Appendix C. Habitats	Water	Dependent	Qualifying	Interest	Species	and

Annex II species which are water dependent and their sensitivities³⁰

Species name	Common name	Code	Surface water dependent	Groundwater dependent	Marine water dependent**	Sensitivity to hydrological impacts	Sensitivity to water pollution	Overall Status ³¹
Vertigo geyeri	Geyer's whorl snail	1013		✓		High	High	Bad
Vertigo moulinsiana	Desmoulin's whorl snail	1016	✓	✓		High	High	Inadequate
Margaritifera margaritifera	Freshwater pearl mussel	1029	✓			High*	High*	Bad
Austropotamobius pallipes	White- clawed crayfish	1092	✓			Medium to High	Medium to High	Bad
Salmo salar	Atlantic salmon	1106	✓		✓	High	High	Inadequate
Petalophyllum ralfsii	Petalwort	1395		✓		High	High	Favourable
Najas flexilis	Slender naiad	1833	✓			High	High	Inadequate
Margaritifera durrovensis	Nore pearl mussel	1990	✓			High	High*	Bad
Trichomanes speciosum	Killarney fern	1421	✓			High	Medium	Favourable
Saxifraga hirculus	Yellow marsh saxifrage	1528		✓		High	Medium	Favourable

³⁰ Table adapted from Western RBD, ESBI, Eleanor Mayes, Ecological Consultant. (2008). Water Framework Directive Annex IV Protected Areas: Water Dependent Habitats and Species in High Status Sites. Available online 31 National Parks and Wildlife Service (2019a). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neill.

^{*} species extremely sensitive to sedimentation and changes in hydrology, flow regime etc.

** water pollution affecting marine mammals from any of the proposed option types is considered unlikely given the assimilative nature of the marine environment and its very large assimilative capacity

Species name	Common name	Code	Surface water dependent	Groundwater dependent	Marine water dependent**	Sensitivity to hydrological impacts	Sensitivity to water pollution	Overall Status ³¹
Petromyzon marinus	Sea lamprey	1095	✓		✓	High	Medium	Bad
Lampetra planeri	Brook lamprey	1096	✓			High	Medium	Favourable
Lampetra fluviatilis	River lamprey	1099	✓			High	Medium	Unknown
Alosa alosa	Allis shad	1102	✓		✓	High	Medium	Vagrant
Alosa fallax	Twaite shad	1103	✓		✓	High	Medium	Bad
Lutra lutra	Otter	1355	✓		✓	Medium	Medium	Favourable
Vertigo angustior	Narrow- mouthed whorl snail	1014		✓		Medium	Medium	Inadequate
Tursiops truncatus	Bottle-nosed dolphin	1349			✓	N/A	-	Favourable
Phocoena phocoena	Harbour porpoise	1351			✓	N/A	-	Favourable
Halichoerus grypus	Grey seal	1364			✓	N/A	-	Favourable
Phoca vitulina	Common seal	1365			✓	N/A	-	Favourable

Appendix D. Appendix E.

^{*} species extremely sensitive to sedimentation and changes in hydrology, flow regime etc.
** water pollution affecting marine mammals from any of the proposed option types is considered unlikely given the assimilative nature of the marine environment and its very large assimilative capacity

Annex I water dependent habitats

	Affilex I water dependent habitats								
Habitat code	Habitat name	Habitat status ³²							
1110	Sandbanks which are slightly covered by sea water all the time	Favourable							
1130	Estuaries	Inadequate							
1140	Mudflats and sandflats not covered by seawater at low tide	Inadequate							
1150	Coastal lagoons	Bad							
1160	Large shallow inlets and bays	Bad							
1170	Reefs	Inadequate							
1210	Annual vegetation of drift lines	Inadequate							
1220	Perennial vegetation of stony banks	Inadequate							
1230	Vegetated sea cliffs of the Atlantic and Baltic coasts	Inadequate							
1310	Salicornia and other annuals colonising mud and sand	Favourable							
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Inadequate							
1410	Mediterranean salt meadows (Juncetalia maritimi)	Inadequate							
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	Bad							
2110	Embryonic shifting dunes	Inadequate							
2120	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Inadequate							
2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)	Bad							
2140	Decalcified fixed dunes with Empetrum nigrum	Favourable							
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	Inadequate							
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	Inadequate							
2190	Humid dune slacks	Inadequate							
21A0	Machairs (* in Ireland)	Inadequate							
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	Bad							
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea	Inadequate							
3140	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.	Bad							
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	Inadequate							
3160	Natural dystrophic lakes and ponds	Inadequate							
3180	Turloughs	Inadequate							
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	Inadequate							
3270	Rivers with muddy banks with <i>Chenopodion rubri</i> p.p. and <i>Bidention</i> p.p. vegetation	Favourable							
4010	Northern Atlantic wet heaths with Erica tetralix (flushes only)	Bad							
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	Bad							
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	Bad							

³² National Parks and Wildlife Service (2019a). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neill.

Habitat code	Habitat name	Habitat status ³²
7110	Active raised bogs	Bad
7120	Degraded raised bogs still capable of natural regeneration	Bad
7130	Blanket bogs (* if active bog)	Bad
7140	Transition mires and quaking bogs	Bad
7150	Depressions on peat substrates of the Rhynchosporion	Bad
7210	Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	Inadequate
7220	Petrifying springs with tufa formation (Cratoneurion)	Inadequate
7230	Alkaline fens	Bad
8310	Caves not open to the public	Favourable
8330	Submerged or partially submerged sea caves	Favourable
91D0	Bog woodland	Favourable
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	Bad