort (Pinguicula vulgaris) are also present.

Scrub vegetation dominated by Rowan (Sorbus

aucuparia), Willow (Salix cinerea), Hawthorn (Crataegus monogyna), Hazel (Corylus avellana), grading into Birch (Betula pubescens), is well developed in the more inaccessible areas, such as the gullies at the western edge of the site. In places it encroaches on to grassland, probably due to undergrazing. Dense (Pteridium Bracken aquilinum) is also present. Red Grouse is known from the site, as well as the Irish Hare, Common Frog and Common Lizard. The occurrence of the Small White Orchid (Pseudorchis albida) at this site is of particular note as it is a Red Data Book species which legally protected under the Flora (Protection) Order 1999. Lough The site is of significant Lough Derg, the lowest order lake on the River ecological interest, with six Shannon, is one of the largest bodies of Derg, North East habitats listed on Annex I of freshwater in Ireland. The site, however, only Shore the includes the northern shore of the lake from the Site code: E.U. Habitats Directive. Four mouth of the Cappagh River in the north-west to

002241

of these are priority habitats Cladium fen. alluvial limestone woodland, pavement and Yew woodland. Other annexed habitats present include alkaline fen and Juniper scrub formations on heath and calcareous grasslands. In addition, the lake itself is an SPA (Special Protection Area) that supports important numbers of wintering wildfowl. White-fronted Greenland Goose, Common Tern and Cormorant. Both the Greenland White-fronted Geese and Common Tern are listed under Annex I of the EU Birds Directive. A Wildlife Sanctuary is located in the lake close to Portumna Forest Park.

just below Black Lough at the north-eastern shore. The greater part of this site lies on Carboniferous limestone, although there is Old Red Sandstone on the southern shores of the eastern section.

Kilcarren-Firville bog Site code: 000647

Vegetation on intact raised bog is dominated by Heather (Calluna Vulgaris), Crossleaved Heath (Erica tetralix), Common Cottongrass (Eriophorum angustifolium), Deergrass (Scirpus cespitosus), Carnation Sedge (Carex panicea), Bog (Narthecium Asphodel ossifragum) and Bog Moss (Sphagnum spp.). Away Kilcarren - Firville Bog is situated approximately 2 km east of the village of Carrigahorig in north Tipperary. It is a lowland raised bog complex which extends about 4.5 km from east to west and is bisected by a road.

Land reclamation and mechanical peat cutting are the main threats to the site. An extensive peripheral drainage network is affecting peat hydrology and is causing the bog edge to dry out.

Active raised bogs once characteristic of central Ireland, are now rare and vulnerable, and have

from the cutaway margins, the bog is wet and pool systems are well developed. Localised flushes support Downy Birch (Betula pubescens) and Scots Pine (Pinus sylvestris).

been recognised by the European Union as a habitat of international importance. Ireland has a special responsibility to conserve the best of its remaining bogs.

Peripheral areas have been extensively damaged peat cutting, drainage and land reclamation. Cutaway bog is frequently dominated by **Purple** Moor-grass (Molinia caerulea) and Bog Myrtle (Myrica gale) is locally abundant. Birch woodland with some Holly aquifolium) and Willow (Salix spp.) is widespread in most cutaway areas. Scots Pine is common in a few locations.

n Fen Site code: 001683 The main habitat consists of calcareous fen, dominated Black by Bog-rush (Schoenus nigricans) which covers a wide area. The Common Butterwort (Pinguicula vulgaris) occurs here. Common Reed (Phragmites australis) and especially Saw Sedge (Cladium mariscus) are present in addition and in become dominant places and form their own

Liskeenan Fen is a small turlough-like fen situated about 10 km north-west of Borrisokane and just 1 km from the village of Aglish, in north Co. Tipperary. The site floods in winter via a swallow hole in the far north-west corner. The eastern part of the site is a small dry, inactive raised bog on which mixed woodland is developing, as well as an extensive and unusual area of flooded cut-away.

Grazing of the fen occurs in summer but few cattle venture into the wettest centre. Alteration of the swallow-hole would threaten the summer water-table. Liskeenan Fen is the only such fen in the area, most of the rest having been

community. The Cladium fen in the wettest parts of the centre also includes Blunt-flowered Rush (Juncus subnodulosus) as well as Long-stalked Yellow-sedge (Carex lepidocarpa).

drained in the past. The area of Cladium fen in the centre is of special interest in a European context.

A secondary habitat of great interest is the regenerating flooded cut-away bog east of the fen. Wide flat expanses of Bog Moss (particularly Sphagnum cuspidatum) and numerous large actively growing hummocks (S. capillifolium, S. papillosum and others) grow over an area of about 5 surrounded old turf by acidic banks. This community contrasts sharply the calcareous fen adjacent to it.

A small field of species-rich dry grassland with Green-Orchid winged (Orchis morio) and Cowslip (Primula veris), together with wet grassland and mixed woodland developing on the bog in the east make Liskeenan Fen а very diverse site.

Redwood Bog is located 7 km south west of

Bog Site code: 002353 Special Area of Conservation selected for active raised bog, degraded raised bog and Rhynchosporion, habitats that are listed on Annex I of the E.U. Habitats Directive. Active raised bog comprises areas of high bog that are wet and actively peatforming, where the percentage cover of bog mosses (Sphagnum spp.) is high, and where some or all of the following features hummocks, occur: pools, wet flats, Sphagnum lawns, flushes and soaks. Degraded raised bog corresponds to those areas of high bog whose hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration.

The Rhynchosporion habitat occurs in wet depressions, pool edges and erosion channels where the vegetation includes White Beak-sedge (Rhynchospora alba) and/or Brown Beak-sedge (R. fusca), and at least some of the following

Banagher mainly in the townland of Redwood, Co. Tipperary. The site comprises a raised bog that includes both areas of high bog and cutover bog. The site is bounded by the Middle Shannon Callows Special Protection Area (SPA) to the north and the River Little Brosna SPA to the north-east.

There has been extensive peat-cutting in the western half of the site but active cutting is minimal and has only been recorded in the north and north-west of this area. Damaging activities associated with this landuse include drainage throughout the site (both old and recent) and extensive burning of the high bog.

There are many indications that this site has been burnt on a regular basis. These are all activities that have resulted in loss of habitat and damage to the hydrological status of the site, and that pose a continuing threat to its viability.

associated species, Bog
Asphodel (Narthecium
ossifragum), Sundews
(Drosera spp.), Deergrass
(Scirpus cespitosus),
Carnation Sedge (Carex
panicea).

The bog has developed on the margins of the River Shannon and Little Brosna floodplains. The site can be divided into two sections, a cutover and drained western side and the eastern side that contains intact high bog. This eastern part of the site consists of two domes, which are separated to some extent by a stream that runs south to north. Hummocks and pools occur in the northern dome of the bog. The flushes in the site are found along the length of the stream.

Much of the high bog has vegetation typical of the Western Raised Bog type consisting of Ling Heather (Calluna vulgaris), the moss Racomitrium lanuginosum and the liverwort Pleurozia purpurea. There are some hummocks of the bog moss

Sphagnum imbricatum. A few of the pools in the northwest of the site support Great Sundew (Drosera anglica), the bog moss Sphagnum cuspidatum and Bogbean (Menyanthes trifoliata). West of this section there is an area of high bog with tear pools. In this area Sphagnum cover is high and there are small amounts of the bog mosses imbricatum and magellanicum. Hummocks of the moss Leucobryum glaucum are also found here. In the north-west of the site lichen cover is high with Cladonia portentosa, C. uncialis and C. subcervicornis. In the west of the site Deergrass, White Beak-sedge and the moss Campylopus introflexus are common in an area that was previously burnt. In the hollows throughout much of the high bog Bog Asphodel dominates. Both the northern and southern areas of flush contain Purple Moorgrass (Molinia caerulea), Downy Birch (Betula pubescens) and Ling Heather.

The southern section of flush dryer with Devil's-bit Scabious (Succisa pratensis) and Bracken (Pteridium aquilinum) found there. The central section of flush is the wettest and there is а bog moss (S. cuspidatum)-dominated pool surrounded by Purple Moorand Hare's-tail grass Cottongrass (Eriophorum vaginatum). Patches Carnation Sedge have been recorded along the western edge of this flush. The cutover to the north and west of the high bog is colonised by mixed deciduous woodland that contains large amounts of Gorse (Ulex sp.).

Greenland White-fronted Goose, a species that is listed on Annex I of the E.U. Birds

Directive, and that frequents the adjacent SPAs has been recorded on the site.

However, numbers of birds using the site in recent years are not known.