# Appendix 6.1 Relevant Legislation, Policy and Guidelines

## International and National Legislation

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora;

Directive 2009/147/EEC;

European Communities (EC) (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011 (as amended);

Flora (Protection) Order, 2015;

Planning and Development Acts 2000 to 2018;

Wildlife Acts, 1976 to 2018.

# **Relevant Policies and Plans**

National Biodiversity Action Plan 2017 – 2021;

South Dublin County Development Plan 2016 – 2022;

South Dublin County Heritage Plan 2010 – 2015;

## **Relevant Guidelines**

Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (Environment Protection Agency (EPA), 2003);

Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2002);

Guidelines on the Information to be contained in Environmental Impact Assessment Reports. Draft August 2017 (EPA, 2017);

Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, 2<sup>nd</sup> edition. (CIEEM, 2018);

Best Practice Guidance for Habitat Survey and Mapping (Heritage Council, 2011);

A Guide to Habitats in Ireland (Fossitt, 2000);

Bat Mitigation Guidelines for Ireland. National Parks and Wildlife Service (NPWS) (Kelleher and Marnell, 2006);

Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition (Collins, 2016);

Guidance Note 08/18: Bats and artificial lighting in the UK. Bats and the Built Environment (Bat Conservation Trust & Institute of Lighting Professionals, 2018);

Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes. (NRA, undated);

Guidelines for Assessment of Ecological Impacts of National Road Schemes. (NRA, 2009);

Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes (NRA, 2006);

Guidelines for the protection and preservation of trees, hedgerows and scrub prior to, during and post construction of National Road Schemes (NRA, undated); and,

Design Manual for Roads and Bridges: Nature Conservation Advice in Relation to Bats (Highways Agency, 2001).

# Appendix 6.2 Criteria for Ecological Evaluation

# Ecological Valuation Criteria

# International Importance:

- 'European Site' including Special Area of Conservation (SAC), Site of Community Importance (SCI), Special Protection Area (SPA) or proposed Special Area of Conservation.
- Site that fulfils the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended).
- Features essential to maintaining the coherence of the Natura 2000 Network.<sup>1</sup>
- Site containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive.
- Resident or regularly occurring populations (assessed to be important at the national level)<sup>2</sup> of the following:
- Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and / or
- Species of animal and plants listed in Annex II and/or IV of the Habitats Directive.
- Ramsar Site (Convention on Wetlands of International Importance Especially Waterfowl Habitat 1971).
- World Heritage Site (Convention for the Protection of World Cultural & Natural Heritage, 1972).
- Biosphere Reserve (UNESCO Man & The Biosphere Programme).
- Site hosting significant species populations under the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, 1979).
- Site hosting significant populations under the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats, 1979).
- Biogenetic Reserve under the Council of Europe.
- European Diploma Site under the Council of Europe.
- Salmonid water designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988, (S.I. No. 293 of 1988).<sup>3</sup>

# National Importance:

- Site designated or proposed as a Natural Heritage Area (NHA).
- Statutory Nature Reserve.
- Refuge for Fauna and Flora protected under the Wildlife Acts.
- National Park.
- Undesignated site fulfilling the criteria for designation as a Natural Heritage Area (NHA); Statutory Nature Reserve; Refuge for Fauna and Flora protected under the Wildlife Act; and/or a National Park.
- Resident or regularly occurring populations (assessed to be important at the national level)4 of the following: -

<sup>1</sup> See Articles 3 and 10 of the Habitats Directive.

<sup>&</sup>lt;sup>2</sup> It is suggested that, in general, 1% of the national population of such species qualifies as an internationally important population. However, a smaller population may qualify as internationally important where the population forms a critical part of a wider population or the species is at a critical phase of its life cycle.

<sup>&</sup>lt;sup>3</sup> Note that such waters are designated based on these waters' capabilities of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*).

<sup>&</sup>lt;sup>4</sup> It is suggested that, in general, 1% of the national population of such species qualifies as a nationally important population. However, a smaller population may qualify as nationally important where the population forms a critical part of a wider population or the species is at a critical phase of its life cycle.

#### **Ecological Valuation Criteria**

- Species protected under the Wildlife Acts; and/or
- Species listed on the relevant Red Data list.

• Site containing 'viable areas'<sup>5</sup> of the habitat types listed in Annex I of the Habitats Directive.

### County Importance:

- Area of Special Amenity.<sup>6</sup>
- Area subject to a Tree Preservation Order.
- Area of High Amenity, or equivalent, designated under the County Development Plan.
- Resident or regularly occurring populations (assessed to be important at the County level)<sup>7</sup> of the following:
- Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;
- Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;
- Species protected under the Wildlife Acts; and/or
- Species listed on the relevant Red Data list.
- Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance.
- County important populations of species, or viable areas of semi-natural habitats or natural heritage features identified in the National or Local Biodiversity Action Plan (BAP) if this has been prepared.
- Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county.
- Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.

Local Importance (higher value):

- Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP, if this has been prepared;
- Resident or regularly occurring populations (assessed to be important at the Local level)<sup>8</sup> of the following:
- Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;
- Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;
- Species protected under the Wildlife Acts; and/or
- Species listed on the relevant Red Data list.
- Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality.

<sup>&</sup>lt;sup>5</sup> A 'viable area' is defined as an area of a habitat that, given the particular characteristics of that habitat, was of a sufficient size and shape, such that its integrity (in terms of species composition, and ecological processes and function) would be maintained in the face of stochastic change (for example, as a result of climatic variation).

<sup>&</sup>lt;sup>6</sup> It should be noted that whilst areas such as Areas of Special Amenity, areas subject to a Tree Preservation Order and Areas of High Amenity are often designated on the basis of their ecological value, they may also be designated for other reasons, such as their amenity or recreational value. Therefore, it should not be automatically assumed that such sites are of County importance from an ecological perspective.

<sup>&</sup>lt;sup>7</sup> It is suggested that, in general, 1% of the County population of such species qualifies as a County important population. However, a smaller population may qualify as County importance where the population forms a critical part of a wider population or the species is at a critical phase of its life cycle.

<sup>&</sup>lt;sup>8</sup> It is suggested that, in general, 1% of the local population of such species qualifies as a locally important population. However, a smaller population may qualify as locally important where the population forms a critical part of a wider population or the species is at a critical phase of its life cycle.

#### **Ecological Valuation Criteria**

 Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value.

Local Importance (lower value):

- Sites containing small areas of semi-natural habitat that are of some local importance for wildlife;
- Sites or features containing non-native species that are of some importance in maintaining habitat links.

## Hedgerow Evaluation Criteria

The hedgerow evaluation criteria shown in table below have been adapted from various sources, including the 'Ecological criteria for evaluation of hedgerows' (NRA guidance), UKBAP priority habitat description and the Hedgerow Regulations 1997 (England and Wales). This method was agreed with Kildare County Council for the purpose of this study.

A hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less that 20m wide. Any bank, wall, ditch or tree within 2m of the centre of the hedgerow is considered to be part of the hedgerow habitat, as is herbaceous vegetation within 2m of the centre of the hedgerow.

For each hedgerow an assessment is made of the 14 features listed in the table below. The hedgerow is then valued according to the category for which it contains the most features. Mature treelines (or very overgrown hedgerows) were separately recorded as such and these are considered to be of high value.

Hedgerow Evaluation Criteria			
Feature	High value (County Importance)	Moderate value (Local Importance (higher value))	Low value (Local Importance (lower value))
1. Average shrub canopy height (excluding treelines)	> 5m	2-5m	<2m
2. Average width at ground level	>4m	2-4m	<2m
3. Ground cover	Dense	Patchy	Little or none
4. Mature standard trees per 50m length	> 5	1-5	None
5. Gaps per 50m length	< 10%	10-30%	>30%
6. Connection to other hedges	>4	2-3	<2
7. Dominant tree and shrub species	Mainly native or naturalised* species	Mixed native or naturalised species and non-native species	Mainly non-native species
8. Hedge acting as a wildlife corridor linking adjacent semi-natural habitats that would otherwise be isolated	Yes	Yes	No
9. Diversity of tree or shrub species per 50m length	>7	4-7	<3
10. Ground flora	Typical diverse woodland flora present	Some woodland ground flora present	No woodland ground flora present
11. Epiphytic flora (e.g. bryophytes & lichens)	Diverse epiphytic flora present	Some epiphytic flora present	No epiphytic flora

12. Associated stream or drain	With permanent water	With seasonal water only	No
13. Associated hedge bank height	>1m in height	0.5-1m	None
14. Age	Veteran hedge (approx. >50 yrs) with high landscape value	Mature hedge (approx. 10-50 yrs) with some landscape value	Recent hedge (approx. <10yrs) with little landscape value
Total	/14	/14	/14

# Appendix 6.3 European and Nationally Designated Sites Occurring Within the Vicinity of the Proposed Development

Site name and code	Distance from Proposed Development	Reasons for designation (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives and Site Synopses documents (where available)) <sup>9</sup>			
Special Conservation	Special Conservation Areas (SACs)				
Rye Water Valley / Carton SAC (001398)	<i>c.</i> 6.4km northwest	Conservation Objectives Generic Version 6.0 (21/02/2018) Annex I Habitats: Petrifying springs with tufa formation (Cratoneurion)* [7220] Annex II Species: Narrow-mouthed Whorl Snail (Vertigo angustior) [1014] Desmoulin's Whorl Snail (Vertigo moulinsiana) [1016]			
Glenasmole Valley SAC (001209)	c. 7.1km southeast	Conservation Objectives Generic Version 6.0 (21/02/2018) Annex I Habitats: Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia) (*important orchid sites)* [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Petrifying springs with tufa formation (Cratoneurion)* [7220]			
Wicklow Mountains SAC (002122)	c. 9.0km southeast	Conservation Objectives Version 1.0 (31/07/2017) Annex I Habitats: Oligotrophic waters containing very few minerals of sandy plains ( <i>Littorelletalia uniflorae</i> ) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bog (*active only) [7130] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Old sessile oak woods with Ilex and Blechnum in British Isles [91A0] <b>Annex II Species:</b> Otter ( <i>Lutra lutra</i> ) [1355]			
Red Bog, Kildare SAC (000397)	c. 14.8km southwest	Conservation Objectives Generic Version 6.0 (21/02/2018) Annex I Habitats: Transitional mires and quaking bogs [7140]			
South Dublin Bay SAC (000210)	<i>c.</i> 13.6km east	Conservation Objectives Version 1.0 (22/08/13) Annex I Habitats: [1140] Mudflats and sandflats not covered by seawater at low tide [1210] Annual vegetation of drift lines [1310] Salicornia and other annuals colonizing mud and sand [2110] Embryonic shifting dunes			

<sup>&</sup>lt;sup>9</sup> Available online at <u>http://www.npws.ie/protected-sites/</u>. Accessed 2<sup>nd</sup> January 2019

Name Dutil D	a 10 21m	Concernation Objections Manian & Oloc (co. (co.)		
North Dublin Bay SAC (000206)	c. 16.3km northeast	Conservation Objectives Version 1.0 (06/11/13)		
SAC (000200)	northeast	Annex I Habitats:		
		[1140] Mudflats and sandflats not covered by seawater at low tide		
		[1210] Annual vegetation of drift lines		
		[1310] <i>Salicornia</i> and other annuals colonizing mud and sand		
		[1330] Atlantic salt meadows ( <i>Glauco-Puccinellietalia</i> maritimae)		
		[1410] Mediterranean salt meadows ( <i>Juncetalia maritimi</i> )		
		[2110] Embryonic shifting dunes		
		[2120] Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")		
		[2130] Fixed coastal dunes with herbaceous vegetation ("grey dunes")		
		[2190] Humid dune slacks		
		Annex II Species:		
		[1395] Petalwort Petalophyllum ralfsii		
Special Protection	Areas (SPAs)			
Wicklow	<i>c.</i> 11.6km	Conservation Objectives Generic Version 6.0 (21/02/2018)		
Mountains SPA	southeast	Merlin ( <i>Falco columbarius</i> ) [A098]		
(004040)		Peregrine ( <i>Falco peregrinus</i> ) [A103]		
North Bull Island	<i>c</i> . 13.2km			
SPA (004006)	northeast	Conservation Objectives Version 1.0 (09/03/15)		
5177(004000)	northeast	Special Conservation Interest Species:		
		[A046] Light-bellied Brent Goose Branta bernicla hrota		
		[A048] Shelduck Tadorna tadorna		
		[A052] Teal Anas crecca		
		[A054] Pintail Anas acuta		
		[A056] Shoveler Anas clypeata		
		[A130] Oystercatcher Haematopus ostralegus		
		[A140] Golden Plover Pluvialis apricaria		
		[A141] Grey Plover Pluvialis squatarola		
		[A143] Knot Calidris canutus		
		[A144] Sanderling <i>Calidris alba</i>		
		[A149] Dunlin Calidris alpina		
		[A156] Black-tailed Godwit Limosa limosa		
		[A157] Bar-tailed Godwit Limosa lapponica		
		[A160] Curlew Numenius arquata		
		[A162] Redshank Tringa totanus		
		[A169] Turnstone Arenaria interpres		
		[A179] Black-headed Gull Croicocephalus ridibundus		
		[A999] Wetlands & Waterbirds		
South Dublin Bay	<i>c.</i> 13.6km east	Conservation Objectives Version 1.0 (09/03/15)		
and River Tolka		Special Conservation Interest Species:		
Estuary SPA		[A046] Light-bellied Brent Goose Branta bernicla hrota		
(004024)		[A130] Oystercatcher Haematopus ostralegus		
		[A137] Ringed Plover Charadrius hiaticula		
		[A140] Grey Plover Pluvialis squatarola		
		[A143] Knot Calidris canutus		
		[A144] Sanderling Calidris alba		
		[A149] Dunlin Calidris alpina		
		[A157] Bar-tailed Godwit Limosa lapponica		
		[A162] Redshank Tringa totanus		
		[A179] Black-headed Gull Croicocephalus ridibundus		
		[A192] Roseate Tern Sterna dougallii		
		[A193] Common Tern Sterna hirundo		

		[A194] Arctic Tern <i>Sterna paradisaea</i> [A999] Wetlands & Waterbirds	
Proposed Natural Heritage Areas (pNHAs)			
Grand Canal pNHA (002104)	c. 1.2km north	Freshwater habitat, hedgerow, calcareous grassland, reed fringe, scrub and woodland. Otter ( <i>Lutra lutra</i> ) Opposite-leaved Pondweed ( <i>Groenlandia densa</i> ) Smooth newt ( <i>Lissotriton vulgaris</i> )	
Liffey Valley pNHA (000128)	c. 4.6km north	River and woodland habitats, and a number of rare and/or protected plant species including Green Figwort ( <i>Scrophularia</i> <i>umbrosa</i> ), Hairy St. John's wort ( <i>Hypericum hirsutum</i> ) and Archangel ( <i>Lamiastrum galeobdolon</i> ).	

# Appendix 6.4 Records of Protected, Rare Flora and Fauna, and Invasive Plant Species Within 2km or 10km<sup>10</sup> of the Proposed Development.

Common Name	Scientific Name	Protection <sup>11</sup>	Red-Listing Status <sup>12</sup>
Plants			
Hairy Violet	Viola hirta	FPO	Vulnerable
Blue Fleabane	Erigeron acer		Endangered
Green Figwort	Scrophularia umbrosa	FPO	Endangered
Blunt-leaved Earwort	Diplophyllum obtusifolium		Near Threatened
Crisp Beardless-moss	Weissia longifolia	FPO	
Donn's Grimmia	Grimmia donniana		Near Threatened
Hair-pointed Grimmia	Grimmia trichophylla		Data Deficient
Lance-leaved Pottia	Tortula lanceola		Critically Endangered
	Weissia longifolia var. angustifolia		Vulnerable
Wulfsberg's Tamarisk-moss	Heterocladium wulfsbergii		Near Threatened
Amphibians			
Common Frog	Rana temporaria	HD V, WA	Least Concern
Smooth Newt	Lissotriton vulgaris	WA	Least Concern
Crustaceans			
Freshwater White-clawed Crayfish	Austropotamobius pallipes	HD II IV, WA	Vulnerable
Insects			
Dingy Skipper	Erynnis tages	-	Near Threatened
Marsh Fritillary	Euphydryas aurinia	HD II	Vulnerable
Small Blue	Cupido minimus	-	Endangered
Small Heath	Coenonympha pamphilus	-	Near Threatened
Wall	Lasiommata megera	-	Endangered
Andrena	Andrena praecox	-	Vulnerable
Andrena	Melandrena nigroaenea	-	Vulnerable
Large Red Tailed Bumble Bee	Bombus (Melanobombus) Iapidarius	-	Near Threatened
Moss Carder-bee	Bombus (Thoracombus) muscorum)	-	Near Threatened
Trimmer's Mining Bee	Andrena (Hoplandrena) trimmerana)	-	Critically Endangered
Mammals			•
Red Deer	Cervus elaphus	WA	Least Concern
Hedgehog	Erinaceus europaeus	WA	Least Concern
Pygmy Shrew	Sorex minutus	WA	Least Concern

<sup>&</sup>lt;sup>10</sup> Records preceding 1950 were not included in this list.

<sup>&</sup>lt;sup>11</sup> HDII/IV/V = Habitats Directive Annexes II/IV/V; FPO = Flora Protection Order; WA = Wildlife Acts; BD I = Birds Directive Annex I.

<sup>&</sup>lt;sup>12</sup> Mammal Red-list from Marnell *et al.*, Birds from Birds of Conservation Concern in Ireland (Colhoun & Cummings 2013); Vascular Flora from the Irish Red Data Book 1; Vascular Plants (Curtis & McGough 2005); Fish and Amphibians from King *et al.*, 2011; Non-Marine Molluscs from Byrne *et al.*, 2009.

Common Name	Scientific Name	Protection <sup>11</sup>	Red-Listing Status <sup>12</sup>
Otter	Lutra lutra	HD II IV, WA	Near Threatened
Badger	Meles meles	WA	Least Concern
Red Squirrel	Sciurus vulgaris	WA	Near Threatened
Pine marten	Martes martes	HD II IV, WA	Least Concern
Daubenton's Bat	Myotis daubentonii	HD IV, WA	Least Concern
Leisler's Bat	Nyctalus leisleri	HD IV, WA	Near Threatened
Common Pipistrelle	Pipistrellus pipistrellus	HD IV, WA	Least Concern
Soprano Pipistrelle	Pipistrellus pygmaeus	HD IV, WA	Least Concern
Brown Long-eared Bat	Plecotus auritus	HD IV, WA	Least Concern
Birds		<u>.</u>	<u>.</u>
Barn Owl	Tyto alba	WA	Red-listed
Barn Swallow	Hirundo rustica	WA	Amber-listed
Black-headed Gull	Larus ridibundus	WA	Red-listed
Coot	Fulica atra	BD II III, WA	Amber-listed
Goldeneye	Bucephala clangula	BD II, WA	Amber-listed
Grasshopper Warbler	Locustella naevia	WA	Amber-listed
Kestrel	Falco tinnunculus	WA	Amber-listed
Kingfisher	Alcedo atthis	BD I, WA	Amber-listed
Linnet	Carduelis cannabina	WA	Amber-listed
Pochard	Aythya ferina	BD II III, WA	Amber-listed
Redshank	Tringa totanus	WA	Red-listed
Common Sandpiper	Actitis hypoleucos	WA	Amber-listed
Snipe	Gallinago gallinago	BD II III, WA	Amber-listed
Starling	Sturnus vulgaris	WA	Amber-listed
Swift	Apus apus	WA	Amber-listed
Corn Crake	Crex crex	BD I, WA	Red-listed
Curlew	Numenius arquata	BD II, WA	Red-listed
Oystercatcher	Haematopus ostralegus	WA	Amber-listed
Teal	Anas crecca	BD II III, WA	Amber-listed
Tree Sparrow	Passer montanus	WA	Amber-listed
Wigeon	Anas penelope	BD II III, WA	Red-listed
Woodcock	Scolopax rusticola	BD II III, WA	Amber-listed
Golden Plover	Pluvialis apricaria	BD I, WA	Red-listed
Gadwall	Anas strepera	BD II, WA	Amber-listed
Goosander	, Mergus merganser	BD II, WA	Amber-listed
Great Black-backed Gull	Larus marinus	WA	Amber-listed
Great Cormorant	Phalacrocorax carbo	WA	Amber-listed
Great Crested Grebe	Podiceps cristatus	WA	Amber-listed
Grey Partridge	, Perdix perdix	BD II III, WA	Red-listed
Hen Harrier	Circus cyaneus	BD I, WA	Amber-listed
Herring Gull	Larus argentatus	WA	Red-listed
House Martin	Delichon urbicum	WA	Amber-listed
House Sparrow	Passer domesticus	WA	Amber-listed
Lesser Black-backed Gull	Larus fuscus	WA	Amber-listed

Common Name	Scientific Name	Protection <sup>11</sup>	Red-Listing Status <sup>12</sup>
Little Egret	Egretta garzetta	BD I, WA	Green-listed
Little Grebe	Tachybaptus ruficollis	WA	Amber-listed
Mallard	Anas platyrhynchos	BD II III, WA	Green-listed
Merlin	Falco columbarius	BD I, WA	Amber-listed
Common Gull	Larus canus	WA	Amber-listed
Mute Swan	Cygnus olor	WA	Amber-listed
Northern Lapwing	Vanellus vanellus	BD II, WA	Red-listed
Northern Pintail	Anas acuta	BD II III, WA	Red-listed
Northern Wheatear	Oenanthe oenanthe	WA	Amber-listed
Peregrine Falcon	Falco peregrinus	BD I, WA	Green-listed
Red Grouse	Lagopus lagopus	BD II III, WA	Red-listed
Red Kite	Milvus milvus	WA	Amber-listed
Ringed Plover	Charadrius hiaticula	WA	Amber-listed
Sand Martin	Riparia riparia	WA	Amber-listed
Skylark	Alauda arvensis	BD II, WA	Amber-listed
Spotted Flycatcher	Muscicapa striata	WA	Amber-listed
Tufted Duck	Aythya fuligula	BD II III, WA	Red-listed
Water Rail	Rallus aquaticus	WA	Amber-listed
Whinchat	Saxicola rubetra	WA	Amber-listed
Whooper Swan	Cygnus cygnus	BD I, WA	Amber-listed
Yellowhammer	Emberiza citrinella	WA	Red-listed

Invasive Plant Species			
Common Name	Scientific Name	Impact Status	3 <sup>rd</sup> Schedule species <sup>13</sup>
Butterfly-bush	Buddleja davidii	Medium	-
Canadian Waterweed	Elodea Canadensis	High	3 <sup>rd</sup> Schedule
Fringed Water-lily	Nymphoides peltata	High	3 <sup>rd</sup> Schedule
Giant Hogweed	Heracleum mantegazzianum	High	3 <sup>rd</sup> Schedule
Indian Balsam	Impatiens glandulifera	High	3 <sup>rd</sup> Schedule
Japanese Knotweed	Fallopia japonica	High	3 <sup>rd</sup> Schedule
Nuttall's Waterweed	Elodea nuttallii	High	3 <sup>rd</sup> Schedule
Russian-vine	Fallopia baldschuanica	Medium	-
Spanish Bluebell	Hyacinthoides hispanica	Low	3 <sup>rd</sup> Schedule
Sycamore	Acer pseudoplatanus	Medium	-
Three-cornered Leek	Allium triquetrum	Medium	3 <sup>rd</sup> Schedule

<sup>&</sup>lt;sup>13</sup> European Communities (EC) (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011 (as amended); hereafter the 'Birds and Habitats Regulations'. This legislation transposes the Habitats and Birds Directives into Irish law. It also contains regulations (49 and 50) that deal with invasive species (those included within the Third Schedule of the regulations)

# Appendix 6.5 Reference List

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