

Table 1: Evaluation of sites for Flora, Fauna and Fisheries in Route Corridor Assessment

Rating	Importance of ecological sites	Importance of fisheries waters
A	Internationally important Site qualifying for designation as proposed SAC or SPA, therefore subject to the EU Habitats Directive	Internationally important Designated salmonid waters under the EU Freshwater Fish Directive
B	Nationally or regionally important Site listed as proposed NHA or containing habitats which are nationally or regionally rare	Nationally important Other major salmonid waters
C	High value, locally important Sites containing semi-natural habitat types with high biodiversity. High degree of naturalness. Locally rare habitats or species	High value, locally important Small streams with known salmonid populations. Larger waters with some fisheries value
D	Low value, locally important Artificial habitats which provide some secondary wildlife habitat of local value	Low value, locally important Small streams without known salmonid populations
E	Very low value Modified sites or sites with very low habitat diversity	Very low value Polluted waterways with no current fisheries value
F	Unknown value Sites of possible ecological value which require further investigation at optimum season to establish importance	Unknown value Sites of possible fisheries value requiring further survey

Table 2: Designated conservation areas within or adjoining the southern section of the N9/N10 route corridor from Kilcullen to Waterford.

Site name	Code	Status	General site description/main habitat types/rare species
River Barrow and River Nore	2162	pcSAC	Long, narrow site incorporating the river corridors and associated bankside habitats of the Barrow, Nore and parts of some of the main tributaries. Important for five Annex I habitats: floating river vegetation (3260), *alluvial forests (91E0), *old sessile oak woods (91A0), *petrifying springs (7220) and salt meadows (1330) Vascular plants: meadow saffron, nettle-leaved bellflower, Killarney Fern Mammals: otter, Daubenton's bat Birds: Greenland white-fronted goose, whooper swan, Bewick's swan, kingfisher, peregrine Fish: salmon, twaite shad, smelt, brook lamprey, river lamprey, sea lamprey Invertebrates: white-clawed crayfish, freshwater pearl mussel (<i>Margaritifera margaritifera</i> , <i>M. margaritifera durrovensis</i>)
Red Bog, Dungarvan	0846	pNHA	Wetland area with floating fen surrounded by wet grassland and scrub. Proposed as an SAC on the NGO shadow list of SACs (Dwyer, 2000) for the Annex I habitat, degraded raised bog (7120)
¹ Archersgrove	2051	pNHA	Three areas of scrubby woodland supporting an important population of a rare plant on the banks of River Suir Vascular plants: nettle-leaved bellflower
¹ Thomastown	0410	pNHA	Narrow strip of wet grassland and broadleaved woodland beside the River Nore. Supports populations of two rare plants Vascular plants: meadow saffron, nettle-leaved bellflower
¹ Mount Juliet	0843	pNHA	Wet grassland and woodland on the floodplain of the River Nore Vascular plants: meadow saffron
Lough Cullin	0406	pNHA	Lake and associated wetland habitats (fen and wet grassland) in a low-lying depression. Important for birds (I-WeBS count site)
Hugginstown Fen	0404	pNHA	Large isolated area of swamp and floating fen with iron-rich springs in a small valley. Proposed as an SAC on the NGO shadow list of SACs (Dwyer, 2000) for the Annex I priority habitat, * <i>Cladium</i> fen (7210)
Grannyferry	0833	pNHA	Reedswamp, marsh and wet grassland with a saline influence on the margins of the Black Water, a tributary of the River Suir Vascular plants: meadow barley
Kilkeasy Bog	0839	pNHA	Large wetland area comprising small lakes, fen, wet grassland, cutover bog and heathland
Lower River Suir [adjoins the southern boundary of the study area]	2137	pcSAC	Long narrow site incorporating the river corridor of the Suir. Important for four Annex I habitats: floating river vegetation (3260), *alluvial forests (91E0), *old sessile oak woods (91A0) and salt meadows (1330) Vascular plants: opposite-leaved pondweed Mammals: otter, pipistrelle bat, natterer's bat, Daubenton's bat Birds: Greenland white-fronted goose, greylag goose, whooper swan, dunlin, greenshank, kingfisher, golden plover Fish: salmon, twaite shad, smelt, brook lamprey, river lamprey, sea lamprey Invertebrates: white-clawed crayfish

¹ = sites that overlap with, or are sub-sites of River Barrow and River Nore pcSAC 2162

pcSAC = proposed candidate Special Area of Conservation

pNHA = proposed Natural Heritage Area

Annex I = list of habitats of conservation importance in the EU Habitats Directive

* = Annex I priority habitat (in danger of disappearance)

I-WeBS = Irish Wetland Bird Survey

Rare and protected species include those listed in the Flora Protection Order, 1999, in the Irish Red Data books for vascular plants (Curtis and McGough, 1988) and vertebrates (Whilde 1993), and in Annex I of the EU Birds Directive.

Table 3: Ecological Sites in the Study Area

Site no.	Grid ref.	Site description/habitat types
1	S 47 54	Broadleaved woodland
2	S 46 56	Quarry
3	S 46 53	Small lowland conifer plantation
4	S 45 52	Conifer plantation, partly felled
5	S 47 55	Lowlying wetland area with wet grassland and possibly heath
6	S 53 51	Waterbody and wetland area
7	S 64 53	River and woodland fringe near Gowran
8	S 62 51	Woodland along the margins of a racecourse
9	S 68 54	River Barrow and associated semi-natural habitats (woodland, scrub, unimproved grassland)
10	S 68 54	Quarry adjacent to site 9
11	S 48 49	Broadleaved woodland
12	S 48 48	Lowland area of wet grassland and fen (and possibly bog) beside two streams
13	S 52 48	Small woodland
14	S 55 47	Small area of broadleaved woodland adjacent to River Barrow and River Nore pcSAC – see Table 1
15	S 60 23	Conifer plantation, recently felled woodland and heath
16	S 55 43	Scattered areas of broadleaved woodland, east of River Barrow and River Nore pcSAC – see Table 1
17	S 54 42	Mosaic of conifer plantation and broadleaved woodland adjacent to River Barrow and River Nore pcSAC – see Table 1
18	S 54 41	Lowlying wetland area
19	S 59 42	Scrub and scattered trees along two streams
20	S 59 43	Small area of woodland
21	S 60 40	Mixed broadleaved/conifer woodland adjacent to River Barrow and River Nore pcSAC – see Table 1
22	S 51 39	Woodland/scrub on a hill
23	S 52 36	Small lowland wetland area beside stream, scattered trees
24	S 55 38	Little Arrigle River and associated semi-natural habitats
25	S 55 38	Wooded area along railway embankment and nearby hill slope
26	S 57 38	Wooded river valley
27	S 57 39	Mixed broadleaved/conifer woodland on hill slope
28	S 58 40	Scrub/woodland on hill slope
29	S 59 38	Woodland, upland unimproved grassland and heath on hill slope
30	S 60 38	Wooded river valley along the Arrigle River
31	S 51 34	Conifer plantation and recently felled woodland on hill slope
32	S 53 35	Conifer plantation and recently felled woodland along Little Arrigle River
33	S 55 35	Conifer plantation and recently felled woodland on hill slope, possibly with areas of heath
34	S 58 35	Conifer plantation, recently felled woodland, heath and unimproved grassland in upland area
35	S 59 34	Broadleaved woodland in the Arrigle River valley
36	S 52 31	Conifer plantation, recently felled woodland and heath on hill slope
37	S 54 32	Conifer plantation, recently felled woodland and heath on hill slope
38	S 53 29	Unimproved grassland and wetland area adjacent to Hugginstown Fen pNHA – see Table 1
39	S 54 30	Wetland area adjacent to Kilkeasy Bog pNHA – see Table 1
40	S 57 31	Conifer plantation and areas of open upland habitat (heath, grassland)
41	S 59 32	Mixed broadleaved/conifer plantation on hill slope
42	S 60 32	Conifer plantation on hill slope near Arrigle River
43	S 61 32	Conifer plantation on hill slope

44	S 61 31	Wetland area in the Arrigle River valley
45	S 55 28	Woodland fringe along Derrylacky River
46	S 57 28	Conifer plantation, recently felled woodland and areas of open upland habitat (grassland and heath)
47	S 60 25	Conifer plantation, recently felled woodland and areas of open upland habitat (grassland and heath)
48	S 62 27	Wetland area in the Arrigle River valley
49	S 55 25	Wetland area in the Black Water River valley
50	S 57 25	Scrub and wetland areas in river valley
51	S 54 24	Woodland/scrub fringe along Pollanassa River
52	S 57 23	Scrub fringe along river
53	S 59 23	Conifer plantation and areas of upland wet grassland
54	S 55 22	Broadleaved woodland on hill slope
55	S 55 21	Conifer plantation and scrub
56	S 58 22	Conifer plantation and areas of open upland habitat (grassland and possibly heath)
57	S 61 21	Wet grassland on hill slope and wetland area adjacent to river
58	S 57 21	Small upland conifer plantation
59	S 57 20	Small lowland conifer plantation
60	S 61 20	Woodland on steep slopes
61	S 61 19	Small mixed broadleaved/conifer plantation in lowland area
62	S 58 15	Broadleaved woodland/scrub and wet grassland adjacent to Grannyferry pNHA – see Table 1
63	S 59 15	Woodland along the valley of Smartcastle Stream
64	S 59 14	Strip of woodland/scrub adjacent to Grannyferry pNHA – see Table 1
65	S 55 15	Exposed rock and possible wetland area
66	S 55 51	Quarry adjacent to River Barrow and River Nore pcSAC – see Table 1
67	S 54 50	Quarry adjacent to River Barrow and River Nore pcSAC – see Table 1
68	S 60 49	Lowland wetland area with wet grassland, scrub and heath
69	S 54 48	Mixed broadleaved/conifer woodland on estate
70	S 54 45	Broadleaved woodland adjacent to River Barrow and River Nore pcSAC – see Table 1
71	S 60 48	Lowland wetland area along river
72	S 51 38	Lowland area with trees, scrub and wet grassland
73	S 54 33	Wetland area along river
74	S 54 22	Upland wet grassland and heath
75	S 54 21	Upland wet grassland and heath
76	S 55 21	Heath and wet grassland on hill slope
77	S 57 22	Lowland wet grassland

Table 4: Fisheries value of the main watercourses in the southern section of the N9/N10 Kilcullen to Waterford study area.

Name	Channel type	Fisheries value/protected fauna	Rating
Barrow system			
Barrow	Main channel	Good stock of brown trout. Salmon, bream and pike also present. Noted for quality of coarse fishing at a number of locations. Lamprey (unspec.) in the upper reaches	A
Monefelim River	Tributary	Contains salmonids	C
Gowran River	Tributary	Contains salmonids	C
Powerstown River	Tributary	Contains salmonids	C
Nore system			
River Nore	Main channel	Designated Salmonid Water. Proposed as an SAC for salmon (Dwyer, 2000). Good stocks of brown trout. Lamprey (unspec.) in the upper reaches. Ammocoetes (unspec.) in the lower and middle reaches. Brook and sea lamprey common; sea lamprey spawn between Thomastown and Inistioge	A
Pococke River	Tributary	Contains salmonids	C
King's River	Tributary	Important for salmonids. Lamprey (unspec.) in the upper reaches. White-clawed crayfish present. <i>Two main tributaries: River Glory and Ennisnag Stream</i>	B
Little Arrigle River	Tributary	Ammocoetes (unspec.) in the lower reaches. Important for salmonids	B
Arrigle River	Tributary	Brook and sea lamprey spawn in the lower reaches. Important for salmonids	B
Suir system			
River Suir	Main channel	Adjoins the southern boundary of the study area. Contains salmonids, twaite shad, smelt, brook lamprey, river lamprey, sea lamprey, white-clawed crayfish	A
Black Water River	Tributary	Important for salmonids <i>One main tributary: Pollanassa River</i>	B
Smartcastle Stream	Tributary	Contains salmonids	C

Sources: Southern Regional Fisheries Board, Reynolds (1998), Kurz and Costello (1999), Dwyer (2000)