

APPENDIX A3j – CONSERVATION OF SITES AND SPECIES

A3j.1 INTRODUCTION

There is a wide range of international treaties and conventions, European and national legislation and other measures which have application in relation to the protection and conservation of species and habitats in the UK. These are summarised below as a context and introduction to the site listings which follow.

Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (Birds Directive), and *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora* (Habitats Directive) have together formed a backbone to EU internal policy on the protection of biodiversity. The Habitats Directive requires the creation of a network of protected areas (“European Sites”) known as “Natura 2000” sites. This network consists of Special Areas of Conservation (SACs) to protect habitats and species listed under the Habitats Directive and Special Protection Areas (SPAs) to protect wild birds as set out under the Birds Directive. The Directives also contain requirements for the protection of listed species (“European Protected Species”).

The *Conservation (Natural Habitats &c.) Regulations 1994 (as amended)* transpose the Habitats Directive into legislation in England, Wales and Scotland, including their territorial seas out to 12 nautical miles (nm), as do, in Northern Ireland and its adjacent territorial seas, the *Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended)*. The *Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007* apply the Habitats Directive and the Birds Directive beyond territorial waters (beyond 12nm). These Regulations together provide for the designation and protection of European sites and the protection of European Species in the UK and UK waters.

The *Wildlife and Countryside Act 1981 (as amended)* (WCA) is one of the principal pieces of legislation relating to nature conservation in Great Britain. Although protection under the WCA generally includes adjacent territorial waters (12nm), for certain species, protection is limited to 6nm from coastal baselines due to the interaction with the Common Fisheries Policy and for the designation of Marine Nature Reserves out to 3nm. The WCA is supplemented by various other pieces of legislation including the *Countryside and Rights of Way (CROW) Act 2000* (in England and Wales), and the *Nature Conservation (Scotland) Act 2004* (in Scotland). In Northern Ireland, the main legislation is contained in the *Wildlife (Northern Ireland) Order 1985 (as amended)* and *The Environment (Northern Ireland) Order 2002*. This legislation provides for the protection of species and the designation of nationally important sites known as Sites of Special Scientific Interest (SSSI) in England, Wales and Scotland and as Areas of Special Scientific Interest (ASSI) in Northern Ireland. Many SSSIs and ASSIs are also designated as European Sites.

Directive 2008/56/EC of the European Parliament and of the Council establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) entered into force in July 2008. The Directive establishes a framework within which Member States must take measures to achieve or maintain good environmental status in the marine environment by the year 2020. These measures include the establishment of a cohesive network of Marine Protected Areas (MPAs) which is intended to build on the areas already protected as European marine sites under the Birds and Habitats Directives.

The *Marine and Coastal Access Bill* was introduced to the House of Lords on 4th December 2008. Amongst a range of other powers the Bill will provide for the designation and

protection of a new type of Marine Protected Areas (MPAs), to be known as Marine Conservation Zones (MCZs), and to protect those zones from damaging activities. MCZs will be identified as follows: in English Territorial Waters and all UK offshore waters, apart from those adjacent to Scotland, through the England MCZ Project; in Welsh Territorial Waters, through a project to be implemented by the Welsh Assembly Government; and in UK offshore waters adjacent to Scotland, MPAs will be identified through a Scottish Marine Protected Area Project. Non-Natura MPAs will be established in Scottish Territorial Waters through a Scottish Marine Bill. The Northern Ireland Assembly plans to consult on policy issues in late 2009 for a dedicated Northern Irish Marine Bill. In addition, various conservation NGOs have published their suggestions/proposals for the selection of MPAs for example: Marine Nature Reserves in Northern Ireland: The Way Forward (Thurstan *et al.* 2008), Finding NIMAS: The Case for Nationally Important Marine Areas (Scottish Environment LINK 2007).

The UK Government and devolved administrations commitment to establishing an ecologically coherent and well-managed network of MPAs will contribute to enabling the UK to comply with the requirements of the Marine Strategy Framework Directive and to meet similar commitments regarding MPAs under international conventions such as the Convention on Biological Diversity on halting biodiversity loss including the 2002 Johannesburg Declaration on Sustainable Development and the OSPAR Convention.

Purpose of this Appendix

This Appendix provides an overview of the various types of sites relevant to the SEA which have been designated for their international or national conservation importance as well as sites designated for their wider cultural relevance such as World Heritage Sites and sites designated for landscape reasons etc. Other non-statutory sites potentially relevant to the SEA are also included.

Using a Geographic Information System (GIS), coastal, marine and offshore sites were identified relevant to each of the regional sea areas and mapped. Terrestrial sites which are wholly or in part within a landward 10km coastal buffer and selected other sites are also mapped. Terrestrial sites outside the buffer are not included here with the exception of summaries for sites whose interest features might be affected by activities offshore e.g. sites designated for breeding red throated divers which may feed offshore. Maps are grouped for each regional sea with a brief introduction followed by an outline of the sites and species of nature conservation importance within that regional sea. Regional Sea areas 9 and 10 have no contiguous coastline and contain only offshore conservation sites and are grouped with Regional Sea 8. Regional Seas 5 and 11 have no contiguous coastline and to date no offshore conservation sites proposed and are not mapped further in this section.

A3j.2 SITES OF INTERNATIONAL IMPORTANCE

This section provides an overview of sites designated as required under international legislation for their scientific, wildlife, natural and cultural heritage and/or landscape value.

A3j.2.1 Special Protection Areas (SPA)

Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Directive on the conservation of wild birds (79/409/EEC), also known as the Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds, listed in Annex I of the Birds Directive, and for regularly occurring migratory species.

A list of Migratory and/or Annex 1 bird species for which SPAs are selected in the UK is given in Box A3j.1. Summary information about the internationally designated Special Protection Areas (SPAs), relevant to each Regional Sea, is tabulated at the end of Appendix A3j.

Marine SPAs

Work is currently underway to identify marine SPAs; three main types have been recognised (JNCC website):

- **seaward extensions** to existing breeding seabird colony SPAs
- **inshore aggregations** of non-breeding waterbirds
- **offshore aggregations** of seabirds
- **other types**

Surveys of seabird distribution adjacent to selected breeding colony SPAs in 2001 resulted in recommendations of **seaward extensions** for certain species. Seaward boundary extensions of 1km were recommended for breeding guillemot (*Uria aalge*), razorbill (*Alca torda*) and puffin (*Fratercula arctica*), 2km for gannet (*Morus bassanus*) and fulmar (*Fulmarus glacialis*) and 4km for Manx shearwater (*Puffinus puffinus*) (McSorley *et al.* 2003). Recommended extensions for Manx shearwater may exceed 4km where evidence suggests that this is appropriate.

Analyses of aerial survey data from **inshore** areas of known importance to non-breeding waterbirds allows assessment of whether a site qualifies as an SPA, and if so, where the seaward boundaries of the site might be defined. Several inshore areas around the UK are surveyed annually (e.g. Lewis *et al.* 2008); analyses of data from three selected sites (Liverpool Bay, Camarthen Bay and the outer Tay) have allowed formulation of generic guidance for boundary determination (McSorley *et al.* 2005). The JNCC have made recommendations to the relevant countryside agencies on the establishment of several inshore SPAs, and are currently making further recommendations on several more sites (JNCC website). Forty-five areas of interest have been defined, all within 12nm of the shore.

At present, no recommendations have been made towards designating **offshore aggregations** as SPAs. Analyses of the European Seabirds at Sea (ESAS) database are underway with a view to identifying potential important aggregations of seabirds in offshore waters. Following the introduction of the Offshore Conservation Regulations, it is now a legal requirement for important aggregations of seabirds to be protected in UK offshore waters through the designation of SPAs.

Other types of SPA which may be identified include important areas for seabirds which may not be captured by the other three categories; these will be considered individually. Marine areas used by red-throated divers, terns and shags during the breeding season are currently under consideration. Seabird migration hotspots are also being investigated.

Box A3j.1 - Migratory and/or Annex I bird species for which SPAs are selected in the UK

<p>Divers and grebes Red-throated diver <i>Gavia stellata</i> Black-throated diver <i>Gavia arctica</i> Little grebe <i>Tachybaptus ruficollis</i> Great crested grebe <i>Podiceps cristatus</i> Slavonian grebe <i>Podiceps auritus</i></p> <p>Seabirds Fulmar <i>Fulmarus glacialis</i> Manx shearwater <i>Puffinus puffinus</i> Storm petrel <i>Hydrobates pelagicus</i> Leach's petrel <i>Oceanodroma leucorhoa</i> Gannet <i>Morus bassanus</i> Cormorant <i>Phalacrocorax carbo carbo</i> Shag <i>Phalacrocorax aristotelis</i> Guillemot <i>Uria aalge</i> Razorbill <i>Alca torda</i> Puffin <i>Fratercula arctica</i></p> <p>Gulls, terns and skuas Arctic skua <i>Stercorarius parasiticus</i> Great skua <i>Catharacta skua</i> Mediterranean gull <i>Larus melanocephalus</i> Black-headed gull <i>Larus ridibundus</i> Common gull <i>Larus canus</i> Lesser black-backed gull <i>Larus fuscus</i> Herring gull <i>Larus argentatus</i> Great black-backed gull <i>Larus marinus</i> Kittiwake <i>Rissa tridactyla</i> Sandwich tern <i>Sterna sandvicensis</i> Roseate tern <i>Sterna dougallii</i> Common tern <i>Sterna hirundo</i> Arctic tern <i>Sterna paradisaea</i> Little tern <i>Sterna albifrons</i></p> <p>Crakes and rails Spotted crane <i>Porzana porzana</i> Corncrake <i>Crex crex</i> Coot <i>Fulica atra</i></p> <p>Birds of prey and owls Honey buzzard <i>Pernis apivorus</i> Red kite <i>Milvus milvus</i> Marsh harrier <i>Circus aeruginosus</i> Hen harrier <i>Circus cyaneus</i> Golden eagle <i>Aquila chrysaetos</i> Osprey <i>Pandion haliaetus</i> Merlin <i>Falco columbarius</i> Peregrine <i>Falco peregrinus</i> Short-eared owl <i>Asio flammeus</i></p> <p>Other bird species Capercaillie <i>Tetrao urogallus</i> Nightjar <i>Caprimulgus europaeus</i> Woodlark <i>Lullula arborea</i> Fair Isle wren <i>Troglodytes troglodytes fridariensis</i> Aquatic warbler <i>Acrocephalus paludicola</i> Dartford warbler <i>Sylvia undata</i> Chough <i>Pyrrhocorax pyrrhocorax</i> Scottish crossbill <i>Loxia scotica</i></p>	<p>Waders Oystercatcher <i>Haematopus ostralegus</i> Avocet <i>Recurvirostra avosetta</i> Stone Curlew <i>Burhinus oedicnemus</i> Ringed Plover <i>Charadrius hiaticula</i> Dotterel <i>Charadrius morinellus</i> Golden Plover <i>Pluvialis apricaria</i> Grey Plover <i>Pluvialis squatarola</i> Lapwing <i>Vanellus vanellus</i> Knot <i>Calidris canutus</i> Sanderling <i>Calidris alba</i> Purple Sandpiper <i>Calidris maritima</i> Dunlin <i>Calidris alpina alpina</i> Ruff <i>Philomachus pugnax</i> Snipe <i>Gallinago gallinago</i> Black-tailed Godwit <i>Limosa limosa</i> (breeding) Black-tailed Godwit <i>Limosa limosa islandica</i> (non-breeding) Bar-tailed Godwit <i>Limosa lapponica</i> Whimbrel <i>Numenius phaeopus</i> Curlew <i>Numenius arquata</i> Redshank <i>Tringa totanus</i> Greenshank <i>Tringa nebularia</i> Wood Sandpiper <i>Tringa glareola</i> Turnstone <i>Arenaria interpres</i> Red-necked Phalarope <i>Phalaropus lobatus</i></p> <p>Waterfowl Bewick's swan <i>Cygnus columbianus bewickii</i> Whooper swan <i>Cygnus cygnus</i> Bean goose <i>Anser fabalis</i> Pink-footed goose <i>Anser brachyrhynchus</i> Russian white-fronted goose <i>Anser albifrons albifrons</i> Greenland white-fronted goose <i>Anser albifrons flavirostris</i> Icelandic greylag goose <i>Anser anser</i> Greenland barnacle goose <i>Branta leucopsis</i> Svalbard barnacle goose <i>Branta leucopsis</i> Dark-bellied brent goose <i>Branta bernicla bernicla</i> Canadian light-bellied brent goose <i>Branta bernicla hrota</i> Svalbard light-bellied brent goose <i>Branta bernicla hrota</i> Shelduck <i>Tadorna tadorna</i> Wigeon <i>Anas penelope</i> Gadwall <i>Anas strepera</i> Teal <i>Anas crecca</i> Mallard <i>Anas platyrhynchos</i> Pintail <i>Anas acuta</i> Shoveler <i>Anas clypeata</i> Pochard <i>Aythya ferina</i> Tufted duck <i>Aythya fuligula</i> Scaup <i>Aythya marila</i> Eider <i>Somateria mollissima</i> Long-tailed duck <i>Clangula hyemalis</i> Common scoter <i>Melanitta nigra</i> Velvet scoter <i>Melanitta fusca</i> Goldeneye <i>Bucephala clangula</i> Red-breasted merganser <i>Mergus serrator</i> Goosander <i>Mergus merganser</i></p>
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Scottish Natural Heritage underwent public consultation on seaward extensions to SPAs from June-September 2008; and it is understood that the other Nature Conservation Bodies will consult in the near future. Public consultation on inshore and offshore aggregations and other types of SPA are expected to take place from 2010-11, with site designation in 2012.

A3j.2.2 Special Areas of Conservation (SAC)

Special Areas of Conservation (SACs) are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended). The habitat types and species listed in the Annexes to the Directive are those considered to be most in need of conservation at a European level (excluding birds). Of the Annex I habitat types, 78 are believed to occur in the UK. Of the Annex II species, 43 are native to, and normally resident in, the UK.

Box A3j.2 - Special Area of Conservation site status definitions

Special Areas of Conservation (SACs): sites that have been adopted by the European Commission and formally designated by the government of each country in whose territory the site lies

Sites of Community Importance (SCIs): sites that have been adopted by the European Commission but not yet formally designated by the government of each country

Candidate SACs (cSACs): sites that have been submitted to the European Commission, but not yet formally adopted

Possible SACs (pSACs): sites that have been formally advised to UK Government, but not yet submitted to the European Commission

Draft SACs (dSACs): areas that have been formally advised to UK government as suitable for selection as SACs, but have not been formally approved by government as sites for public consultation

Source: JNCC website

Summary information about the internationally designated Special Areas of Conservation (SACs), relevant to each Regional Sea, is tabulated at the end of Appendix A3j.

Inshore SACs

To complement the existing SACs in English territorial waters with marine interest features, Natural England is proceeding with the identification and designation of a second series of SACs around the English coast (Natural England website). In contrast to the current suite of marine SACs, these sites will not be immediately adjacent to the coast.

A total of 7 areas of search are under investigation for the Annex I habitats of reefs and sandbanks. The identification of new SACs and proposed site boundaries should be completed in 2008, with consultation expected to take place in 2009 (Natural England website).

Offshore SACs

In UK offshore waters (12-200nm), there are currently 5 candidate SACs (cSACs), 2 possible SACs (pSACs) and 2 draft SACs (dSACs). Definitions of these terms are provided in Box A3j.2. Descriptions of these sites are given in Section A3j.10.

The introduction of the Offshore Conservation Regulations¹ in August 2007 formed the legal basis for the implementation of the Habitats and Birds Directives in UK offshore waters. The regulations require the identification of SACs to protect habitats and species in this area. Following much work towards identifying offshore sites, a number of possible sites have been identified. Selection criteria and potential areas which may qualify for protection, as Natura 2000 sites, are given in Johnston *et al.* (2002). An update on the selection criteria and potential areas for SACs (Johnston *et al.* 2003) identified areas of Annex I habitat within the 12-200nm zone which could be classified into Group 1 or Group 2 depending (respectively) on the confirmation/suspicion of the presence of Annex I habitat, adequacy/inadequacy of biological information, and absence/presence of sites of such character in territorial waters.

Following the introduction of the Offshore Conservation Regulations, the Joint Nature Conservation Committee (JNCC) submitted seven possible SACs (pSACs) beyond 12nm for public consultation (JNCC 2007) from December 2007 to March 2008, resulting in modifications to the proposed boundaries of some sites. Five of these sites have been submitted to the European Commission for adoption, and are therefore currently classified as cSACs: Darwin Mounds, Braemar Pockmarks, Scanner Pockmark, Haig Fras and Stanton Banks. Two sites remain as pSACs: the North Norfolk Sandbanks and Saturn Reef and the Wyville Thomson Ridge, while two further sites are classified as draft SACS (dSACs): North West Rockall Bank and Dogger Bank. Further consultation on possible offshore SACs will take place from 2009-2010.

In addition to the sites above, work is ongoing to obtain further information on the distribution of Annex I habitats and Annex II species in offshore waters. Several areas of search for offshore SACs (habitats) have been defined and are given in Ridgeway *et al.* (2008).

A3j.2.3 Ramsar sites

The Convention on Wetlands of International Importance, especially as Waterfowl Habitats (The Ramsar Convention, 1971) is an international treaty that aims to stem the progressive encroachment on and loss of wetland habitat. Ramsar sites are designated because they contain representative, rare or unique wetland types and/or are sites of international importance for conserving biological diversity. The Convention adopts a broad definition of wetland, namely "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres – see Table A3j.1.

Table A3j.1 – Ramsar sites along the UK coast

Name of Ramsar Site	Site code	Country	Area (ha)	Latitude	Longitude	Status
Alde-Ore Estuary	UK11002	England	2546.99	52° 04 58 N	01° 33 03 E	Designated
Summary: Special Protection Area, SSSI. An estuary complex of three rivers comprising various habitats including intertidal mudflats, saltmarsh, a vegetated shingle spit, saline lagoons, and semi-intensified grazing marsh. The site supports nationally scarce plants and invertebrates and notable assemblages of breeding and wintering wetland birds. Human activities include recreation, fishing, livestock grazing, and hunting. Ramsar site no. 862						
Benfleet and Southend Marshes	UK11006	England	2251.31	51° 31 42 N	00° 41 00 E	Designated
Summary: National Nature Reserve, Special Protection Area, SSSI. The site comprises an extensive series of saltmarshes, mudflats,						

¹ *The Offshore Marine Conservation (Natural Habitats &c.) Regulations 2007*

Name of Ramsar Site	Site code	Country	Area (ha)	Latitude	Longitude	Status
and grassland supporting a diverse flora and fauna. Internationally important numbers of several species of wintering waterbirds occur at the site. Human activities include tourism, recreation, research, fishing, shellfish and bait collection, livestock grazing, and hunting. Ramsar site no. 648.						
Blackwater Estuary (Mid-Essex Coast Phase 4)	UK11007	England	4395.15	51° 45 13 N	00° 51 59 E	Designated
Summary: National Nature Reserve, Special Protection Area, SSSI. The site, one of the largest estuarine complexes in East Anglia, consists of intertidal mudflats fringed by saltmarsh, shingle and shell banks, and offshore islands. Surrounding terrestrial habitats include a sea wall, grassland, ancient grazing marsh and associated fleet and ditch system. This rich mosaic of habitats supports an outstanding assemblage of nationally scarce plants and a nationally important assemblage of rare invertebrates. Internationally and nationally important numbers of waterbirds winter at the site. Human activities include marine aquaculture, tourism, commercial and sport fishing, shellfish and bait collection. Extended on 12/05/95 from the former Ramsar Site known as Old Hall Marshes. Ramsar site no. 543.						
Breydon Water	UK11008	England	1202.94	52° 35 03 N	01° 37 18 E	Designated
Summary: Special Area of Conservation, Special Protection Area, SSSI. An inland tidal estuary with extensive areas of mudflats exposed at low tide. The site is internationally important for wintering waterbirds, notably Bewick's swan, <i>Cygnus columbianus bewickii</i> , and it supports important numbers of passage birds. Human activities include recreation, hunting, and agriculture. Extended in March 2000 from 515 to 1203 ha. Ramsar site no. 821.						
Chesil Beach and The Fleet	UK11012	England	748.11	50° 36 40 N	02° 31 10 W	Designated
Summary: Special Protection Area EC Directive; SSSI, Area of Outstanding Natural Beauty, Heritage Coast. A shingle storm beach of international geomorphologic importance, and a shallow lagoon subject to strong tidal and salinity gradients supporting saltmarsh and reedbeds. The area is internationally important for wintering ducks, geese, and swans and nationally important for breeding birds. The Dorset coast is an important centre for tourism and recreation. The area is near a major port and the town of Weymouth. Ramsar site no. 300.						
Chichester and Langstone Harbours	UK11013	England	5810.03	50° 48 23 N	00° 55 12 W	Designated
Summary: Special Protection Area, SSSI, Area of Outstanding Natural Beauty, Local Nature Reserve. Two large estuarine basins linked by a channel and including extensive intertidal mudflats, saltmarsh, sand and shingle spits, and dunes supporting reedbeds and some grassland. Numbers of wintering waterbirds regularly exceed 20,000 individuals and include internationally and nationally important numbers of several species. Human activities include recreation and dredging for oysters and clams. Ramsar site no. 378.						
Colne Estuary (Mid-Essex Coast Phase 2)	UK11015	England	2701.43	51° 48 57 N	00° 57 36 E	Designated
Summary: National Nature Reserve, Special Protection Area, SSSI. A short, branching estuary with five tidal arms flowing into the main river channel. The site includes an intertidal zone of mudflat communities. The estuary is of international importance for wintering brent geese and black-tailed godwit and of national importance for breeding little terns and five other species of wintering waders and wildfowl. Various habitats include mudflats, saltmarsh, grazing marsh, reedbeds, sand and shingle spits, and unused gravel pits. The site supports outstanding assemblages of invertebrates and plants, several of which are nationally scarce. Human activities include nature conservation, tourism, recreation, research, and military activities. Ramsar site no. 665.						
Crouch and Roach Estuaries (Mid-Essex Coast Phase 3)	UK11058	England	1735.58	51° 38 16 N	00° 40 10 E	Designated
Summary: Special Area of Conservation, Special Protection Area, SSSI. The site includes the tidal estuaries of the Crouch and Roach Rivers, an extensive and diverse saltmarsh, and a narrow strip of tidal mud. The dark-bellied brent goose, <i>Branta bernicla bernicla</i> , occurs in internationally important numbers, and three other species of wader and wildfowl occur in nationally important numbers. The site supports a diversity of aquatic and terrestrial invertebrates and an outstanding assemblage of nationally scarce plants. Human activities include recreation, agriculture, hunting, fishing, and marine aquaculture. Ramsar site no. 721.						
Deben Estuary	UK11017	England	978.93	52° 02 31 N	01° 20 44 E	Designated
Summary: Special Protection Area, SSSI. A sheltered estuary with areas of saltmarsh and intertidal mudflats displaying the most complete range of saltmarsh community types in Britain. The site supports nationally and internationally important flora and fauna. Important numbers of the dark-bellied brent goose winter at the site. Human activities include large-scale commercial fishing and small-scale recreation, hunting, and livestock grazing. Ramsar site no. 794						
Dengie (Mid-Essex Coast Phase 1)	UK11018	England	3127.23	51° 41 26 N	00° 57 34 E	Designated
Summary: National Nature Reserve, Special Protection Area, SSSI. A remote area of tidal mudflats and saltmarsh between the						

Name of Ramsar Site	Site code	Country	Area (ha)	Latitude	Longitude	Status
Blackwater and Crouch Estuaries. The saltmarsh, the largest continuous example of its type in Essex, includes cockleshell spits and beaches and supports an outstanding assemblage of rare coastal flora. The site supports internationally and nationally important populations of wintering wildfowl and waders. In summer the range of breeding coastal birds includes rare species. Human activities include tourism, bait collecting, hunting, and fishing. Ramsar site no. 651.						
Dorset Heathlands	UK11021	England	6790.15	50° 39 00 N	02° 09 33 W	Designated
Summary: National Nature Reserve, Special Protection Area, SSSI. This inland wetland contains numerous examples of wet heath (<i>Erica ciliaris</i> , <i>E. tetralix</i>) and acid valley mire, habitats that are restricted to the Atlantic fringe of Europe. These heath wetlands are amongst the best of their type in lowland Britain. The site supports a large assemblage of nationally rare and scarce wetland plant species and invertebrates (28 species). The area is used for nature conservation, tourism, recreation, rough or shifting grazing, mining, and hunting. Ramsar site no. 964.						
Duddon Estuary	UK11022	England	6806.3	54° 10 39 N	03° 15 24 W	Designated
Summary: Special Area of Conservation, SSSI. The site includes marine and coastal wetlands with intertidal sand, mudflats, and saltmarsh. It supports more than 20,000 waterfowl including <i>Calidris canutus</i> (1% of the population) and <i>Anas acuta</i> (2.1% of the population), and the rare natterjack toad <i>Bufo Calamita</i> . The site is used for nature conservation, tourism, recreation, fishing, grazing, and hunting. Ramsar site no. 938.						
Exe Estuary	UK11025	England	2345.71	50° 38 50 N	03° 26 32 W	Designated
Summary: Special Protection Area, SSSI, Local Nature Reserve. The estuary includes shallow offshore waters, extensive mud and sand flats, saltmarsh, a complex of marshes and damp pasture, and an extensive dune system. The area is important for internationally important numbers of several species of wintering and passage waterbirds and functions as a refuge during severe weather. Ramsar site no. 542.						
Foulness (Mid-Essex Coast Phase 5)	UK11026	England	10932.95	51° 34 25 N	00° 55 17 E	Designated
Summary: Special Protection Area, SSSI. Part of an open coast estuarine system comprising grazing marsh, saltmarsh, intertidal mud and sandflats. The site supports nationally rare plants, as well as nationally and internationally important populations of various species of breeding, migratory and wintering waterbirds. Human activities include commercial fishing, agriculture, some livestock grazing, and military activities. Ramsar site no. 861.						
Gibraltar Point	UK11027	England	414.09	53° 06 00 N	00° 20 16 E	Designated
Summary: National Nature Reserve, Special Protection Area, SSSI. The area consists of a sand dunes system, freshwater and saltmarsh, extensive intertidal flats, and open water. The vegetation includes sedges (<i>Carex spp</i>), rushes, ferns, crowfoot, reed, sea holly, and sea campion. It supports <i>Pluvialis squatarola</i> (1.2% of the population), <i>Limosa lapponica</i> (0.6% of the population), and <i>Branta bernicla bernicla</i> (0.3% of the population). The site is used for recreation and grazing. Ramsar site no. 589.						
Hamford Water	UK11028	England	2187.21	51° 52 46 N	01° 14 29 E	Designated
Summary: Special Protection Area; Nature Reserve, SSSI. An estuarine basin with an extensive network of tidal creeks, scattered islands, substantial intertidal sandflats, mudflats supporting <i>Zostera spp.</i> beds, and associated saltmarsh. Several rare or notable plants and a well-developed flora characteristic of the lime-rich sand are supported on the dune-topped shingle spits. The site is important for nationally and internationally important numbers of wintering and nesting waterbirds, and serves as a winter refuge for migratory waterbirds displaced by severe weather. Ramsar site no. 607.						
Humber Estuary	UK11031	England	37987.8	53° 32 59 N	00° 00 03 E	Designated
Summary: Special Protection Area, SSSI. An estuary with a max.7.4 m. tidal range exposing vast mud and sand flats at low tide. Vegetation includes extensive reedbeds, areas of mature and developing saltmarsh, backed by grazing marsh or low sand dunes with marshy slacks and brackish pools. The area regularly supports internationally important numbers of various species of breeding and wintering waterbirds. Many passage birds, notably internationally important populations of ringed plover, <i>Charadrius hiaticula</i> , and sanderling <i>Calidris alba</i> stage in the area. The site supports Britain's most southeasterly breeding colony of grey seal <i>Halichoerus grypus</i> . Human activities include tourism, recreation, commercial and recreational fishing, livestock grazing, and hunting. Renamed and area significantly increased in 2007. Ramsar site no. 663.						
Isles of Scilly	UK11033	England	401.64	49° 57 46 N	06° 20 42 W	Designated
Summary: Special Protection Area, SSSI. The site is within the Isles of Scilly archipelago 45km southwest of Land's End, England, and mainly consists of many small uninhabited islands and parts of some inhabited islands, with habitats including coastal cliffs, boulder beaches, heathland, and some dune grassland. The economy of local communities depends heavily upon tourism, which benefits from the presence of high numbers of breeding seabirds in an attractive environment. The site qualifies for the List by virtue of Criterion 6, for during the breeding season some 2.9% of the population of lesser black-backed gull (<i>Larus fuscus</i>) is supported. The sea cliffs, rocky islets, and boulder beaches are relatively devoid of plant communities except for a sparse crevice vegetation with <i>Crithmum maritimum</i> and <i>Armeria maritima</i> . An environmental trust manages most of the land						

Name of Ramsar Site	Site code	Country	Area (ha)	Latitude	Longitude	Status
within the site and controls access of visitors to the most vulnerable areas by voluntary agreement with tour boat operators; it also maintains a rat control programme to reduce their impact on ground-nesting seabirds. Ramsar site no. 1095.						
Lindisfarne	UK11036	England	3679.22	55° 40 22 N	01° 50 17 W	Designated
Summary: Special Protection Area, Nature Reserve, SSSI, Area of Outstanding Natural Beauty, Heritage Coast. Extensive intertidal flats, with a large area of saltmarsh, a major sand dune system with well-developed dune slacks supporting beds of <i>Zostera</i> . The slacks provide food for an internationally important flock of wintering geese, <i>Branta bernicla hrota</i> (2,428), of the Spitzbergen breeding population. Various species of ducks and geese winter in internationally important numbers regularly exceeding 20,000 individuals. The site is of national importance for breeding terns. The dune systems support a rich flora and diverse invertebrate fauna. Tourism attracts up to 750,000 visitors annually. Ramsar site no. 70.						
Medway Estuary and Marshes	UK11040	England	4696.74	51° 24 02 N	00° 40 38 E	Designated
Summary: Special Protection Area, SSSI. The site is a complex of rain-fed, brackish, floodplain grazing marsh with ditches and intertidal marsh and mudflat. It is of international importance for its diverse assemblage of wetland plants and invertebrates (12 British Red Data Book species). Over the winter it provides habitat for <i>Tringa totanus</i> (2.1% of the population), <i>Pluvialis squatarola</i> (2% of the population), and <i>Calidris alpina alpina</i> (1.9% of the population). The area is used for recreation, fishing, grazing, and hunting. Ramsar site no. 645.						
Mersey Estuary	UK11041	England	5023.35	53° 18 51 N	02° 49 25 W	Designated
Summary: Special Protection Area, SSSI. A large, sheltered estuary comprising large areas of saltmarsh and intertidal sand and mudflats. The site includes brackish marsh, rocky shoreline, and cliffs set in a rural and industrial environment. Internationally important numbers of various species of waterbirds feed and roost at the site in winter, or stage at the site in spring and fall, notably <i>Charadrius hiaticula</i> . Human activities include livestock grazing, hunting, industrial activities. Ramsar site no. 785.						
Mersey Narrows and North Wirral Foreshore	UK11042	England	2089.41	53° 29 53 N	07° 03 43 W	Proposed
Summary: The site comprises intertidal habitats at Egremont foreshore, man-made lagoons at Seaforth Nature Reserve and the extensive intertidal flats at North Wirral Foreshore. Egremont is most important as a feeding habitat for waders at low tide whilst Seaforth is primarily a high-tide roost site, as well as a nesting site for terns. North Wirral Foreshore supports large numbers of feeding waders at low tide and also includes important high-tide roost sites. The most notable feature of the site is the exceptionally high density of wintering turnstone <i>Arenaria interpres</i> . Mersey Narrows and North Wirral Foreshore has clear links in terms of bird movements with the nearby Dee Estuary SPA, Ribble and Alt Estuaries SPA, and (to a lesser extent) Mersey Estuary SPA.						
Minsmere/Walberswick	UK11044	England	2018.92	52° 18 55 N	01° 38 02 E	Designated
Summary: Special Protection Area, Nature Reserve, SSSI, Environmentally Sensitive Area, Area of Outstanding Natural Beauty, Heritage Coast. A mosaic of coastal habitats consisting of shingle beaches, dunes, estuarine mudflats, grazing marshes, lagoons, reedbeds, and heathland. The marshes support the largest continuous stand of reedbed in England and Wales. The site supports an outstanding diversity of breeding birds, including a number of nationally rare species which winter at the site, as well as rare species of marshland flora and insect fauna. A flagship reserve, in which a well-developed system of trails and hides are maintained. Human activities include groundwater abstraction and increasing numbers of visitors. Ramsar site no. 75.						
Morecambe Bay	UK11045	England	37404.6	54° 07 19 N	02° 57 21 W	Designated
Summary: Special Area of Conservation, Special Protection Area, SSSI. Representing the largest continuous intertidal area in Britain, the site comprises the estuaries of five rivers, intertidal mud and sandflats, associated saltmarshes, shingle beaches, and other coastal habitats. It is part of a series of west coast estuaries of outstanding importance for numerous species of passage, breeding and wintering waterbirds. The site supports the third largest number of wintering wildfowl in Britain. Breeding birds include gulls and terns. Human activities include recreation, hunting, fishing, and livestock grazing. Site extended from 35,372 to 36,913 hectares in 1999. Ramsar site no. 863.						
North Norfolk Coast	UK11048	England	7862.39	52° 58 13 N	00° 35 55 E	Designated
Summary: UNESCO Biosphere Reserve, Special Protection Area, Nature Reserve, SSSI, Area of Outstanding Natural Beauty, Heritage Coast. A stretch of coastline consisting of shingle beaches, dunes, saltmarsh, intertidal mud and sand flats, brackish lagoons, reedbeds, and grazing marshes. The site supports nationally and internationally important numbers of various species of breeding or wintering waterbirds. It also includes several important botanical areas and is a centre for tourism and general recreation; a visitors' centre, trails and hides are available. Ramsar site no. 76.						
Northumbria Coast	UK11049	England	1107.98	55° 27 58 N	01° 35 18 W	Designated
Summary: Special Protection Area, SSSI. Comprises several discrete sections of rocky foreshore between Spittal, in the north of Northumberland, and an area just south of Blackhall Rocks in County Durham. These stretches of coast regularly support						

Name of Ramsar Site	Site code	Country	Area (ha)	Latitude	Longitude	Status
<p>internationally important numbers of purple sandpiper (<i>Calidris maritima</i>) and turnstone (<i>Arenaria interpres</i>, 1739 individuals, 2.6 % of the Eastern Atlantic Flyway population). The Ramsar site also includes an area of sandy beach which supports a nationally important breeding colony of little tern and parts of three artificial piers which form important roost sites for purple sandpiper. The 96% of the site composed of Wetland Type D (rocky marine shore) includes cliffs, crags/ledges, intertidal rock, open coast (including bay), and pools and assists in shoreline stabilization, dissipation of erosive forces, and sediment trapping. Little terns are vulnerable to disturbance by tourists in the summer causing reduced breeding success, and the National Trust employs wardens in summer to protect the little tern colony. A range of recreational activities takes place along the coast, including walking, camping, sea angling, birdwatching, and water sports (water skiing, sailing, windsurfing and canoeing). Birdwatching is particularly popular at Druridge Bay. In addition to many day trippers who come to the site, a sizeable population of summer visitors stay in caravan parks and other accommodation along the coast. Ramsar site no. 1019.</p>						
Pagham Harbour	UK11052	England	636.68	50° 45 48 N	00° 45 38 W	Designated
<p>Summary: Special Protection Area, SSSI, Local Nature Reserve. An estuarine harbour with shingle beaches, intertidal mudflats and saltmarsh, giving way to brackish marsh supporting reedbeds and damp pasture. The site includes a nationally important vegetation community and small amounts of ancient woodland. Nationally and internationally important numbers of wintering or breeding waterbirds or waders use the site. Ramsar site no. 396.</p>						
Pevensey Levels	UK11053	England	3577.71	50° 50 30 N	00° 20 32 E	Designated
<p>Summary: National Nature Reserve. The site is one of the largest and least fragmented lowland wet grassland systems in southeast England, including a small area of shingle and intertidal muds and sands. The low-lying grazing meadows are intersected by a complex system of ditches which support rare and scarce aquatic plants and invertebrates (freshwater molluscs and dragonflies <i>Odonata spp</i>) as well as breeding and wintering wildfowl. The area is used for nature conservation, pastoral agriculture, tourism, fishing, and hunting. Ramsar site no. 973.</p>						
Poole Harbour	UK11054	England	2439.2	50° 40 52 N	02° 01 34 W	Designated
<p>Summary: National Nature Reserve, Special Protection Area, SSSI. The site is described as the best and largest example in Britain of a bar-built estuary with lagoon characteristics. It is composed of salt marshes, peatland mires, swamps, and fens. The site supports two species of nationally rare plants and one nationally rare alga, as well as at least three Red Data Book species of invertebrate. There are also internationally important numbers of waterfowl, including <i>Sterna hirundo</i> and <i>Larus melanocephalus</i>. The area is used for nature conservation, recreation, permanent pastoral agriculture, and fishing. Ramsar site no. 1005.</p>						
Portsmouth Harbour	UK11055	England	1248.77	50° 49 41 N	01° 07 32 W	Designated
<p>Summary: Special Protection Area, SSSI. A large industrialized estuary consisting of a saltmarsh, vast expanses of mudflats, and tidal creeks on the south coast. The mudflats, supporting extensive beds of eelgrass, green algae, and sea lettuce, provide feeding grounds for internationally important numbers of wintering dark-bellied brent geese. A unique and high quality flora and fauna occur at the site. Nationally important numbers of grey plover, dunlin, and black-tailed godwit are supported. Set in an urban area, there is a major port facility, and large-scale military activities occur at the site. Ramsar site no. 720.</p>						
Ribble and Alt Estuaries	UK11057	England	13464.1	53° 42 41 N	02° 58 44 W	Designated
<p>Summary: Special Protection Area, SSSI. A large area, including two estuaries, extensive sand and mudflats, saltmarsh and dunes. The tidal flats and saltmarsh support internationally important populations of wintering waterbirds. Internationally important vegetation communities and amphibian populations occur in the sand dunes. Human activities include tourism, livestock grazing, hunting, and large-scale industrial and military activities. There are port facilities, as well as oil and gas production and exploration activities, in the surroundings. Extended on 16/02/95 from the former Ramsar Site known as Alt Estuary. Ramsar site no. 325.</p>						
Solent and Southampton Water	UK11063	England	5346.44	50° 44 25 N	01° 31 32 W	Designated
<p>Summary: National Nature Reserve, SSSI. The site is comprised of estuaries and adjacent coastal habitats including intertidal flats, saline lagoons, shingle beaches, reefs, saltmarsh, and reedbeds, damp woodland, and grazing marsh. The site exhibits an "unusual strong double tidal flow" and has long periods of slack water at high and low tide. It supports internationally important numbers of wintering waterfowl (51,361 over the winter) including <i>Charadrius hiaticula</i>, <i>Anas crecca</i> and <i>Branta bernicla bernicla</i>, important breeding gull and tern populations, and an impressive assemblage of rare invertebrates and plants. Human activities include tourism, recreation, fishing, marine aquaculture, and hunting. Ramsar site no. 965.</p>						
Stodmarsh	UK11066	England	481.33	51° 18 18 N	01° 10 19 E	Designated
<p>Summary: National Nature Reserve, Special Protection Area, SSSI. This is a complex site comprising inland, marine and coastal wetlands. It is important because it supports a number of uncommon wetland invertebrates and plants, and it provides breeding and wintering habitat for several wetland bird species, particularly waterfowl such as <i>Anas strepera</i>. The main activities include nature conservation, recreation, research, and fishing. Ramsar site no. 646.</p>						
Stour and Orwell Estuaries	UK11067	England	3676.92	51° 57 16 N	01° 09 38 E	Designated

Name of Ramsar Site	Site code	Country	Area (ha)	Latitude	Longitude	Status
Summary: Special Protection Area, SSSI. An estuary comprising extensive mudflats, low cliffs, saltmarsh, and areas of vegetated shingle on the lower river reaches. The site supports internationally and nationally important numbers of numerous species of wintering wildfowl and waders. Several nationally scarce plants and invertebrates occur. Human activities include tourism, bait collection, livestock grazing, and hunting. Ramsar site no. 662.						
Teesmouth and Cleveland Coast	UK11068	England	1247.31	54° 37 50 N	01° 07 07 W	Designated
Summary: National Nature Reserve, Special Protection Area, SSSI. An estuary, highly modified by human activities, encompassing a range of habitats including sand and mud flats, rocky shore, saltmarsh, freshwater marsh, and sand dunes. Nationally and internationally important numbers of various species of waterbirds stage and winter at the site. The site supports a rich assemblage of invertebrates, including seven nationally rare species. Human activities include recreation, hunting, and fishing. Site extended from 943 to 1247 hectares, 11/04/00. Ramsar site no. 741.						
Thames Estuary and Marshes	UK11069	England	5588.59	51° 29 08 N	00° 35 47 E	Designated
Summary: Special Protection Area, SSSI. The site comprises a complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat along the River Thames between Gravesend and Sheerness in Essex and Kent. The habitats support internationally important numbers of wintering waterfowl, and the saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. The site performs important hydrological functions, including shoreline stabilization, sediment trapping, flood water storage and desynchronization of flood peaks, and maintenance of water quality by removal of nutrients. Human uses include yachting, angling, wildfowling (seasonal), jet skiing, waterskiing, and birdwatching; disturbance from some of these is a current issue but is being addressed through negotiation and awareness-raising. Ramsar site no. 1025.						
Thanet Coast and Sandwich Bay	UK11070	England	2169.23	51° 18 18 N	01° 22 47 E	Designated
Summary: Special Area of Conservation, Special Protection Area, SSSI. A coastal site, consisting of a long rocky shore, adjoining estuary, dune, maritime grassland, saltmarsh, and grazing marsh. The site supports internationally important numbers of wintering turnstone <i>Arenaria interpres</i> , nationally important numbers of a breeding seabird, and four waders: ringed plover, golden plover, gray plover, and sanderling. Large numbers of migratory birds use the site for staging. Large numbers of nationally scarce invertebrate species occur at the site. Human activities include recreation, bait collection, agriculture, livestock grazing, fishing, and hunting. Ramsar site no. 664.						
The Swale	UK11071	England	6514.71	51° 21 39 N	00° 50 21 E	Designated
Summary: Special Protection Area, Nature Reserve, SSSI, Environmentally Sensitive Area, Local Nature Reserve. An extensive complex of mudflats, saltmarsh and freshwater grazing marsh, an estuarine channel, and areas of shingle, shell and sand beaches and mussel beds. The saltmarshes and mudflats support a high species diversity of plants and invertebrates, including several nationally rare species. The area is of national importance for various breeding, passage and wintering ducks and waders, and regularly supports internationally important numbers of numerous species of wintering waterbirds. Ramsar site no. 299.						
The Wash	UK11072	England	62211.66	52° 56 16 N	00° 17 12 E	Designated
Summary: Special Protection Area, Nature Reserve, SSSI, Area of Outstanding Natural Beauty, Local Nature Reserve. A vast intertidal embayment incorporating one of the largest and most important areas of estuarine mudflats, sandbanks and saltmarsh in Britain. Counts of wintering waterbirds reach 320,673 individuals and include nationally and internationally important numbers of numerous species, notably up to 17,000 passerines (perching songbirds). The site is also of outstanding international importance for passage birds, notable waders, and supports various breeding birds, an important shell fishery, and the largest breeding colony in Europe of the common seal <i>Phoca vitulina</i> . Adjoining land is used for intensive agriculture, and includes several localized industrial and residential zones. There are few public access points. Ramsar site no. 395.						
Severn Estuary	UK11081	England/Wales	24662.98	51° 13 29 N	03° 02 57 W	Designated
Summary: Special Protection Area, Nature Reserve, SSSI. The estuary has the second highest tidal range in the world and consists of an extensive intertidal zone comprising intertidal mudflats, sand banks, saltmarsh, shingle, and rocky platforms. Flora and fauna communities typical of extreme physical conditions occur at the site. The invertebrate community provides an important food source for passage and wintering waders. The site is of particular importance for staging nationally important numbers of several species of waterbirds, including <i>Tadorna tadorna</i> and <i>Numenius phaeopus</i> , and supports internationally important numbers of various species of wintering waterbirds, including <i>Limosa limosa islandica</i> . This site is important for several species of fish migrating between sea and river via the estuary. Small patches of a nationally rare plant <i>Lythrum hyssopifolia</i> are found in the grassland zone. Human activities include recreation, fishing, and hunting, and a visitors' centre, trails and hides are maintained. Extended on 13/07/95 from the former Ramsar Sites Bridgwater Bay and Upper Severn Estuary. Ramsar site no. 67						
The Dee Estuary	UK11082	England/Wales	13084.85	53° 18 39 N	03° 11 02 W	Designated
Summary: Special Protection Area, SSSI. Extensive intertidal mud and sand flats, with large expanses of saltmarsh and three sandstone islets providing high-tide roosts. Numbers of numerous species of wintering waterbirds can reach 74,000 individuals. The site						

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is surrounded by agricultural land, industry, residential and urban development. Human activities include recreation. The estuary is under pressure from industrial and transport development and suffers from a lack of integrated management, owing (in part at least) to multiple administrative bodies. Specific issues include tipping of colliery waste, discharge from paper mills, recreational disturbance, and power station construction. Subject of Ramsar Advisory Missions in 1993 and 1994. Ramsar site no. 298.						
Burry Inlet	UK14001	Wales	6627.99	51° 38 55 N	04° 10 37 W	Designated
Summary: Special Protection Area, Nature Reserve, SSSI, Area of Outstanding Natural Beauty, Heritage Coast. An estuarine complex with extensive areas of intertidal sand and mudflats. The site includes the largest continuous area of saltmarsh in Wales and major dune systems at the estuary mouth. Nationally and internationally important numbers of several species of wintering waterbirds are supported, with numbers reaching 42,563 individuals. Ramsar site no. 562.						
Cors Fochno and Dyfi	UK14004	Wales	2492.24	52° 32 21 N	03° 59 52 W	Designated
Summary: UNESCO Biosphere Reserve, Nature Reserve, SSSI. A bar-built estuarine complex, comprising the Dyfi estuary, two calcareous dune systems, and a large raised mire. The Dyfi is one of the best examples in north-west Europe of a small, drying, nutrient-poor estuary, which has been relatively unaffected by industrial development. A wide range of estuarine habitats are present, including rare transitions to peatland. Cors Fochno is of international importance being the type locality for estuarine raised mire and one of the largest active raised mires in the United Kingdom. The geomorphology, flora and invertebrate faunas are of national importance. The site supports the only regular wintering flock of Greenland white-fronted geese in England and Wales, and is a key site in Wales for breeding waders. The site supports significant tourist trade, recreational and educational usage. Ramsar site no. 66.						
Corsydd Môn a Llyn (Anglesey & Llyn Fens)	UK14005	Wales	624.9	53° 18 45 N	04° 17 44 W	Designated
Summary: National Nature Reserve, SSSI. The inland wetland supports a suite of base-rich fens comprising of six component sites, supporting a range of associated floral and faunal rarities. Calcareous springs, predominantly from limestone aquifers, irrigate the fen and result in a distinctive vegetation. Human activities include nature conservation, tourism, grazing, and hunting. Ramsar site no. 927.						
Upper Solway Flats and Marshes	UK11079	England/Scotland	43636.73	54° 54 20 N	03° 25 27 W	Designated
Summary: Special Protection Area, Nature Reserve, SSSI, Area of Outstanding Natural Beauty. Bordering Scotland, the extensive flats and marshes form one of the largest and most important continuous areas of intertidal habitat in Britain. The site exhibits an outstanding display of vegetational transition from seaward edge communities through grassy saltmarsh to mature marsh. The estuary is internationally important for numerous species of wintering waterbirds, whose numbers reach 121,325 individuals and include the entire Svalbard breeding population of the goose <i>Branta leucopsis</i> . The site is a vital estuary link used by various migrating waders, and the area is used for recreation, fishing, and grazing. Extended 30/11/92 from the former Ramsar Site Rockcliffe Marsh. Ramsar site no. 341.						
Bridgend Flats, Islay	UK13001	Scotland	331.16	55° 46 22 N	06° 16 05 W	Designated
Summary: Added to the Montreux Record, 4 July 1990, removed from the Record, 9 November 1991. Special Protection Area, SSSI. An area of sand and mudflats backed by saltmarsh. An important feature of the site is the well-developed transition from upper saltmarsh to freshwater marsh and fen, which exhibits a high botanical diversity. Internationally important numbers (up to 14,000 birds) of geese from the Greenland breeding population roost at the site. Ramsar site no. 403.						
Castle Loch, Lochmaben	UK13006	Scotland	107.6	55° 07 12 N	03° 25 50 W	Designated
Summary: SSSI. A freshwater loch with a range of habitats including emergent vegetation, birch and alder carr, areas of acidic, marshy grassland, and plantation woodland. The site regularly supports internationally important numbers of wintering pink-footed geese <i>Anser brachyrhynchus</i> and notable assemblages of breeding and wintering birds, as well as nationally scarce plants and uncommon invertebrates. Human activities include fishing, hunting, small-scale recreation, and commercial forestry. Ramsar site no. 796.						
Coll	UK13008	Scotland	2208.52	56° 39 16 N	06° 30 05 W	Designated
Summary: Special Protection Area, SSSI. The site supports substantial areas of maritime heath, blanket mire, and open water. The occurrence and botanical composition reflect the long interaction between landforms and low-intensity agriculture. The site supports internationally important numbers of geese, together with several nationally rare wetland plant species. Human activities include tourism, livestock grazing, hunting, and fishing. Ramsar site no. 723.						
Cromarty Firth	UK13009	Scotland	3746.95	57° 41 00 N	04° 12 00 W	Designated

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<p>Summary: Special Protection Area, SSSI. The site supports the full range of estuarine habitats. Of particular importance are the extensive intertidal mudflats, which support sizeable beds of <i>Zostera spp.</i> The tidal flats are bordered locally by saltmarsh which grades into alluvial woodland at the mouth of the river Conon. It provides habitat for internationally important populations of <i>Limosa lapponica</i> and <i>Anser anser</i>. The site is used for nature conservation, tourism, and grazing. Ramsar site no. 1001.</p>						
Dornoch Firth and Loch Fleet	UK13011	Scotland	7836.6	57° 51 00 N	04° 02 30 W	Designated
<p>Summary: National Nature Reserve, SSSI, Special Protection Area. The Dornoch Firth is a large complex estuary which has been relatively unaffected by industrial development, whilst Loch Fleet is an example of a shallow, bar-built estuary. Extensive sandflats and mudflats are backed by saltmarsh and sand dunes with transitions to alder <i>Alnus glutinosa</i> woodland. It supports nationally scarce aquatic plants and British Red Data Book invertebrates. Over the winter it provides habitat for <i>Anser anser</i> (1.1% of the population), <i>Anas penelope</i> (1.2% of the population), and <i>Limosa lapponica</i> (1.1% of the population). Human activities include tourism, forestry, fishing, grazing, and hunting. Ramsar site no. 897.</p>						
East Sanday Coast	UK13013	Scotland	1514.88	59° 16 00 N	02° 34 00 W	Designated
<p>Summary: Special Protection Area, SSSI. The site comprises inland, marine, and coastal wetlands. The coastline consists of rocky and sandy sections, sand dunes, machair habitats, intertidal flats, and saltmarsh. It supports greater than 20,000 waterfowl, including <i>Calidris maritima</i> and <i>Arenaria interpres</i>. Human activities include nature conservation and tourism within the site, and fishing, grazing, and mineral exploration in the vicinity. Ramsar site no. 917.</p>						
Firth of Forth	UK13017	Scotland	6313.68	56° 01 00 N	02° 53 00 W	Designated
<p>Summary: A large coastal area comprising a complex of estuaries, mudflats, rocky shorelines, beaches and saltmarshes, including many fragmentary bits of shoreline considered to act as a single ecological unit. Several large urban areas, including Edinburgh, are adjacent to the site and include areas of heavy industry and well-used maritime shipping lanes. The site provides habitat for large numbers of wintering waders and wildfowl, many in nationally and internationally important numbers, and a number of aesthetic, archaeological, sporting and recreational interests lend added value. Coastal industrial development is seen as a source of pressure but is subject to detailed planning control, and the potential for rising sea levels are foreseen in "planned retreat" coastal realignment schemes. Ramsar site no. 1111.</p>						
Firth of Tay & Eden Estuary	UK13018	Scotland	6918.42	56° 24 30 N	03° 05 00 W	Designated
<p>Summary: Special Protection Area, SSSI, National Nature Reserve. A complex of estuarine and coastal habitats in eastern Scotland adjacent to the city of Dundee. The site includes extensive invertebrate-rich intertidal mudflats and sandflats created by the massive sediment load deposited by the River Tay, as well as large areas of reedbed and sand dune and a small amount of saltmarsh. At least four species of wintering waterfowl are present above the 1% threshold of international importance, and on average some 48,000 waterfowl are supported there in winter, including 14 species in nationally important numbers. Some disturbance is caused in some parts of the site by large numbers of walkers and illegal use of all-terrain bicycles, but these and other potential threats are considered manageable. Students from many nearby universities conduct research on the site. Ramsar site no. 1034.</p>						
Gruinart Flats, Islay	UK13023	Scotland	3260.69	55° 50 42 N	06° 19 33 W	Designated
<p>Summary: Special Protection Area, SSSI. A sea loch with extensive intertidal mud and sand flats, saltmarsh, blanket mire, and a well-developed dune complex. The area supports internationally important numbers of wintering and passage geese (<i>Branta leucopsis</i>) of the Greenland breeding population, and over 95% of the Greenland breeding population stages at the site in autumn. Various other breeding birds, including the globally threatened <i>Crex crex</i>, use the area. Ramsar site no. 401.</p>						
Inner Clyde Estuary	UK13024	Scotland	1824.92	55° 56 50 N	04° 38 00 W	Designated
<p>Summary: SSSI, Special Protection Area. A long narrow, heavily industrialized estuary near Glasgow on the west coast of Scotland, consisting mostly of tidal mudflat with a shoreline of unmanaged semi-natural coastal vegetation; saltmarsh is also present. In winter, the site supports internationally important numbers of redshank <i>Tringa totanus</i>. Sport fishing and hunting, in addition to navigation, are practiced in the area. Dredging and pollution from domestic sewage and oil are considered to be adverse factors, but monitoring is intended and long-term improvements in water quality are expected. Ramsar site no. 1036.</p>						
Inner Moray Firth	UK13025	Scotland	2339.25	57° 29 70 N	04° 21 15 W	Designated
<p>Summary: Special Protection Area, SSSI. The site supports important wetland habitats including intertidal flats, saltmarsh, and a sand and shingle spit. The intertidal areas are especially important for the population of wintering waterfowl, including <i>Limosa lapponica</i> (1% of the population) and <i>Anser anser</i> (3% of the population). Human activities include nature conservation, tourism, fishing, hunting, and grazing. Ramsar site no. 1002.</p>						
Lewis Peatlands	UK13028	Scotland	58984.24	58° 15 00 N	06° 35 00 W	Designated
<p>Summary: Special Area of Conservation, Special Protection Area. The Lewis Peatlands site is predominantly made up of a near-</p>						

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continuous mantle of blanket bog liberally dotted with small pools and lochans. With their north-westerly and island location, the Lewis Peatlands are probably the most extremely 'Atlantic' of all the blanket mires in Great Britain. In terms of the bioclimatic zones represented, the hyper-oceanic, extremely humid upper boreal zone predominates to an extent found nowhere else in Scotland.						
Loch an Duin	UK13029	Scotland	2621.13	57° 38 30 N	07° 08 50 W	Designated
<p>Summary: SSSI, Scenic Area. This site is important in the British Isles for its complex system of freshwater, brackish and sea lochs, and tidal channels. It includes part of the northeast coastland of North Uist and some of the adjacent islands and skerries. The comprehensive range of salinities, from freshwater to brackish and saltwater, is reflected in the associated plant and animal communities, which include the northern forms of some seaweeds. The habitat types of the coastland and islands range from moorland to maritime grassland. The site is also important for its geomorphology, as it is one of the best fjardic loch systems in Great Britain. Ramsar site no. 468.</p>						
Loch of Inch and Torrs Warren	UK13037	Scotland	2111.39	54° 50 30 N	04° 52 30 W	Designated
<p>Summary: Special Protection Area. The area is composed of two separate sites: a large nutrient-rich freshwater loch including well-developed fen communities, and an area of foreshore and sand dunes. In winter, both components of the site support internationally important numbers of Greenland white-fronted geese (<i>Anser albifrons flavirostris</i>). The area is used for nature conservation, military activities, pastoral agriculture, tourism, and hunting. Ramsar site no. 972.</p>						
Loch of Strathbeg	UK13041	Scotland	615.94	57° 37 24 N	01° 53 00 W	Designated
<p>Summary: Special Protection Area, SSSI. A shallow nutrient-rich loch constituting the largest dune slack pool in Britain. Vegetation consists of reedbeds, freshwater marshes, and alder-willow carr. Calcareous dunes and dune slacks are relatively undisturbed and provide habitat for a rich flora and fauna. This site provides wintering habitat for numerous important wetland bird species, notably internationally important numbers of geese and the whooper swan, <i>Cygnus cygnus</i>, and is an important staging area for migratory waterbirds. Human activities include tourism, fishing, and livestock grazing. Ramsar site no. 778.</p>						
Montrose Basin	UK13046	Scotland	984.62	56° 42 40 N	02° 30 20 W	Designated
<p>Summary: Special Protection Area, SSSI. The site, relatively unimpacted by development, consists of an enclosed estuary, mudflats, marsh, and a small nutrient-rich loch. Due to its unusual hydrology, there is high species diversity in the intertidal zone. Internationally important numbers of pink-footed geese <i>Anser brachyrhynchus</i>, greylag geese <i>Anser anser</i>, and redshank <i>Tringa totanus</i> winter at the site. Human activities include recreation, agriculture, and livestock grazing. Ramsar site no. 716.</p>						
Moray and Nairn Coast	UK13048	Scotland	2412.27	57° 38 54 N	03° 43 48 W	Designated
<p>Summary: Special Area of Conservation, Special Protection Area, SSSI. The site, of outstanding conservation and scientific importance for coastal and riverine habitats, includes intertidal flats, saltmarsh, dunes, and associated floodplain alder <i>Alnus glutinosa</i> woodland. Several nationally scarce aquatic plants, invertebrates, and mammals are present. The site regularly supports migrating waterbirds and various species of wintering waders, as well as internationally important numbers of wintering geese. Human activities include recreation, timber harvesting, shellfish collecting, and hunting. Ramsar site no. 890.</p>						
North Uist Machair and Islands	UK13050	Scotland	4704.92	57° 32 00 N	07° 22 45 W	Designated
<p>Summary: Special Protection Area, SSSI. The site comprises "machair" areas (grassland upon sand, commonly behind coastal sand dunes in northwestern Scotland) which show a range of habitats from intertidal sand and rock through sand dunes and dune slacks to a calcareous coastal plain and acid grassland. The site contains freshwater wetlands, including nutrient-rich and average nutrient machair loch, important freshwater marshes and fens, wet and dry machair and saltmarsh. The area supports a rich and diverse range of plant communities, including some nationally scarce plants and mosses, and qualifies under Criterion 6 by supporting internationally important numbers of dunlin and ringed plover during the breeding season and barnacle goose, ringed plover, and turnstone during the winter. The extended designation now includes four sites on the west and north coasts of North Uist and all or part of three islands in the Sound of Harris south of Lewis and Harris. The RSPB maintains a small visitors' centre and guided walks at the Balranald Bog part of the site. The spread of the invasive American mink is considered to be a potential threat and measures are being taken. Human activities include nature conservation, tourism, and permanent pastoral agriculture. Ramsar site no. 1004.</p>						
Rinns of Islay	UK13052	Scotland	3570.75	55° 50 36 N	06° 23 15 W	Designated
<p>Summary: Special Protection Area, SSSI. A mosaic of natural and semi-natural habitats including bog, moorland, blanket mires, dune and maritime grasslands, and farmland. The site supports a peatland flora of exceptional interest that includes several nationally scarce wetland species. An important staging area for internationally important numbers of sandwich tern <i>Sterna sandvicensis</i> and redshank <i>Tringa totanus</i>, and nationally important numbers of ringed plover <i>Charadrius hiaticula</i> and sanderling <i>Calidris alba</i>. The site supports a diverse assemblage of breeding waders and internationally important numbers of wintering geese <i>Anser albifrons flavirostris</i>. Human activities include livestock grazing, recreation, fishing, and hunting. Extended on 27/11/95 to include former Ramsar Sites Feur Lochain and Glac na Criche. Ramsar site no. 466.</p>						
River Spey / Insh Marshes	UK13053	Scotland	1158.77	57° 05 24 N	03° 59 48 W	Designated

Name of Ramsar Site	Site code	Country	Area (ha)	Latitude	Longitude	Status
Summary: Special Protection Area, SSSI. Forming the largest unit of poor fen floodplain mire in Britain, the site consists of a large area of swamp and carr subject to seasonal flooding, extensive river shingles, and a gravel fan. The site includes Loch Insh and reaches of the Spey River that support large numbers of wintering and breeding waterbirds consisting of several rare species. The site supports a large assemblage of nationally rare or scarce aquatic plants and invertebrates, and is one of the best sites in Britain for otter <i>Lutra lutra</i> . Human activities include recreation, fishing, hunting, and livestock grazing. Ramsar site no. 889.						
Ronas Hill / North Roe and Tingon	UK13054	Scotland	5470.2	60° 33 00 N	01° 25 00 W	Designated
Summary: Special Protection Area, SSSI. Comprises two adjacent headlands separated by Ronas Voe in the North Mainland of Shetland. Most of the site is composed of active blanket bog with numerous acidic lochans and pools that support a typical peatland avifauna. It provides habitat for common seal <i>Phoca vitulina</i> and otter <i>Lutra lutra</i> , and the invertebrate fauna includes the arctic water flea <i>Eurycercus glacialis</i> . Human activities include tourism, recreation, fishing, and grazing. Ramsar site no. 916.						
Sléibhteán agus Cladach Thiriodh (Tiree Wetlands and Coast)	UK13056	Scotland	1938.59	56° 30 00 N	06° 52 00 W	Designated
Summary: SSSI, Special Protection Area. The site includes significant portions of a small island west of the Isle of Mull in the Inner Hebrides, consisting of two zones: an intertidal sector comprising rocky shore, sandy bays, and shingle shore, and an inland sector comprising "machair" (sandy coastal) plain, marsh, and wet moorland with one large and several small lochs and numerous pools. The inland areas provide roost sites for internationally important numbers of wintering geese from Greenland and breeding sites for a variety of wader species, whilst the intertidal sectors support similarly significant numbers of wintering wader populations. Several of the lochs support rich aquatic plant communities including a range of nationally scarce and rare species, and the site provides an excellent representative of dune and machair habitats. Sheep and cattle grazing is the main land use of the site; disturbance from ditching and clearance by local crofters is being addressed by management agreements. Features of archaeological and historical interest are mentioned in the datasheets but no details have been provided. Ramsar site no. 1158.						
South Uist Machair and Lochs	UK13058	Scotland	5019.05	57° 18 50 N	07° 20 00 W	Designated
Summary: Special Protection Area, SSSI. A complex site that includes inland, marine and coastal wetlands on the west coast of South Uist in the Outer Hebrides, with outstanding examples of relict woodland, moorland, blanket bog, freshwater marsh, salt marsh, coastal dunes, and sandy rock shores. Part of the largest "machair" (sandy coastal plain) system in the British Isles. Coastal dunes with dune slacks grade into the machair plain consisting of shallow, nutrient-rich lochs, associated fens and marshes. The site is important for wintering and breeding waterfowl such as <i>Anser anser</i> (4.8% of the breeding population) and <i>Charadrius hiaticula</i> (2.5% of the breeding population). The machair is used for traditional rotational cultivation and grazing, as well as for nature conservation, tourism, and recreation. Extended on 01/12/97 from the Ramsar site Loch Druidibeg, Loch a'Machair & Loch Stilligarry, a UNESCO Biosphere Reserve. Ramsar site no. 71.						
Ythan Estuary and Meikle Loch	UK13061	Scotland	314.17	57° 20 30 N	01° 57 30 W	Designated
Summary: SSSI. The site is a combination of inland wetlands and marine and coastal wetlands. The area is a waterfowl wintering ground and supports well over 20,000 waterfowl. The main activities in the area include nature conservation, recreation, fishing, rough or shifting grazing. Ramsar site no. 939.						
Belfast Lough	UK12002	Northern Ireland	432.14	54° 38 00 N	05° 54 00 W	Designated
Summary: Special Protection Area, SSSI. The inner part of the lough comprises areas of intertidal foreshore composed of mudflats and lagoons, and land, both reclaimed and being reclaimed, which form important feeding/roosting sites for significant numbers of wintering waders and wildfowl. The outer lough is restricted to mainly rocky shores with some small sandy bays and beach-head saltmarsh. It regularly supports internationally important numbers of redshank <i>Tringa totanus</i> in winter. Human activities include tourism, recreation, and fishing. Ramsar site no. 958.						
Carlingford Lough	UK12004	Northern Ireland	830.51	54° 03 00 N	06° 07 00 W	Designated
Summary: Special Protection Area, SSSI. The site includes mudflats, saltmarsh, small rocks, and shingle islands on the border with Ireland. It supports an important assemblage of vulnerable and endangered Irish Red Data Book bird species. It provides habitats for terns, including <i>Sterna hirundo</i> , <i>S. dougallii</i> , <i>S. paradisaea</i> . The site is used for recreation, fishing, marine aquaculture, and hunting. Ramsar site no. 936.						
Killough Bay	UK12012	Northern Ireland	104.23	54° 15 21 N	05° 37 50 W	Designated
Summary: Killough Bay encompasses the intertidal areas and adjoining areas of notable habitat, including mudflats, sand-dominated beaches, gravel and cobble units and rocky shore. The boundary of the Ramsar site includes Killough Harbour and Coney Island Bay. The principal interest is the wintering population of light-bellied brent goose <i>Branta bernicla hrota</i> , which feeds on the rich mats of the green alga <i>Enteromorpha</i> spp. present especially in Killough Harbour. The birds find refuge here during late winter and spring, once the main wintering flock from Strangford Lough disperses due to lack of food.						
Larne Lough	UK12013	Northern Ireland	395.94	54° 48 54 N	05° 44 38 W	Designated

Name of Ramsar Site	Site code	Country	Area (ha)	Latitude	Longitude	Status
Summary: SSSI, National Nature Reserve, Special Protection Area. A shallow estuary partially enclosed by a peninsula and including intertidal flats and areas of saltmarsh. Vegetation is dominated by halophytic communities and includes reedbeds and saltmarsh pans. The site regularly supports nationally important numbers of breeding terns and internationally important numbers of wintering light-bellied brent goose, <i>Branta bernicla hrota</i> . Human activities include recreation and some shellfish and bait gathering. Dredging is regularly carried out to maintain the shipping channel. Ramsar site no. 895.						
Lough Foyle	UK12014	Northern Ireland	2204.36	55° 05 24 N	07° 01 37 W	Designated
Summary: National Nature Reserve, Special Protection Area. The site is composed of a large shallow lough including estuaries, extensive intertidal areas of mudflats, sandflats, saltmarsh and associated brackish ditches. It supports a diverse assemblage of waterfowl (<i>Limosa lapponica</i> , 1.6% of the population, and <i>Branta bernicla hrota</i> , 11% of the population) and internationally important (more than 29,000 birds) waterfowl. The site is used for nature conservation, gathering shellfish, and recreation. Ramsar site no. 974.						
Outer Ards	UK12018	Northern Ireland	1154.16	54° 32 47 N	05° 29 02 W	Designated
Summary: The Outer Ards site mainly encompasses intertidal areas, but with some additional adjoining areas of notable habitat. It includes sand- and mud-dominated shores, cobble and boulder beaches together with rocky shores. Offshore islands are also present. Adjoining habitat includes areas of dune and maritime grassland, maritime heath and cliff ledge vegetation, saltmarsh, tidal and non-tidal fens and wet flushes. Some areas still display the natural transition from maritime to terrestrial vegetation where a number of notable communities occur. At least 17 rare or local plant species have been recorded across the range of habitats within the area. The Outer Ards is especially important for the breeding colony of Arctic tern <i>Sterna paradisaea</i> , together with the wintering populations of light-bellied brent goose <i>Branta bernicla hrota</i> , European golden plover <i>Pluvialis apricaria</i> , ruddy turnstone <i>Arenaria interpres</i> and ringed plover <i>Charadrius hiaticula</i> . Nationally important populations of 11 other species of bird have also been recorded within the Outer Ards site.						
Strangford Lough	UK12021	Northern Ireland	15581.3	54° 26 40 N	05° 35 40 W	Designated
Summary: National Nature Reserve, SSSI. The wetland types for this site include marine and coastal wetlands. The site supports one of the most extensive saltmarsh areas in Northern Ireland. Present are an assemblage of vulnerable and endangered wetland plants and animals such as eelgrass, and marine sponges, marine mollusc, and it is also a breeding and wintering site for well over 70,200 waterfowl. Human activities include nature conservation, tourism, recreation, and hunting. Ramsar site no. 937.						

A3j.2.4 OSPAR Marine Protected Areas (MPA)

The OSPAR Commission is currently in the process of establishing a network of Marine Protected Areas (MPAs), the designation of which will be informed by the *Initial List of Threatened and/or Declining Species and Habitats*. It is aimed to complete a joint network of well managed MPAs by 2010 that, together with the Natura 2000 network, is ecologically coherent (OSPAR 2006). The UK is addressing this in two phases. Under Phase I, 55 UK sites are currently nominated as MPAs, all of which are currently overlapping coastal or marine SACs (see asterisked sites in the-relevant SAC tables - Sections A3j.8 and 9) (OSPAR website). Phase II involves the identification of additional MPAs in order to complete UK's contribution to the ecologically coherent network of MPAs in the OSPAR area by 2010. The UK Marine Bill supports the establishment of the ecologically coherent network of MPAs by 2012. The Scottish Marine Bill will also support the establishment of MPAs.

There are a number of species and habitats on the OSPAR list which occur either throughout the year or seasonally in UK offshore waters, including *Sabellaria spinulosa* reef, lesser black-backed gull, cod and the harbour porpoise (OSPAR 2004). However, there are no sites nominated as MPAs in offshore waters at present.

A3j.2.5 Biosphere Reserves

Biosphere reserves are sites recognized under UNESCO's Man and the Biosphere (MAB) Programme. They are nominated by national governments, in through the national MAB Committee, and must meet a minimum set of criteria and adhere to a minimum set of

conditions before being added to the network. Each reserve is identified to fulfil three complementary functions:

- conservation - to preserve genetic resources, species, ecosystems and landscapes;
- development - to foster sustainable economic and human developments, and
- logistic support - to support demonstration projects, environmental education and training, research and monitoring related to issues of conservation and sustainable development.

Current UK Biosphere reserves located adjacent or close to the coast are summarised in Table A3j.2.

Table A3j.2 – Coastal Biosphere Reserves

Name	Country	Area (ha)	Latitude	Longitude	Status
Braunton Burrows	England	14177	51° 05 N	04° 24 W	Designated
Summary: A diversity of habitats is represented in this region with the major ecosystem type being temperate broadleaf forests or woodlands including coastal/marine component. The core area comprises an active dune system with geomorphological and successional processes. Other habitats include a rocky foreshore, mud and sand flats, saltmarshes of various types, lowland farmland, grazing marsh, coastal heath, back-shore marsh as well as woodlands.					
North Norfolk Coast	England	8500	52° 56 to 52° 57 N	00° 43 to 01° 00 E	Designated
Summary: Reserve has a wide range of habitats, from intertidal sands and muds, through shingle ridges, to saltwater and freshwater marshes. The saltmarshes are of great value for breeding and wintering wildfowl and includes a large breeding colony of common seals. Beaches are important for tourism. Mussel, cockles, shrimp and crab harvesting. Reserve research covers a full range of biological sciences and also relates to the geomorphology of coastal processes.					
Dyfi	Wales	1589	52° 32 N	04° 00 W	Designated
Summary: The reserve is representative of salt marshes and estuarine systems in the west of the United Kingdom. The estuary forms one of the most important wildfowl and shorebird centers in Wales and also comprises a Ramsar site. The primary raised mire at the site contains a high number of invertebrate species, including some of national and international importance. There is a long history of research and monitoring in the area.					
Beinn Eighe	Scotland	4800	57° 33 to 57° 40 N	05° 18 to 05° 30 W	Designated
Summary: Displays a suite of habitats primarily influenced by upland and oceanic factors. Of national interest are two variants of dwarf shrub heath and a western variant of moss heath. The woodland, which is found below 300m close to Loch Maree and in various isolated gorges, includes the best remaining examples of western pinewood in Britain. The nature reserve provides facilities at an onsite field station for the long-term monitoring of environmental change.					
Loch Druidibeg	Scotland	1677	57° 20 N	07° 20 W	Designated
Summary: Exhibits a cross-section of habitats from alkaline machair grassland through oligotrophic loch to acidic moorland. This highly diverse range of habitats is variously influenced by the oceanic exposure with high levels of salt spray and humidity, and the influence of settled agriculture on which the species-rich machair grassland depends.					
Taynish	Scotland	353	56° 00 N	05° 38 W	Designated
Summary: The reserve represents native mixed woodland, with wet and dry heath, grassland, and coastal ecosystems. Natural harbours, such as Crinan, form a base for small-scale commercial boat trips and local and visiting private craft. The area has a significant amenity value to tourists.					

The Moor House - Upper Teesdale and Cairnsmore of Fleet, Merrick Kells and Silver Flowes National Nature Reserves are also designated as Biosphere Reserves but are fully terrestrial.

A3j.2.6 World Heritage Sites

UNESCO adopted the World Heritage Convention in 1972, which was ratified in the UK in 1984. The Convention aims to encourage countries to identify, protect and preserve sites of cultural and natural heritage considered to be of outstanding value to humanity at a global scale. The UK's ratification of the Convention also extends to its Overseas Territories and Crown Dependencies. UK World Heritage Sites are listed in Table A3j.3 below.

Table A3j.3 – UK world heritage sites at or close to the coast

Name	Site Code	Country	Area (ha)	Latitude	Longitude	Status
Old and New Towns of Edinburgh	728	Scotland	443.54	55° 57 00 N	03° 13 00 W	Designated
Summary: Recognised for its unique juxtaposition of Medieval Old Town and neoclassical Georgian planned New Town. A Cultural heritage site containing 4,500 buildings, over 75% of which are listed. This site is on the Firth of Forth and in close proximity to the coast.						
Canterbury Cathedral, St. Augustine's Abbey and St. Martin's Church	496	England	18.18	51° 16 48 N	1° 4 60 E	Designated
Summary: Christ Church Cathedral is a unique artistic creation with early stained glass windows which constitute the richest collection in the United Kingdom. The influence of the Benedictine abbey of St Augustine was decisive throughout the High Middle Ages in England and extended far beyond the boundaries of Kent and Northumbria. All 3 structures are directly and tangibly associated with the history of the introduction of Christianity to the Anglo-Saxon kingdoms. This site is in close proximity to the kent coastline.						
Blaenavon Industrial Landscape	984	Wales	3290	51° 46 35 N	3° 5 17 W	Designated
Summary: The Blaenavon landscape constitutes an exceptional illustration in material form of the social and economic structure of 19th century industry. The components of the Blaenavon industrial landscape together make up an outstanding and remarkably complete example of a 19th century industrial landscape. This site is 40km north east of Cardiff and unlikely to be considered in close proximity to the coast.						
Castles and Town Walls of King Edward in Gwynedd	374	Wales	6.00	53° 8 23 N	4° 16 37 W	Designated
Summary: The royal castles of the ancient principality of Gwynedd bear a unique testimony to construction in the Middle Ages in so far as this royal commission is fully documented. They outline financing of the construction works and provide an understanding of the daily life of the workmen and population and thus constitute one of the major references of medieval history. The castles and fortifications are the finest examples of late 13th century and early 14th century military architecture in Europe. The four castles of Beaumaris, Conwy, Caernarfon, Harlech and the attendant fortified towns at Conwy and Caernarfon are all on the welsh coast.						
Frontiers of the Roman Empire	430ter	England	46501.12	54° 59 33.4 N	2° 36 3.6 W	Designated
Summary: Hadrian's Wall in England is part of the transnational property "Frontiers of the Roman Empire". The 118-km-long Hadrian's Wall (UK) was built on the orders of the Emperor Hadrian c. AD 122 at the northernmost limits of the Roman province of Britannia. It is a striking example of the organization of a military zone and illustrates the defensive techniques and geopolitical strategies of ancient Rome. Hadrian's wall is located inland.						
Westminster Palace, Westminster Abbey and Saint Margaret's Church	426bis	England	9.41	51° 29 59 N	0° 7 43 E	Designated
Summary: Westminster Palace, Westminster Abbey, and St Margaret's Church together encapsulate the history of one of the most ancient of parliamentary monarchies of present times and the growth of parliamentary and constitutional institutions. Westminster Abbey is a unique artistic construction representing the phases of English Gothic art. This site is not located on the coast.						
Tower of London	488	England	7.80	51° 30 29 N	0° 4 34 W	Designated
Summary: A monument symbolic of royal power since the time of William the Conqueror, the Tower of London served as an outstanding model throughout the kingdom from the end of the 11th century. The ensemble of the Tower is a major reference for the history of medieval military architecture. This site is not located on the coast.						
Maritime Greenwich	795	England	109.47			Designated

Name	Site Code	Country	Area (ha)	Latitude	Longitude	Status
Summary: The ensemble of buildings at Greenwich, an outlying district of London, and the park in which they are set, symbolize English artistic and scientific endeavour in the 17th and 18th centuries. The Greenwich buildings are located alongside the Thames which is considered a coastal river system.						
Heart of Neolithic Orkney	514rev	Scotland	594.68	58° 59 45.8 N	3° 11 19.2 W	Designated
Summary: A group of Neolithic monuments make up this site. The group constitutes a major prehistoric cultural landscape which gives a graphic depiction of life in this remote archipelago in the far north of Scotland some 5,000 years ago. This site is located of the Isle of Orkney and can be considered as coastal.						
Dorset and East Devon Coast	1029	England	2474.91	50° 42 20 N	2° 59 23.6 W	Designated
Summary: The cliff exposures along the Dorset and East Devon coast provide an almost continuous sequence of rock formations spanning the Mesozoic Era, or some 185 million years of the earth's history. The site includes a range of internationally important fossil localities – both vertebrate and invertebrate, marine and terrestrial - which have produced well preserved and diverse evidence of life during Mesozoic times.						
Liverpool – Maritime Mercantile City	1150	England	137.01	53° 24 24.0 N	2° 59 40.0 W	Designated
Summary: Six areas in the historic centre and docklands of the maritime mercantile City of Liverpool bear witness to the development of one of the world's major trading centres in the 18th and 19th centuries.						
Cornwall and West Devon Mining Landscape	1215	England	19709.66	50° 08 10 N	05° 23 01 W	Designated
Summary: Much of the landscape of Cornwall and West Devon was transformed in the 18th and early 19th centuries as a result of the rapid growth of pioneering copper and tin mining. The substantial remains are a testimony to the contribution Cornwall and West Devon made to the Industrial Revolution in the rest of Britain.						
Durham Castle and Cathedral	370bis	England	8.79	54° 46 29 N	1° 34 34 W	Designated
Durham Cathedral was built in the late 11th and early 12th and is the largest and finest example of Norman architecture in England. Behind the cathedral stands the castle, an ancient Norman fortress which was the residence of the prince-bishops of Durham. Durham is located in the North East of England and is not a coastal city.						
Giant's Causeway and Causeway Coast	369	Northern Ireland	70	55° 15 00 N	6° 29 07 W	Designated
The Giant's Causeway lies at the foot of the basalt cliffs along the sea coast on the edge of the Antrim plateau in Northern Ireland. It is made up of some 40,000 massive black basalt columns sticking out of the sea. Geological studies of these formations over the last 300 years have greatly contributed to the development of the earth sciences, and show that this striking landscape was caused by volcanic activity during the Tertiary, some 50–60 million years ago.						
St Kilda	387bis	Scotland	24201.4	57° 49 02 N	8° 34 36 W	Designated
This volcanic archipelago is situated off the coast of the Hebrides and comprises the islands of Hirta, Dun, Soay and Boreray. It has some of the highest cliffs in Europe, which have large colonies of rare and endangered species of birds, especially puffins and gannets. There is evidence of more than 2,000 years of human occupation in the extreme conditions prevalent in the Hebrides. Human vestiges include built structures and field systems, the cleits and the traditional Highland stone houses. They feature the vulnerable remains of a subsistence economy based on the products of birds, agriculture and sheep farming.						

A3j.2.7 Other internationally important sites

The European Diploma (CoE Dip Site) is an award established by the Council of Europe for a five-year period – see list of UK sites I Table A3j.4 below. It recognises that an area is of particular European interest for natural-heritage and that the area is properly protected.

Table A3j.4 – UK Council of Europe Diploma Sites

Name	Site Code	Country	Area (ha)	Latitude	Longitude	Status
Fair Isle	UK940002	Scotland	830	59° 32 00 N	1° 37 00 W	Designated
Interest Features Isolated and almost completely treeless island with a climate influenced by the North Atlantic Drift giving rise to unique landscapes and weather patterns. Important for examples of cultural heritage such as a watermill system, stone walls, archaeological sites and many grain drying kilns.						
Beinn Eighe	UK940001	Scotland	4684	57° 35 00 N	5° 22 00 W	Designated

Name	Site Code	Country	Area (ha)	Latitude	Longitude	Status
Interest Features Mountain heathland with remnants of the post-glacial pinewoods of the ancient Caledonian forest.						
Purbeck Coast	UK940005	England	70000	50° 34 00 N	2° 04 00 W	Designated
Interest Features 40-kilometre stretch of coast on the English Channel. The landscape is extremely diversified, with spectacular cliffs, dunes, islands and mesothermophilous meadows. The site is also important for archaeological heritage with features that allow human activity to be traced back for many thousand of years. The coast also has a geomorphologic and geological interest with sites such as Lulworth Cove.						
Peak District	UK940004	England	140400	53° 15 00 N	1° 45 00 W	Designated
Interest Features The site comprises two distinct parts; the White Peak, a high limestone plateau with its characteristic deep dales and stone walls and the Dark Peak with its gritstone moors. Includes geological SSSIs and regionally important geomorphological sites. Examples of a long cultural history and monuments including disused lead-mines and unspoilt villages.						
Minsmere / Walberswick Marshes	UK940003	England	935	52° 17 00 N	1° 37 00 E	Designated
Interest Features Flooded fenland areas and shallow lagoon system. Minsmere is one of the most important bird reserves in the United Kingdom. The site is culturally important due to the diversity of habitats resulting from a long history of management by humans.						

BirdLife International identifies sites throughout the world as Important Bird Areas (IBAs) for their importance for the conservation of the world's birds using globally agreed criteria. The sites are recognised as supporting internationally or nationally important numbers of breeding and/or non-breeding birds – see maps in Section A3j.7.

Biogenetic Reserves (see Table A3j.5) are established by the Council of Europe to conserve representative examples of European flora, fauna and natural areas, and to encourage biological research.

Table A3j.5 – UK Coastal Biogenetic Reserves

Name	Site Code	Country	Area (ha)	Latitude	Longitude	Status
Forvie (Sands of)	UK930010	Scotland	973	57° 20 00 N	1° 58 00 W	Designated
Summary: The reserve is an example of the most undisturbed sand dune complex in Britain with resultant breeding seabird colonies of international importance. There is well documented spreads of acidic sand over former land surfaces with subsequent fixing by vegetation in part but remaining very mobile in others. Succession of soil profile and plant communities is very clearly shown with a large area of unusual <i>Empetrum</i> -lichen heath. Plant associations (Sands of Forvie only): strand-line flora; <i>Ammophila</i> dunes; <i>Carex arenaria</i> grassland; dry heath (<i>Empetrum</i> , <i>Calluna</i>); wet heath (<i>Calluna</i> , <i>Erica</i>); <i>Salix repens</i> slacks; <i>Salix spp.</i>						
The Lizard	UK930016	England	1300	49° 57 45 N	5° 11 36 W	Designated
Summary: The reserve is an area of heathland occurring on both Gabbro and Serpentinite rock. The heathland occurring on the extensive areas of ultra-basic Serpentinite rocks are unique in Britain, the nearest similar heathland occurs on the Serpentinite rocks of south-west France. Six main heathland types occur and the following two are unique to the reserve; 1) <i>Erica vagans</i> - <i>Schoenus nigricans</i> heath, 2.) <i>E. vagans-Ulex europaeus</i> heath. Other habitats in the reserve include; maritime grassland, scrub, cliff and flush communities. The geologic exposure of Serpentinite, Gabbro and Schists is of national geological importance.						
Rhinogydd	UK930014	Wales	598	52° 54 00 N	4° 00 00 W	Designated
Summary: An example of temperate shrub heathland. Predominant characteristics include mature <i>Callunetum</i> on rough steep ground and a range of habitat types including; <i>Calluna/Vaccinium myrtillus/Hypnum cupressiforme</i> , <i>Pteridium</i> in deeper soiled hollows at lower levels, <i>Vaccinium myrtillus</i> dominant at south west of reserve and <i>Molinia/Eriophorum</i> dominant in areas of restricted drainage. The reserve is also important for bird and mammal species such as the red fox and peregrine falcon.						

A3j.3 SITES OF NATIONAL IMPORTANCE AND NON-STATUTORY SITES

National conservation designations provide the underpinning protection for most of the European sites, as well as safeguarding sites of national importance. These sites include National Nature Reserves (NNRs) (which extend to Mean Low Water Springs), Sites of Special Scientific Interest (SSSIs) that have been designated for geological, botanical, entomological, ornithological and/or marine biological interest, National Parks, Areas of Outstanding Natural Beauty (AONBs) and other sites designated for their landscape value etc. Statutory sites are legally protected whilst non-statutory sites, rely on the planning process to confer protection. An overview of the different types of national and non-statutory sites is given in Table A3j.6 below. The locations of these sites have been mapped for each Regional Sea (see Section A3j.7).

Table A3j.6 - Sites of national importance and non-statutory sites

Full name	Abbreviation	Details
Areas of High Landscape or Coastal Value and Scenic Significance (Isle of Man)		These are areas that are designated for the purposes of the Isle of Man Planning Scheme (Development Plan) Order 1982. They are referred to as part of the planning process on the Isle of Man and they also provide a guide to areas of Scenic Significance.
Areas of Outstanding Natural Beauty (England, Wales and Northern Ireland)	AONB	Primary purpose of the designation is to conserve natural beauty – which by statute includes wildlife, physiographic features and cultural heritage Designated under the National Parks and Access to the Countryside Act 1949, amended in the Environment Act 1995.
Areas of Special Protection (England, Scotland, Wales and Isle of Man)	AoSP	Sanctuary Areas, originally designated under the Protection of Birds Acts 1954, were amended to AoSPs under the Wildlife and Countryside Act 1981. Designation aims to prevent the disturbance and destruction of the birds for which the area was identified.
Areas of Special Scientific Interest (Northern Ireland)	ASSI	Developed since 1949 as the national suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features.
Country Parks (England, Scotland, Wales and Northern Ireland)	-	Primarily intended for recreation and leisure opportunities close to population centres they do not necessarily have any nature conservation importance.
Earth Science Conservation Review Sites (Northern Ireland)	ESCR	Sites identified by the statutory nature conservation agencies as having national or international importance for earth science conservation on the basis of their geology, palaeontology, mineralogy or geomorphology.
Environmentally Sensitive Area (England, Scotland and Wales)		A Scheme was introduced in 1987 to offer incentives to encourage farmers to adopt agricultural practices which would safeguard and enhance parts of the country of particularly high landscape, wildlife or historic value.
Geological Conservation Review sites (England, Scotland and Wales)	GCR	Sites identified by the statutory nature conservation agencies as having national or international importance for earth science conservation on the basis of their geology, palaeontology, mineralogy or geomorphology.

Full name	Abbreviation	Details
Heritage Coasts (England and Wales)	-	Section of coast exceeding one mile in length that is of exceptionally fine scenic quality, substantially undeveloped and containing features of special significance and interest.
John Muir Trust (Scotland)	-	The John Muir Trust is a charitable membership organisation that owns and manages land in Scotland.
Limestone Pavement Orders		Limestone Pavement Orders afford statutory protection for limestone pavements under the Wildlife and Countryside Act 1981.
Local Authority Nature Reserves (Northern Ireland)	LANR	Places with wildlife or geological features that are of special interest locally. Designated under Section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities.
Local Nature Reserve (England, Scotland and Wales)	LNR	Places with wildlife or geological features that are of special interest locally. Designated under Section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities.
Manx National Heritage (Isle of Man)		Manx National Heritage (previously The Manx National Trust) was created by Act of Tynwald in 1951 as an expansion of the remit of the Manx Museum and Ancient Monument Trustees. It has a similar role on the Isle of Man to that of the National Trust and National Trust for Scotland.
Marine Consultation Area (Scotland)	MCA	Non-statutory areas introduced in 1986 by Scottish Natural Heritage. The areas are considered to deserve particular distinction in respect of the quality and sensitivity of the marine environment within them.
Marine Nature Reserve (England, Scotland, Wales and Northern Ireland)	MNR	Purpose is to conserve marine flora and fauna and geological features of special interest. They are the mechanism for the protection of nationally important marine (including subtidal) areas.
National Nature Reserve (Britain)	NNR	Established to protect the most important areas of wildlife habitat and geological formations in Britain, and to provide a resource for scientific research.
National Park (England and Wales)	-	Established under the The Parks and Access to the Countryside Act 1949 (and subsequent amending legislation) to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them.
National Park (Scotland)	-	Established under the National Parks (Scotland) Act 2000 to conserve and enhance the natural and cultural heritage of the area; promote sustainable use of the natural resources of the area; promote understanding and enjoyment (including enjoyment in the form of recreation) of the special qualities of the area by the public; and to promote sustainable economic and social development of the area's communities.
National Scenic Areas (Scotland)	NSA	Areas of land considered of national significance on the basis of their outstanding scenic interest which must be conserved as part of the country's natural heritage.
National Trust / National Trust for Scotland	-	Independent charities which conserve the cultural, built and natural heritage of the UK. Both National Trusts own or have protective covenants over land of historic interest or natural beauty. Comparable independent bodies exist in a number of the UK's Crown Dependencies, for example the National Trust of Guernsey and the National Trust for Jersey.

Full name	Abbreviation	Details
Preferred Conservation Zone	PCZ	Preferred Conservation Zones were forerunners of NSAs. The requirement to notify central government of certain kinds of planning application affecting these Zones has been withdrawn since the introduction of NSAs.
Protected Wrecks	-	The Protection of Wrecks Act (1973) allows the Government to designate a wreck to prevent uncontrolled interference. Designated sites are identified as being likely to contain the remains of a vessel, or its contents, which are of historical, artistic or archaeological importance.
Regional Landscape Designation	RLD	For the protection and guidance of change in areas of particular landscape importance in Scotland.
Scheduled Monuments	-	Monument that is on a schedule for protection and whose preservation is given priority over other land uses. The schedule is supported by the Ancient Monuments and Archaeological Areas Act 1979.
Scottish Wildlife Trust (SWT) Reserve		These are areas managed or owned by the Scottish Wildlife Trust to protect locally important plants, animals and other wildlife. These reserves have no statutory basis, but some are protected by statutory designations
Sensitive Marine Areas	SMA	Non-statutory marine areas Marine sites designated by local authorities for the protection and conservation of important national features.
Sites of Special Scientific Interest (England, Scotland and Wales)	SSSI	Developed since 1949 as the national suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features.
The Royal Society for the Protection of Birds	RSPB	Non-governmental organisation who own or manage nature reserves or other areas of land that are important for biodiversity.
Voluntary Marine Conservation Areas	VMCA	Marine areas designated due to features of local importance.
Wildfowl and Wetlands Trust (WWT) Reserves (England, Scotland, Northern Ireland and Wales)		Conservation organisation managing wetland reserves in the UK. These reserves have no statutory basis, but some are protected by statutory designations.
Wild Bird Sanctuary (Isle of Man)		Wild Bird Sanctuaries in the Isle of Man are established under the section 11 of the Wild Birds Protection Act 1932. They provide protection to all wild birds, nests and eggs in the designated area.
Wildlife Refuges (Northern Ireland)		Wildlife Refuges are equivalent to Areas of Special Protection. The statutory provision of an area as a 'Wildlife Refuge' is a protection mechanism under the Wildlife (Northern Ireland) Order 1985.
Wildlife Trust Reserve	-	These are areas managed or owned by the Wildlife Trusts of England, Wales, N.Ireland and the Isle of Man to protect locally important plants, animals and other wildlife. These reserves have no statutory basis, but some are protected by statutory designations.
Woodland Trust	-	Non-governmental organisation who own or manage nature reserves or other areas of land that are important for biodiversity.

Notes: For more information on sites of national and local importance see the JNCC website.

A3j.4 NATIONAL PARKS

There are 14 National Parks in the United Kingdom (see Table A3j.7). Parks which abut or are close to the coast are mapped in Section A3j.8.

Table A3j.7 – National Parks

Name	Country	Area (sq miles)
Brecon Beacons	Wales	519
Summary: The Brecon Beacons is a mountain range located in south Wales and is not considered coastal in its location. The Black Mountains and Black Mountain ranges are also located within the park. The landscape is dominated by moorland and a large forested area known as Fforest Fawr. The park is home to the Norman castle of Carreg Cennen and over twenty iron age hill sites.		
The Broads	England	117
Summary: Is not a named national park but has equivalent status and was designated under its own Act of Parliament in 1989. The area is a system of rivers, marshes, fens and woodland with habitats important for wildlife and tourist activities such as fishing, walking, board-sailing and birdwatching. The Broads occupies the coastal region of Norfolk in the southeast of England.		
Cairngorms	Scotland	1467
Summary: Located in the north east of Scotland, the cairngorms is a mountainous area containing 4 of Scotland's 5 highest mountains. The park contains the largest area of arctic mountain landscape in the British Isles with habitats ranging from forests, heather moorland, lochs and the valleys of the Spey, Don and Dee. The park is home to 25% of the UK's threatened bird, animal and plant species.		
Dartmoor	England	368
Summary: Dartmoor is an area of moorland in the centre of Devon, southwest England. One of the distinct features of the park are tors which are large hills topped with outcrops of bedrock. The park is famous for its prehistoric remains, with many standing stones and Bronze and Iron Age hut circles and hillforts.		
Exmoor	England	268
Summary: The park is situated on the Bristol Channel coast of southwest England and straddles the two counties of Somerset and Devon. The landscape is varied from the tallest cliffs in England, overlooking the Bristol Channel coast to the inland landscape of heather-covered moors, intersected by roundsided combes. Red deer and wild ponies occupy the moors. The east of the park features vales and valleys with villages of colour-washed cob, stone and thatched cottages. The area is rich in archaeological heritage and has a wide range of routes popular with walkers, cyclists and horse riders.		
Lake District	England	885
Summary: Located in Cumbria, north west England. The park reaches the coastline with the Irish sea and can be considered as coastal. The park consists of moorland and mountains, known as fells. The highest mountain in England, Scafell Pike is located within the park and attracts many tourists annually. The most prominent feature is the 16 lakes formed from glacial meltwater that lie in the mountain valleys. The history of the area is reflected in Neolithic stone circles and Roman forts.		
Loch Lomond and The Trossachs National Park	Scotland	720
Summary: The park is located in the south of Scotland and encompasses Argyll and Bute, Perth and Kinross, Stirling and West Dunbartonshire. Loch Lomond, the largest freshwater body of water in the UK, occupies the centre of the park. Landscape contrasts from rolling lowland in the south to high mountains in the north, and has many lochs and rivers, forests and woodlands. Loch Goil, Loch Long and Holy Loch are all sea lochs within the park and for this reason the park can be considered as having a coastal element.		
New Forest	England	220
Summary: The New Forest is in the county of Hampshire in the south of England and meets the English channel coast. The Park is the most intact surviving example in England of a medieval hunting forest and pastoral system. The landscape includes woodland, open heathland, riverine and coastal land. Much of its landscape is also of importance to nature conservation and provides extensive recreational opportunities for walkers, riders, fishermen and others.		
Northumberland	England	405
Summary: Located in the north east of England just south of the Scottish border the park lies entirely within Northumberland and does not		

Name	Country	Area (sq miles)
reach the coast at any point. The park is split into several areas; in the north are the Cheviots, a range of hills that mark the border between England and Scotland, further south, the hills give way to areas of rolling moorland, some of which have been covered by forestry plantations to form Kielder Forest. The southern part of the park is home to the central section of Hadrian's wall.		
North York Moors	England	554
Summary: The park is located in the north east of the county of Yorkshire. Open heather moorland is the main feature and the park is the largest expanse of continuous heather moorland in England. It is home to precious wildlife such as curlew and merlin. The Roman Road at Wheeldale, ironside mines at Rosedale and the remains of Rievaulx Abbey are some of the historical features found in the park. The park has many footpaths and is popular with walkers. The eastern boundary of the Park is a 42km stretch of Heritage Coast, with high cliffs and wide, sweeping bays.		
Peak District	England	555
Summary: The Peak District is an upland area in central and northern England, lying mainly in northern Derbyshire, but also covering parts of Cheshire, Greater Manchester, Staffordshire, and South and West Yorkshire. The park is not considered as coastal. The park is split into the northern Dark Peak, where most of the moorland is found and whose geology is gritstone, and the southern White Peak, where most of the population lives and where the geology is mainly limestone-based. The great houses of Chatsworth and Haddon Hall and the more ancient Iron Age hillfort at Mam Tor are some of the parks attractions.		
Pembrokeshire Coast	Wales	240
Summary: The park is located in Pembrokeshire, southwest Wales and was primarily designated for the spectacular coastline of this region which stretches for 258 miles. The landscape is dominated by rugged cliffs, sandy beaches and wooded estuaries, however forests and marshes can be found on the edge of the park. The limestone cliffs, bays and beaches are of interest geologically and support a wide range of wildlife. The coastal towns, wildlife and castles of the area attract many tourists.		
Snowdonia	Wales	838
Summary: The park is located in north Wales within the counties of Gwynedd and Conwy. The park has 37 miles of coastline mostly along the northern section of Cardigan Bay. It is an example of a mountainous landscape and is home to Mount Snowdon, the highest mountain in Wales. Natural forests and rare alpine plants are present.		
South Downs (awaiting confirmation)	England	To be confirmed
Summary: The South Downs is an area of chalk downland in southern England. The downs extend from the eastern side of Hampshire through West Sussex, Brighton and Hove and East Sussex, reaching the cliffs and English channel coastline at Beachy Head. A network of trails and the South Downs Way, a long distance bridleway, makes the area popular with walkers.		
Yorkshire Dales	England	683
Summary: Located in the north of England, the national park straddles the central Pennines in the counties of North Yorkshire and Cumbria. The Dales features of gorges, waterfalls, pavements, and a landscape of pastoral valleys patterned with dry-stone walls, barns and stone-built villages are due to the underlying limestone. The park is not coastal but is close to Morecambe Bay.		

A3j.5 POTENTIAL OTHER MARINE SITES AND INITIATIVES

A3j.5.1 Marine Nature Reserves

Marine Nature Reserves (MNRs) are national sites which are either statutory or voluntary. Their purpose is to conserve ecological and geological features of special interest and also provide opportunity for the study of marine systems. Statutory sites are established under the Wildlife and Countryside Act 1981 and, in Northern Ireland, the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985.

To date, only three statutory MNRs exist: Lundy Island (England), Skomer Island (Wales) and Strangford Lough (Northern Ireland). These sites have applied various management measures to conserve features of interest, including 'no-take' zones and other spatial restrictions on activities such as fishing and anchoring. A number of voluntary MNRs have

also been established, although these have no statutory basis; management relies on agreement between non-governmental organisations, stakeholders and user groups.

Legislative issues have contributed towards the lack of further statutory MNRs being established. Efforts to provide statutory protection to marine sites are now primarily associated with the European Habitats and Birds Directives, along with forthcoming legislative tools to be provided by the Marine Bill (described below).

A3j.5.2 Marine Conservation Zones/Marine Protected Areas

The UK draft Marine Bill, released in April 2008, provides the tools for the designation and protection of Marine Conservation Zones (MCZs) in UK waters (see Defra 2008). Individual sites will be given varying levels of protection, from restricting certain activities within them to 'Highly Protected Marine Reserves', where no damaging activities will be allowed. The MCZs will afford protection to individual habitats and species, and will also be both large enough and close enough together to support broader ecosystems. MCZs will focus on areas which are important for the diversity of rare, threatened and representative habitats and species. These are likely to include the rare fan mussel *Atrina fragilis*, the clam *Arctica islandica*, seagrass (*Zostera*) and maerl beds.

Programmes to enable the designation of MCZs will be developed by 2012, these will involve wide regional stakeholder consultation to ensure social and economic aspects are given full consideration. Conservation objectives will be developed for each MCZ, with some receiving greater protection than others, and measures will be developed to prevent activities from damaging sites once they are designated. Thorough guidance on the designation and management of MCZs will be developed by government and the statutory conservation agencies.

A consultation has also been completed on a Scottish Marine Bill which will also provide a mechanism for the designation of Marine Protected Areas in Scotland.

A3j.5.3 Coastal Management Initiatives

The main coastal management initiative is that of Integrated Coastal Zone Management (ICZM). This is the adoption of an integrated approach towards the many different interests in both the land and marine components of the coast. In 2002, European Member States adopted a Recommendation on implementing ICZM in Europe. In order to implement this recommendation, Department for environment, food and rural affairs (Defra), jointly with the Devolved Administrations, commissioned a stocktake or audit of the current framework for managing coastal activities in the UK. The final report was published in 2004 and demonstrated that coastal fora/partnerships were an effective way of moving ICZM forward at local level. The principles of ICZM are embedded throughout relevant proposals in the UK Draft Marine Bill mentioned above. Table A3j.8 lists the fora/partnerships existing in each regional sea area.

Table A3j.8 – Coastal/Estuary Fora/Partnerships

Fora/Partnership	Regional sea area
Hebrides Coastal Forum	7/8
Firth of Clyde Forum	6
Solway Firth Partnership	6
Morecambe Bay Partnership	6
Ravenglass Coastal Partnership	6

Fora/Partnership	Regional sea area
Duddon Estuary Partnership	6
North West Coastal Forum	6
Ribble Estuary Partnership	6
Sefton Coast Partnership	6
Dee Estuary Environmental Management	6
Cardigan Bay Coastal Group	6
Ynys Enlli to Llandudno Coastal Group	6
Liverpool Bay Coastal Group	6
Pembrokeshire Coastal Forum	4/6
Carmarthen Bay and Swansea Bay	4
Severn Estuary Partnership	4
Taw Torridge Estuary Forum	4
Devon Maritime Forum	4
Fowey Estuary Partnership	4
Tamar Estuaries Consultative Forum	4
Avon Estuary Forum	4
Dart Forum	4
Torbay Coast & Countryside Trust	4
Teign Estuary Partnership	4
Exe Estuary Management Forum	4
Dorset Coast Forum	3
Isle of Wight Estuaries Project	3
Solent Forum	3
Kent Coastal Network	3/2
Medway Swale Estuary Partnership	2
Thanet Coast Project	2
Thames Estuary Partnership	2
Blackwater Project	2
Essex Estuaries	2
Suffolk Coast and Heath Partnership	2
Norfolk Coast Partnership	2
Wash Estuary Strategy Group	2
Humber Estuary Management Scheme	2
East Riding Coastal Forum	1
North Yorkshire and Cleveland Coastal Forum	1
Durham Heritage Coast	1
Tees Estuary Management Partnership	1
East Grampian Coastal Partnership	1
Forth Estuary Forum	1
Moray Firth Partnership	1
Tay Estuary Forum	1

Source: Defra, Scottish Government and Welsh Assembly Government websites

A3j.6 UK BIODIVERSITY ACTION PLANS

In 1993, the UK government consulted over three hundred organisations throughout the UK and held a two day seminar to debate the key issues raised at the Convention of Biological Diversity. The product of this was the launch of Biodiversity: the UK Action Plan in 1994 which outlined the UK Biodiversity Action Plan for dealing with biodiversity conservation in response to the Rio Convention.

Three types of Action Plans have been developed which set priorities for nationally and locally important habitats and wildlife. Each plan has costed actions and targets and reporting on the targets is done on a 3-5 year cycle:

- Species Action Plans
- Habitat Action Plans
- Local Biodiversity Action Plans (LBAP)

The UK BAP list of priority species and habitats has been adopted and published by the governments of all four UK administrations in 2007. Table A3j.9 lists the marine habitats that have been identified. Priority marine species are included in Tables A3j.10-11 in Section A3j.7.

The 2008 reporting round is the most recently completed and focuses on the original UK priorities and not the new full list of species and habitats. This maintains continuity of data for comparison with previous reports and is essential for meeting the 2010 target of the Convention on Biological Diversity.

Table A3j.9 – UK BAP list of marine priority habitats and their corresponding objectives and targets

Habitat*	Objectives and targets**
Blue mussel beds	New priority habitat
Carbonate mounds	New priority habitat
Coastal and Floodplain Grazing Marsh	Maintain the extent (300,000ha) and quality of the existing habitat. Rehabilitate 10,000ha of grazing marsh habitat which has become too dry, or is intensively managed, by 2020. Begin creating an additional 2,500ha of grazing marsh from arable land in targeted areas, aiming to complete as much as possible by 2000.
Coastal saltmarsh	No further net loss (est. 100ha/yr) of coastal saltmarsh, involving creation of 100ha/yr of saltmarsh. Create a further 40ha/yr to replace those losses between 1992 and 1998. Maintain quality of the existing resource in terms of community and species diversity. Where necessary, restore the nature conservation interest. Some managed realignment sites to develop full range of saltmarsh zonation.
Coastal Sand Dunes	Protect the existing resource (~54,500ha) from further losses to anthropogenic factors (direct or indirect causes). Seek opportunities for restoration, with a suggested target of 1,000ha by 2010. Offset expected net losses due to natural causes (2% over next 20 years) by encouraging new dunes to accrete and where possible by allowing mobile systems to move inland. Encourage natural movement and development of dune systems; control natural succession to scrub and woodland where necessary. Maintain dune grassland, heath and lichen communities. Create Atlantic dune woodland at five sites.
Coastal Vegetated Shingle	Prevent further net loss of existing structures (~5,800ha), accepting some natural local change. Prevent, where possible, further exploitation and or damage through human activities; maintain the quality of existing plant and invertebrate communities currently in favourable condition; restoration, where possible, of extensively degraded or damaged habitats where natural recovery is unlikely to be initiated by 2010.
Cold-water coral reefs	Protect the distribution and status of the habitat within UK waters. Enhance the density and community richness of the habitat.
Deep-sea sponge communities	New priority habitat
Estuarine rocky habitats	New priority habitat
File shell beds	New priority habitat
Fragile sponge & anthozoan communities on subtidal rocky habitats	New priority habitat
Horse mussel beds	Maintain the extent, distribution and quality of horse mussel beds in UK waters.
Intertidal chalk	Retain the extent of habitats unaffected by coastal defence and other engineering works, and increase the extent where possible. Allow natural

Habitat*	Objectives and targets**
	coastal processes to dictate, where possible, the geomorphology of the habitats.
Intertidal mudflats	Maintain at least the present extent and regional distribution of the UK's mudflats. Restore mudflats to compensate for predicted losses to development. Create and restore to offset predicted losses to rising sea level. Restore estuarine water quality to ensure existing mudflats fulfil their important ecological and conservation role.
Intertidal underboulder communities	New priority habitat
Maerl beds	Maintain the geographical range, variety and quality of maerl beds and associated plant and animal communities in the UK subject to best available information.
Maritime Cliff and Slopes	Seek to maintain the existing resource (~4,000km). Maintain wherever possible free functioning of coastal physical processes acting on maritime cliff and slope habitats. Retain, and increase where possible, the amount of maritime cliff and slope habitats unaffected by coastal defence and other engineering works. Increase the area of cliff-top semi-natural habitats by at least 500ha over the next 20 years. Improve the quality of the maritime cliff and slope habitats, including cliff-top vegetation, improving at least 30% 2010 and as much as possible by 2015.
Mud habitats in deep water	Protect a representative range of 8 to 10 sites, illustrating typical mud biotopes in deep water, by 2009.
<i>Sabellaria alveolata</i> reefs	Maintain the extent and quality of <i>S. alveolata</i> reef habitats. Within 15 years, attempt to re-establish <i>S. alveolata</i> reefs in five areas where they were formerly present.
<i>Sabellaria spinulosa</i> reefs	By 2004, maintain the extent, distribution and quality of existing <i>S. spinulosa</i> reefs in the UK. By 2004, establish and ensure necessary habitat conditions required for the re-establishment of <i>S. spinulosa</i> reef where formerly found, for example in the Essex Estuaries and Morecambe Bay.
Saline lagoons	Maintain the current area (~5200ha), number and distribution of coastal saline lagoons. Maintain and improve, as necessary, the quality of coastal saline lagoons as measured by the retention of lagoonal specialist BAP Priority and Red Data Book species where these occur. Create, by 2015, 120ha of saline lagoon.
Seagrass beds	Maintain the extent and distribution of seagrass beds in UK waters. Assess feasibility of restoration of damaged or degraded seagrass beds. Until surveys assess the extent of the seagrass resource, it will not be possible to assess whether restoration is necessary, or to specify a final target. An interim target of 1,000ha has been costed.
Seamount communities	New priority habitat
Serpulid reefs	Maintain the extent and quality of serpulid reefs and associated plant and animal communities in the UK.
Sheltered muddy gravels	Maintain the extent, distribution and quality of sheltered muddy gravel bed habitats.
Subtidal chalk	Retain the extent of habitats unaffected by coastal defence and other engineering works, and increase the extent where possible. Allow natural coastal processes to dictate, where possible, the geomorphology of the habitats.
Subtidal sands and gravels	Protect the extent and quality of a representative range of subtidal sand and gravel habitats and communities.
Tide-swept channels (revised from 'tidal rapids')	Revised priority habitat. For 'tidal rapids': maintain the extent, variety and quality of marine communities in tidal rapids based on best available information.

Notes: * Habitats listed are those appearing on the new (2007) list of priority habitats. **Objectives and targets are those for the original Tranche 1 and 2 action plans (pre-2007); conservation actions for new priority habitats are not yet finalized.

Source: UK Biodiversity Action Plan website

A3j.7 SPECIES CONSERVATION

In addition to the designation of conservation sites, a number of individual species are afforded protection by UK legislation such as the Wildlife and Countryside Act. The *Wildlife and Countryside Act 1981 (as amended)* applies to territorial waters (subject to exceptions) and lists (Schedule 5) many marine and estuarine species which receive protection under the Act. The Act makes it an offence (subject to exceptions) to kill, injure, or otherwise disturb any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection by these species. All wild bird species receive general protection under the Act, with additional protection and exceptions specified several Schedules. Schedule 1 imposes special penalties for offences under the Act, Schedule 2 lists birds which may be killed or taken under specified circumstances, Schedule 3 lists birds which may be sold under specified circumstances, and Schedule 4 lists birds which must be registered and ringed if kept in captivity. The Act does not apply in Northern Ireland, where the equivalent is the *Wildlife (Northern Ireland) Order 1985*.

At a European level, many marine species including all cetaceans, otters, a number of fish species, several marine reptiles and a range of marine invertebrates are listed on Annex IV (Animal and Plant Species of Community Interest in Need of Strict Protection) of the EC Habitats Directive. Under this annex the deliberate capture, killing or disturbance of such species is banned, as is their keeping, sale or exchange. These Annex IV species (European Protected Species) receive protection via the various UK Habitats Regulations. The 2007 amendments to these Regulations resulted in consequential amendments to both the Wildlife and Countryside Act and Wildlife (Northern Ireland) Order with respect to whole or partial removal of European Protected Species from Schedule 5 of the Acts to ensure consistency of regulation. Additionally, there are several species that require the designation of SACs under Annex II of the EC Habitats Directive, and many species of birds which require the designation of SPAs under the EC Birds Directive.

At an international level, several marine species have been listed under Annex V of the OSPAR list of threatened and/or declining species and habitats, and also on Appendices I-III of CITES (the Convention on International Trade in Endangered Species). A number of species are also listed on the IUCN (International Union for the Conservation of Nature) Red List of Threatened Species. At a UK level, many marine and estuarine species are also the subject of UK Biodiversity Action Plans (BAPs), as priority species. As well as a UK-wide list, individual lists exist for Scottish, Welsh and Northern Irish species - with some variation between these lists.

Table A3j.10 lists bird species afforded protection, including all qualifying features of the SPAs listed in Section A3j.9. Table A3j.11 lists relevant non-bird species. Information is provided on the individual species' status under the Wildlife and Countryside Act, the Wildlife (Northern Ireland) Order, EC Birds or Habitats Directive, OSPAR list of threatened and/or declining species and habitats, CITES appendices, the IUCN Red List, and the UK BAP lists of priority species.

Table A3j.10 - Relevant bird species afforded protection under national legislation, strategies and international conventions

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order 1985	EC Birds Directive	OSPAR	CITES	IUCN	BAP listing
Divers and grebes							
Red throated diver (<i>Gavia stellata</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)			LC	Scotland list
Black throated diver (<i>Gavia arctica</i>)	General protection Schedule 1(1), 4	General protection	Annex I (migratory)			LC	UK list + Wales, Scotland
Great northern diver (<i>Gavia immer</i>)	General protection Schedule 1(1), 4	General protection	Annex I (migratory)			LC	Scotland list
Little grebe (<i>Tachybaptus ruficollis</i>)	General protection	General protection	Migratory			LC	
Red-necked grebe (<i>Podiceps grisegena</i>)	General protection		Migratory			LC	Scotland list
Black-necked grebe (<i>Podiceps nigricollis</i>)	General protection Schedule 1(1), 4		Migratory			LC	Scotland list
Great crested grebe (<i>Podiceps cristatus</i>)	General protection	General protection	Migratory			LC	
Slavonian grebe (<i>Podiceps auritus</i>)	General protection Schedule 1(1), 4	General protection	Annex I (migratory)			LC	Scotland list
Seabirds							
Fulmar (<i>Fulmarus glacialis</i>)	General protection	General protection	Migratory			LC	
Manx shearwater (<i>Puffinus puffinus</i>)	General protection	General protection	Migratory			LC	Scotland list
Storm petrel (<i>Hydrobates pelagicus</i>)	General protection	General protection Schedule 1(1)	Annex I (migratory)			LC	Scotland list
Leach's petrel (<i>Oceanodroma leucorhoa</i>)	General protection Schedule 1(1), 4	General protection	Annex I (migratory)			LC	Scotland list
Gannet (<i>Morus bassanus</i>)	General protection	General protection	Migratory			LC	
Cormorant (<i>Phalacrocorax carbo</i>)	General protection	General protection	Migratory			LC	
Shag (<i>Phalacrocorax aristotelis</i>)	General protection	General protection	Migratory			LC	
Guillemot (<i>Uria aalge</i>)	General protection	General protection	Migratory			LC	
Razorbill (<i>Alca torda</i>)	General protection	General protection	Migratory			LC	
Puffin (<i>Fratercula arctica</i>)	General protection	General protection	Migratory			LC	
Gulls, terns and skuas							
Arctic skua (<i>Stercorarius parasiticus</i>)	General protection	General protection	Migratory			LC	UK list + Wales, Scotland
Great skua (<i>Catharacta skua</i>)	General protection	General protection	Migratory			LC	
Mediterranean gull	General	General	Annex I			LC	

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order 1985	EC Birds Directive	OSPAR	CITES	IUCN	BAP listing
<i>(Larus melanocephalus)</i>	protection Schedule 1(1)	protection	(migratory)				
Black-headed gull (<i>Larus ridibundus</i>)	General protection	General protection	Annex II/2 (migratory)			LC	Wales list + Scotland
Common gull (<i>Larus canus</i>)	General protection	General protection	Annex II/2 (migratory)			LC	
Lesser black-backed gull (<i>Larus fuscus</i>)	General protection	General protection	Annex II/2 (migratory)	Y		LC	
Herring gull (<i>Larus argentatus</i>)	General protection	General protection	Annex II/2 (migratory)			LC	UK list + Wales, Scotland, NI
Great black-backed gull (<i>Larus marinus</i>)	General protection	General protection	Annex II/2 (migratory)			LC	
Kittiwake (<i>Rissa tridactyla</i>)	General protection	General protection	Migratory	Y		LC	
Sandwich tern (<i>Sterna sandvicensis</i>)	General protection	General protection Schedule 1(1)	Annex I (migratory)			LC	Scotland list
Roseate tern (<i>Sterna dougallii</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)	Y		LC	UK list + Wales, Scotland, NI
Common tern (<i>Sterna hirundo</i>)	General protection	General protection Schedule 1(1)	Annex I (migratory)			LC	Scotland list
Arctic tern (<i>Sterna paradisaea</i>)	General protection	General protection Schedule 1(1)	Annex I (migratory)			LC	Scotland list
Little tern (<i>Sterna albifrons</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)			LC	Scotland list
Crakes and rails							
Corncrake (<i>Crex crex</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)			NT	UK list + Wales, Scotland, NI
Coot (<i>Fulica atra</i>)	General protection Schedules 2(3) 3 (3)	General protection	Annex II/1, III/2 (migratory)			LC	
Hérons, bitterns and egrets							
Bittern (<i>Botaurus stellaris</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)			LC	UK list + Wales, Scotland, NI
Little egret (<i>Egretta garzetta</i>)	General protection	General protection Schedule 1(1)	Annex I (migratory)			LC	
Birds of prey and owls							
Honey buzzard (<i>Pernis apivorus</i>)	General protection Schedule 1(1), 4		Annex I (migratory)		App. II	LC	Scotland list
Marsh harrier (<i>Circus aeruginosus</i>)	General protection Schedules 1(1), 4	General protection Schedule 1(1)	Annex I		App. II	LC	Scotland list
Hen harrier (<i>Circus cyaneus</i>)	General protection	General protection	Annex I (migratory)		App. II	LC	Wales list + Scotland,

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order 1985	EC Birds Directive	OSPAR	CITES	IUCN	BAP listing
	Schedule 1(1), 4 ¹	Schedule 1(1)					NI
Merlin (<i>Falco columbarius</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)		App. II	LC	Scotland list
Golden eagle (<i>Aquila chrysaetos</i>)	General protection Schedules 1(1), 4	General protection Schedule 1(1)	Annex I		App. II	LC	Scotland list
Osprey (<i>Pandion haliaetus</i>)	General protection Schedules 1(1), 4	General protection Schedule 1(1)	Annex I		App. II	LC	Scotland list
Peregrine (<i>Falco peregrinus</i>)	General protection Schedules 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)		App. I, II	LC	Scotland list
Short-eared owl (<i>Asio flammeus</i>)	General protection	General protection Schedule 1(1)	Annex I		App. II	LC	Scotland list
Other bird species							
Nightjar (<i>Caprimulgus europaeus</i>)	General protection	General protection Schedule 1(1)	Annex I			LC	UK list + Wales, Scotland
Woodlark (<i>Lullula arborea</i>)	General protection Schedule 1(1), 4 ¹		Annex I			LC	UK list + Wales
Fair Isle wren (<i>Troglodytes troglodytes fridariensis</i>)	General protection		Annex I				Scotland list
Aquatic warbler (<i>Acrocephalus paludicola</i>)	General protection		Annex I			V	UK list + Wales
Dartford warbler (<i>Sylvia undata</i>)	General protection Schedule 1(1), 4 ¹		Annex I			NT	
Chough (<i>Pyrhacorax pyrrhacorax</i>)	General protection Schedules 1(1), 4 ¹	General protection Schedule 1(1)	Annex I			LC	Wales list + NI
Capercaillie (<i>Tetrao urogallus</i>)	General protection		Annex I, II/2, III/2			LC	UK list + Scotland,
Waterfowl							
Bewick's swan (<i>Cygnus columbianus</i>)	General protection Schedule 1(1)	General protection Schedule 1(1)	Annex I (migratory)			LC	UK list + Wales, Scotland
Whooper swan (<i>Cygnus Cygnus</i>)	General protection Schedule 1(1)	General protection Schedule 1(1)	Annex I (migratory)			LC	Scotland list
Bean goose (<i>Anser fabalis</i>)	General protection	General protection	Annex II/1 (migratory)			LC	Scotland list
Pink-footed goose (<i>Anser brachyrhynchus</i>)	General protection Schedule 2(1)	General protection Schedule 2(1)	Annex II/2 (migratory)			LC	
Russian white-fronted goose (<i>Anser albifrons albifrons</i>)	General protection Schedule 2(1)	General protection	Annex II/2, III/2 (migratory)			LC	Scotland list
Greenland white-fronted goose (<i>Anser albifrons Flavirostris</i>)	General protection	General protection	Annex I, II/2 (migratory)			LC	UK list + Wales, Scotland
Iceland greylag goose	General	General	Annex II/1,			LC	

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order 1985	EC Birds Directive	OSPAR	CITES	IUCN	BAP listing
(<i>Anser anser</i>)	protection Schedule 2(1)	protection Schedule 2(1)	II/2 (migratory)				
Greenland barnacle goose (<i>Branta leucopsis</i>)	General protection	General protection Schedule 9(1)	Annex I (migratory)			LC	Scotland list
Svalbard barnacle goose (<i>Branta leucopsis</i>)	General protection	General protection Schedule 9(1)	Annex I (migratory)			LC	
Dark bellied brent goose (<i>Branta bernicla bernicla</i>)	General protection	General protection	Migratory				UK list + Wales
Canadian light-bellied brent goose (<i>Branta bernicla</i>)	General protection	General protection	Migratory			LC	
Svalbard light-bellied brent goose (<i>Branta bernicla hrota</i>)	General protection	General protection	Migratory				
Shelduck (<i>Tadorna tadorna</i>)	General protection	General protection	Migratory			LC	
Wigeon (<i>Anas penelope</i>)	General protection Schedules 2(1), 3(3)	General protection Schedules 1(2), 2(1)	Annex II/I, III/2 (migratory)			LC	
Gadwall (<i>Anas strepera</i>)	General protection Schedules 2(1), 3(3)	General protection Schedules 1(2), 2(1)	Annex II/I, III/2 (migratory)			LC	
Teal (<i>Anas crecca</i>)	General protection Schedules 2(1), 3(3)	General protection Schedule 2(1)	Annex II/I, III/2 (migratory)			LC	
Mallard (<i>Anas platyrhynchos</i>)	General protection Schedules 2(1), 3(3)	General protection Schedule 2(1)	Annex II/I, III/2 (migratory)			LC	
Pintail (<i>Anas acuta</i>)	General protection Schedules 1(2), 2(1), 3(3)	General protection Schedules 1(2), 2(1)	Annex II/I, III/2 (migratory)			LC	
Shoveler (<i>Anas clypeata</i>)	General protection Schedules 2(1), 3(3)	General protection Schedules 1(2), 2(1)	Annex II/I, III/2 (migratory)			LC	
Pochard (<i>Aythya ferina</i>)	General protection Schedules 2(1), 3(3)	General protection Schedules 1(2), 2(1)	Annex II/I, III/2 (migratory)			LC	Scotland list
Tufted duck (<i>Aythya fuligula</i>)	General protection Schedules 2(1), 3(3)	General protection Schedule, 2(1)	Annex II/I, III/2 (migratory)			LC	
Scaup (<i>Aythya marila</i>)	General protection Schedules 1(1), 3(3)	General protection Schedules, 1(2), 2(1)	Annex II/2, III/2 (migratory)			LC	UK list + Wales, Scotland
Eider (<i>Somateria mollissima</i>)	General protection	General protection	Annex III/2, (migratory)			LC	
Long-tailed duck (<i>Clangula hyemalis</i>)	General protection	General protection	Annex II/2, (migratory)			LC	

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order 1985	EC Birds Directive	OSPAR	CITES	IUCN	BAP listing
	Schedule 1(1), 4						
Common scoter (<i>Melanitta nigra</i>)	General protection Schedule 1(1), 4	General protection Schedule, 1(1)	Annex II/2, III/2 (migratory)			LC	UK list + Wales, Scotland, NI
Velvet scoter (<i>Melanitta fusca</i>)	General protection Schedule 1(1), 4	General protection	Annex II/2, (migratory)			LC	
Goldeneye (<i>Bucephala clangula</i>)	General protection Schedules 1(2), 2(1)	General protection Schedules, 1(2), 2(1)	Annex II/2, (migratory)			LC	
Red-breasted merganser (<i>Mergus serrator</i>)	General protection	General protection	Migratory			LC	
Goosander (<i>Mergus merganser</i>)	General protection	General protection Schedules, 1(1),	Annex II/2 (Ireland), (migratory)			LC	
Waders							
Oystercatcher (<i>Haematopus ostralegus</i>)	General protection	General protection	Migratory			LC	
Avocet (<i>Recurvirostra avosetta</i>)	General protection Schedule 1(1), 4	General protection	Annex I, (migratory)			LC	
Stone curlew (<i>Burhinus oedicanus</i>)	General protection Schedule 1(1), 4	General protection	Annex I, (migratory)			LC	UK list
Ringed plover (<i>Charadrius hiaticula</i>)	General protection	General protection	Annex I, (migratory)			LC	Wales list
Dotterel (<i>Charadrius morinellus</i>)	General protection Schedule 1(1), 4	General protection Schedules, 1(1),	Annex I, (migratory)			LC	
Golden plover (<i>Pluvialis apricaria</i>)	General protection Schedules, 2(1), 3(3)	General protection Schedules, 1(2), 2(2)	Annex I, II/2, III/2 (migratory)			LC	Wales + Scotland
Grey plover (<i>Pluvialis squatarola</i>)	General protection	General protection	Annex II/2 (migratory)			LC	
Lapwing (<i>Vanellus vanellus</i>)	General protection	General protection	Migratory			LC	UK list + Wales, Scotland, NI
Knot (<i>Calidris canuta</i>)	General protection	General protection	Migratory				
Sanderling (<i>Calidris alba</i>)	General protection	General protection	Migratory			LC	
Purple sandpiper (<i>Calidris maritima</i>)	General protection Schedule 1(1), 4	General protection	Migratory			LC	Scotland list
Green sandpiper (<i>Tringa ochropus</i>)	General protection Schedule 1(1), 4		Migratory			LC	Scotland list
Dunlin (<i>Calidris alpina</i>)	General protection	General protection Schedule 1(2)	Migratory			LC	Scotland list

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order 1985	EC Birds Directive	OSPAR	CITES	IUCN	BAP listing
Ruff (<i>Philomachus pugnax</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)			LC	Scotland list
Snipe (<i>Gallinago gallinago</i>)	General protection Schedules, 2(1), 3(3)	General protection	Annex II/1, III/2 (migratory)			LC	
Black-tailed godwit (<i>Limosa limosa</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex II/2 (migratory)			NT	UK list + Scotland, NI
Bar-tailed godwit (<i>Limosa lapponica</i>)	General protection	General protection	Annex I, II/2 (migratory)			LC	Wales + Scotland
Whimbrel (<i>Numenius phaeopus</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex II/2 (migratory)			LC	
Curlew (<i>Numenius arquata</i>)	General protection	General protection Schedule 2(1)	Annex II/2 (migratory)			NT	
Redshank (<i>Tringa totanus</i>)	General protection	General protection	Annex II/2 (migratory)			LC	NI
Greenshank (<i>Tringa nebularia</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Migratory			LC	
Wood sandpiper (<i>Tringa glareola</i>)	General protection Schedule 1(1), 4	General protection	Annex I			LC	Scotland list
Turnstone (<i>Arenaria interpres</i>)	General protection	General protection	Migratory			LC	
Red-necked phalarope (<i>Phalaropus lobatus</i>)	General protection Schedule 1(1), 4	General protection Schedule 1(1)	Annex I (migratory)			LC	UK list + Wales, Scotland
Garganey (<i>Anas querquedula</i>)	General protection Schedule 1(1)					LC	Scotland list

Notes: ¹ These have been omitted from Schedule 4 of the WCA 1981 in England only, see The Wildlife and Countryside Act 1981 (variation of Schedule 4)(England) Order 2008. NI = Northern Ireland. IUCN Red List categories (in order): Least Concern (LC), Lower Risk (LR), Near Threatened (NT), Vulnerable (V), Endangered (E), Critically Endangered (CE), Extinct in the Wild (EW), Extinct (EX). DD = Data Deficient.

Table A3j.11 - Relevant species afforded protection under national legislation, strategies and international conventions

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
Mammals							
All cetaceans	Sch. 5 (not Scotland)		Annex IV				
Dolphins	Sch. 5 (not Scotland)		Annex IV				NI list
Toothed whales	Sch. 5 (not Scotland)		Annex IV				NI list
Baleen whales	Sch. 5 (not Scotland)		Annex IV				NI list
Minke whale (<i>Balaenoptera</i>)	Sch. 5 (not Scotland)		Annex IV		App. I	LC	UK list + Wales,

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
<i>acutorostrata</i>)							Scotland
Sei whale (<i>Balaenoptera borealis</i>)	Sch. 5 (not Scotland)		Annex IV		App. I	E	UK list
Blue whale (<i>Balaenoptera musculus</i>)	Sch. 5 (not Scotland)		Annex IV	Y	App. I	E	UK list
Fin whale (<i>Balaenoptera physalus</i>)	Sch. 5 (not Scotland)		Annex IV		App. I	E	UK list + Wales, Scotland
Common dolphin (<i>Delphinus delphis</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	LC	UK list + Wales, Scotland
Northern right whale (<i>Eubalaena glacialis</i>)	Sch. 5 (not Scotland)		Annex IV	Y	App. I	E	UK list + Scotland
Long-finned pilot whale (<i>Globicephala melas</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	DD	UK list + Wales, Scotland
Risso's dolphin (<i>Grampus griseus</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	LC	UK list + Wales, Scotland
Northern bottlenose whale (<i>Hyperoodon ampullatus</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	DD	UK list + Wales, Scotland
Atlantic white-sided dolphin (<i>Lagenorhynchus acutus</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	LC	UK list + Wales, Scotland
White-beaked dolphin (<i>Lagenorhynchus albirostris</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	LC	UK list + Wales, Scotland
Humpback whale (<i>Megaptera novaeangliae</i>)	Sch. 5 (not Scotland)		Annex IV		App. I	LC	UK list + Wales, Scotland
Sowerby's beaked whale (<i>Mesoplodon bidens</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	DD	UK list + Scotland
True's beaked whale (<i>Mesoplodon mirus</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	DD	UK list + Scotland
Killer whale (<i>Orcinus orca</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	DD	UK list + Wales, Scotland
Harbour porpoise (<i>Phocoena phocoena</i>)	Sch. 5 (not Scotland)		Annex II & IV	Y	App. II	LC	UK list + Wales, Scotland, NI
Sperm whale (<i>Physeter macrocephalus</i>)	Sch. 5 (not Scotland)		Annex IV		App. I	V	UK list + Scotland
False killer whale (<i>Pseudorca crassidens</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	DD	Scotland list
Striped dolphin (<i>Stenella coeruleoalba</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	LC	UK list + Wales
Bottlenose dolphin (<i>Tursiops truncatus</i>)	Sch. 5 (not Scotland)		Annex II & IV		App. II	LC	UK list + Wales, Scotland
Cuvier's beaked whale (<i>Ziphius cavirostris</i>)	Sch. 5 (not Scotland)		Annex IV		App. II	LC	UK list + Wales,

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
							Scotland
Grey seal (<i>Halichoerus grypus</i>)		Sch. 5	Annex II		App. I	LC	
Common seal (<i>Phoca vitulina</i>)		Sch. 5	Annex II			LC	UK list + Wales, NI
Otter (<i>Lutra lutra</i>)	Sch. 5 (not Scotland)		Annex II & IV			NT	UK list + Wales, Scotland, NI
Nathusius's pipistrelle (<i>Pipistrellus nathusii</i>)	Sch. 5 (not Scotland) (all bats)		Annex IV (all bats)			LC	Scotland, NI (all bats)
Reptiles							
Marine turtles	Sch. 5 (not Scotland)				App. I		NI list
Loggerhead turtle (<i>Caretta caretta</i>)			Annex II & IV	Y	App. I	E	UK list + Wales, Scotland
Green turtle (<i>Chelonia mydas</i>)			Annex II & IV		App. I	E	Scotland list
Leatherback turtle (<i>Dermochelys coriacea</i>)			Annex IV	Y	App. I	CE	UK list + Wales, Scotland
Hawksbill turtle (<i>Eretmochelys imbricata</i>)			Annex IV		App. I	CE	
Kemp's Ridley turtle (<i>Lepidochelys kempi</i>)			Annex IV		App. I	CE	Scotland list
Olive Ridley turtle (<i>Lepidochelys olivacea</i>)					App. I	V	
Flatback turtle (<i>Natator depressus</i>)					App. I	DD	
Amphibians							
Great Crested Newt (<i>Triturus cristatus</i>)	Sch. 5 (not Scotland)		Annex II & IV			LC	UK list + Wales, Scotland
Fish (including elasmobranchs)							
European sturgeon (<i>Acipenser sturio</i>)	Sch. 5 (not Scotland)		Annex II & IV	Y	App. I	CE	UK list + Wales, Scotland
Allis shad (<i>Alosa alosa</i>)	Sch. 5		Annex II & V	Y		LC	UK list + Wales, Scotland, NI
Twaite shad (<i>Alosa fallax</i>)	Sch. 5		Annex II & V			LC	UK list + Wales, Scotland, NI
Sandeel (<i>Ammodytes marinus</i>)							UK list + Wales, Scotland
Sandeel (<i>Ammodytes tobianus</i>)							Scotland list
European eel (<i>Anguilla anguilla</i>)				Y	App. II (from March 2009)	CE	UK list + Wales, Scotland
Black scabbardfish (<i>Aphanopus carbo</i>)							UK list

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
Deepwater sole (<i>Bathysolea profundicola</i>)							Scotland list
Tusk (<i>Brosme brosme</i>)							Scotland list
Gulper shark (<i>Centrophorus granulosus</i>)				Y		V	UK list
Leafscale gulper shark (<i>Centrophorus squamosus</i>)				Y		V	UK list
Portuguese dogfish (<i>Centroscymnus coelolepis</i>)				Y		NT	UK list
Basking shark (<i>Cetorhinus maximus</i>)	Sch. 5			Y	App. II	V	UK list + Wales, Scotland, NI
Herring (<i>Clupea harengus</i>)							UK list + Wales, Scotland
Whitefish (<i>Coregonus lavaretus</i>)	Sch. 5		Annex V	Y		V	UK list + Wales, Scotland
Roundnose grenadier (<i>Coryphaenoides rupestris</i>)							UK list
Kitefin shark (<i>Dalatius licha</i>)						DD	UK list
Atlantic cod (<i>Gadus morhua</i>)				Y		V	UK list + Wales, Scotland
Tope (<i>Galeorhinus galeus</i>)						V	UK list + Wales
Giant goby (<i>Gobius cobitis</i>)	Sch. 5						
Couch's goby (<i>Gobius couchii</i>)	Sch. 5						
Long snouted seahorse (<i>Hippocampus guttulatus</i>)	Sch. 5 (England only)			Y	App. II	DD	UK list + Wales
Short snouted seahorse (<i>Hippocampus hippocampus</i>)	Sch. 5 (England only)			Y	App. II	DD	UK list
Atlantic halibut (<i>Hippoglossus hippoglossus</i>)						E	UK list
Orange roughy (<i>Hoplostethus atlanticus</i>)				Y			UK list
Shortfin mako (<i>Isurus oxyrinchus</i>)						LR/NT	UK list
Porbeagle (<i>Lamna nasus</i>)				Y		V	UK list + Wales
River lamprey (<i>Lampetra fluviatilis</i>)			Annex II & V			LC	UK list + Wales, Scotland
Common skate				Y		CE	UK list +

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
<i>(Leucoraja batis)</i>							Wales, Scotland, NI
Sandy ray (<i>Leucoraja circularis</i>)							UK list
Monkfish (<i>Lophius piscatorius</i>)							UK list + Wales
Whiting (<i>Merlangius merlangus</i>)							UK list + Wales, Scotland
Hake (<i>Merluccius merluccius</i>)							UK list + Wales, Scotland
Blue whiting (<i>Micromesistius poutassou</i>)							UK list
Blue ling (<i>Molva dypterygia</i>)							UK list
Ling (<i>Molva molva</i>)							UK list + Wales, Scotland
Smelt (<i>Osmerus eperlanus</i>)						LC	UK list + Wales, Scotland, NI
Sea lamprey (<i>Petromyzon marinus</i>)			Annex II	Y		LC	UK list + Wales, Scotland
Plaice (<i>Pleuronectes platessa</i>)						LC	UK list + Wales, Scotland
Saithe (<i>Pollachius virens</i>)							Scotland list
Blue shark (<i>Prionace glauca</i>)						LR/NT	UK list + Wales
Thornback ray (<i>Raja clavata</i>)				Y		LR/NT	Scotland list
Spotted ray (<i>Raja montagui</i>)				Y		LC	
Undulate ray (<i>Raja undulata</i>)							UK list + Wales
Greenland halibut (<i>Reinhardtius hippoglossoides</i>)							UK list
White skate (<i>Rostroraja alba</i>)				Y		E	UK list + Wales
Atlantic salmon (<i>Salmo salar</i>)			Annex II (freshwater only)	Y		LC	UK list + Wales, Scotland
Sea trout (<i>Salmo trutta</i>)						LC	UK list + Wales
Mackerel (<i>Scomber scombrus</i>)							UK list + Wales
Norway redfish (<i>Sebastes viviparus</i>)							Scotland list
Sole (<i>Solea solea</i>)							UK list + Wales
Spurdog (<i>Squalus acanthias</i>)				Y		V	UK list + Wales
Angel shark (<i>Squatina</i>	Sch. 5			Y		CE	UK list + Wales

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
<i>squatina</i>)	(England only – not between 6-12nm of coast)						
Northern bluefin tuna (<i>Thunnus thynnus</i>)				Y		DD	UK list
Horse mackerel (<i>Trachurus trachurus</i>)							UK list + Wales
Norway pout (<i>Trisopterus esmarkii</i>)							Scotland list
Commercial marine fish							NI list
Deepwater fish species							NI list
Hemichordata and other Chordata							
Acorn worm (<i>Glossobalanus sarniensis</i>)							NI list
Sea squirt (<i>Pyura microcosmus</i>)							NI list
Loch Goil sea squirt (<i>Styela gelatinosa</i>)							UK list
Echinoderms							
Goosefoot starfish (<i>Anseropoda placenta</i>)							NI list
Starfish (<i>Astropecten irregularis</i>)							NI list
Sea cucumber (<i>Labidoplax media</i>)							NI list
Starfish (<i>Leptasterias mulleri</i>)							NI list
Sea cucumber (<i>Leptosynapta bergensis</i>)							NI list
Sea cucumber (<i>Ocnus planci</i>)							NI list
Brittlestar (<i>Ophiopsila annulosa</i>)							Scotland list
Hybdman's sea cucumber (<i>Paracucumaria hyndmani</i>)							NI list
Purple sunstar (<i>Solaster endeca</i>)							NI list
Sea cucumber (<i>Thyonidium drummondi</i>)							NI list
Bryozoans (sea mats)							
Bryozoan (<i>Ammatophora nodulosa</i>)							Scotland list
Bryozoan (<i>Arachnidium clavatum</i>)							Scotland list
Bryozoan (<i>Arachnidium fibrosum</i>)							Scotland list
Bryozoan (<i>Arachnidium hippothooides</i>)							Scotland list

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
Bryozoan (<i>Arachnidium simplex</i>)							Scotland list
Bryozoan (<i>Bowerbankia gracillima</i>)							Scotland list
Bryozoan (<i>Buskea quincuncialis</i>)							Scotland list
Bryozoan (<i>Coronopora truncata</i>)							Scotland list
Bryozoan (<i>Cylindroporella tubulosa</i>)							Scotland list
Bryozoan (<i>Gephyrotes nitidopunctata</i>)							Scotland list
Bryozoan (<i>Haplota clavata</i>)							Scotland list
Bryozoan (<i>Hypophorella expansa</i>)							Scotland list
Bryozoan (<i>Smittina crystallina</i>)							Scotland list
Trembling sea mat (<i>Victorella pavida</i>)	Sch. 5						
Molluscs							
Sea slug (<i>Aeolidiella sanguinea</i>)							Scotland list
Mollusc (<i>Aldisa zetlandica</i>)							Scotland list
Mollusc (<i>Amauropsis islandicus</i>)							Scotland list
Ocean quahog (<i>Arctica islandica</i>)				Y			
Fan mussel (<i>Atrina fragilis</i>)	Sch. 5						UK list + Wales, Scotland, NI
Mollusc (<i>Buccinum humphreysianum</i>)							Scotland list
DeFolin's lagoon snail (<i>Caecum armoricum</i>)	Sch. 5						
Brackish cockle (<i>Cerastoderma glaucum</i>)							NI list
Mollusc (<i>Ceratia proxima</i>)							Scotland list
Variegated scallop (<i>Chlamys varia</i>)							NI list
Nudibranch mollusc (<i>Cumanotus beaumonti</i>)							NI list
Mollusc (<i>Devonia perrieri</i>)							Scotland list
Egg cowrie (<i>Erato voluta</i>)							NI list
Nudibranch mollusc (<i>Eubbranchus doriae</i>)							Scotland, NI
Mollusc (<i>Facelina annulicornis</i>)							Scotland list

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
Mollusc (<i>Hancockia uncinata</i>)							Scotland list
Mollusc (<i>Hydrobia neglecta</i>)							Scotland list
Mollusc (<i>Manzonina crassa</i>)							Scotland list
Horse mussel (<i>Modiolus modiolus</i>)							NI list
Dog whelk (<i>Nucella lapillus</i>)				Y			
Mollusc (<i>Okenia leachii</i>)							Scotland list
Native oyster (<i>Ostrea edulis</i>)							UK list + Wales, Scotland, NI
Mollusc (<i>Otina ovata</i>)							Scotland list
Lagoon snail (<i>Paludinella littorina</i>)	Sch. 5						
Nudibranch mollusc (<i>Palio dubia</i>)							NI list
Mollusc (<i>Simnia patula</i>)							Scotland list
Lagoon sea slug (<i>Tenellia adspersa</i>)	Sch. 5						UK list + Wales
Northern hatchet-shell (<i>Thyasira gouldi</i>)	Sch. 5						Scotland list
Chiton (<i>Tonicella marmorea</i>)							NI list
Sea slug (<i>Trapania pallida</i>)							Scotland list
Crustaceans							
Deep-sea shrimp (<i>Arrhis phyllonyx</i>)							UK list
Crab (<i>Atelecyclus rotundata</i>)							NI list
Hermit crab (<i>Cestopagurus timidus</i>)							NI list
Lagoon sand shrimp (<i>Gammarus insensibilis</i>)	Sch. 5						
Amphipod shrimp (<i>Gitanopsis bispinosa</i>)							UK list
Crab (<i>Inachus leptochirus</i>)							NI list
Gooseneck barnacle (<i>Mitella pollicipes</i>)							UK list
Rugose squat lobster (<i>Munida rugosa</i>)							NI list
Crawfish (<i>Palinurus elephas</i>)							UK list + Wales, NI
Annelids (segmented worms)							
Tentacled lagoon worm (<i>Alkmaria romijni</i>)	Sch. 5						
Lagoon sandworm (<i>Armandia cirrhosa</i>)	Sch. 5						
Honeycomb worm							NI list

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
<i>(Sabellaria alveolata)</i>							
Honeycomb worm <i>(Sabellaria spinulosa)</i>							NI list
Nemertines (ribbon worms)							
Ribbon worm <i>(Amphiporus hastatus)</i>							Scotland list
Ribbon worm <i>(Carinoma armandi)</i>							Scotland list
Ribbon worm <i>(Cerebratulus fuscus)</i>							Scotland list
Ribbon worm <i>(Emplectonema neesii)</i>							Scotland list
Ribbon worm <i>(Nemertopsis flavida)</i>							Scotland list
Ribbon worm <i>(Procephalothrix filiformis)</i>							Scotland list
Ribbon worm <i>(Psammamphiporus elongatus)</i>							Scotland list
Ribbon worm <i>(Ramphogordius sanguineus)</i>							Scotland list
Ribbon worm <i>(Tetrastemma robertianae)</i>							Scotland list
Ribbon worm <i>(Tetrastemma vermiculus)</i>							Scotland list
Ribbon worm <i>(Tubulanus linearis)</i>							Scotland list
Cnidarians							
Cnidarian (<i>Actinauge richardi</i>)							Scotland list
Sea-fan anemone <i>(Amphianthus dohrnii)</i>							UK list + Scotland
Burrowing anemone <i>(Anemonactis mazelli)</i>							NI list
Glaucus pimplet <i>(Anthopleura thallia)</i>							Scotland list
Scarce tube-dwelling anemone <i>(Arachnanthus sarsi)</i>							UK list + Scotland, NI
Cup coral <i>(Caryophyllia inornata)</i>							Scotland, NI
Hydroid (<i>Clavopsella navis</i>)	Sch. 5						
Hydroid (<i>Diphasia alata</i>)							Scotland, NI
Hydroid (<i>Diphasia nigra</i>)							NI list
Ivell's sea anemone <i>(Edwardsia ivelli)</i>	Sch. 5						
Burrowing anemone <i>(Edwardsia timida)</i>							UK list + Wales, Scotland, NI
Pink sea-fan (<i>Eunicella</i>)	Sch. 5					V	UK list + Wales

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
<i>verrucosa</i>)							
Tall sea pen (<i>Funiculina quadrangularis</i>)							UK list
Burrowing anemone (<i>Halcampoides elongatus</i>)							Scotland list
Hydroid (<i>Halecium plumosum</i>)							NI list
Stalked jellyfish (<i>Haliclystus auricula</i>)							UK list + Wales
Hydroid (<i>Hartlaubella gelatinosa</i>)							Scotland list
Sunset cup coral (<i>Leptopsammia pruvoti</i>)							UK list
Stalked jellyfish (<i>Lucernariopsis campanulata</i>)							UK list + Wales
Stalked jellyfish (<i>Lucernariopsis cruxmelitensis</i>)							UK list
Hydroid (<i>Lytocarpia myriophyllum</i>)							NI list
Starlet sea anemone (<i>Nematostella vectensis</i>)	Sch. 5						
Cnidarian (<i>Octocorallia</i>)							Scotland list
Fireworks anemone (<i>Pachycerianthus multiplicatus</i>)							UK list
Brackish hydroid (<i>Pachycordyle navis</i>)							UK list
Cnidarian (<i>Paraphellia expansa</i>)							Scotland list
Colonial anemone (<i>Parazoanthus axinellae</i>)							Scotland, NI
Hydroid (<i>Polyplumaria flabellata</i>)							Scotland, NI
Northern Sea Fan (<i>Swiftia pallida</i>)							UK list
Hydroid (<i>Tamarisca tamarisca</i>)							Scotland list
Cnidarian (<i>Ventromma halecioides</i>)							Scotland list
Sea pen (<i>Virgularia mirabilis</i>)							NI list
Porifera (Sponges)							
Sponge (<i>Axinella damicornis</i>)							Scotland list
Sponge (<i>Clathria barleei</i>)							NI list
Sponge (<i>Eurypon clavatum</i>)							Scotland list
Sponge (<i>Eurypon</i>)							NI list

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
<i>coronula</i>)							
Sponge (<i>Hymerhabdia typica</i>)							NI list
Sponge (<i>Iophon ingalli</i> (<i>hyndmani</i>))							NI list
Sponge (<i>Macandrewia azorica</i>)							Scotland list
Sponge (<i>Microciona elliptichela</i>)							NI list
Sponge (<i>Mycale contarenii</i>)							NI list
Sponge (<i>Mycale similaris</i>)							NI list
Sponge (<i>Myxilla perspinosa</i>)							Scotland list
Sponge (<i>Quasillina brevis</i>)							Scotland list
Sponge (<i>Spanioplou armaturum</i>)							NI list
Sponge (<i>Spinularia spinularia</i>)							Scotland list
Sponge (<i>Spongionella pulchella</i>)							Scotland list
Sponge (<i>Stryphnus ponderosus</i>)							Scotland list
Plants							
Red seaweed (<i>Ahnfeltiopsis</i> sp.)						DD (<i>A. smithii</i>)	NI list
Bearded red seaweed (<i>Anotrichium barbatum</i>)							UK list + Wales
Knotted wrack (<i>Ascophyllum nodosum</i>)							NI list
Free-floating knotted wrack (<i>Ascophyllum nodosum mackaii</i>)							UK list + Scotland, NI
Brown seaweed (<i>Carpomitra costata</i>)							NI list
Algae (<i>Codium adhaerens</i>)							Scotland list
Algae (<i>Codium bursa</i>)							Scotland list
Red seaweed (<i>Cruoria cruoriaeformis</i>)							UK list + Wales, Scotland
Brown seaweed (<i>Dasya ocellata</i>)							NI list
Red seaweed (<i>Dermocorynus montagnei</i>)							UK list + Wales
Red seaweed (<i>Desmarestia dresnayi</i>)							NI list
Brown algae (<i>Fucus distichus</i>)							UK list
Coral maërl (<i>Lithothamnion coralloides</i>)							UK list + Wales

Species	Wildlife and Countryside Act	Wildlife (Northern Ireland) Order	EC Habitats Directive	OSPAR	CITES	IUCN	BAP listing
Peacock's tail (<i>Padina pavonica</i>)							UK list + Wales
Common maërl (<i>Phymatolithon calcareum</i>)							UK list + Wales

Notes: NI = Northern Ireland. IUCN Red List categories (in order): Least Concern (LC), Lower Risk (LR), Near Threatened (NT), Vulnerable (V), Endangered (E), Critically Endangered (CE), Extinct in the Wild (EW), Extinct (EX). DD = Data Deficient.

A3j.8 MAPS AND SUMMARIES FOR REGIONAL SEAS

A3j.8.1 Regional Sea 1

Regional Sea 1 covers the central and northern North Sea and adjacent UK coastline from Flamborough Head, Yorkshire, in the south to Duncansby Head, Caithness, in the north. The northwest boundary of Regional Sea 1 runs immediately east of Orkney transects the central spine of Shetland to include the eastern coast and islands. Hydrographically, the area is bounded by the Flamborough front to the south, marking the transition from the shallow mixed waters of the southern North Sea to the deeper waters in the north. This is a large sea area with a lengthy coastline hosting a variety of important coastal and marine habitats and species that are protected under international, national and local designations.

The Orkney and Shetland islands host many important marine habitats including coastal lagoons, shallow inlets and bays, sea caves and reefs. The Moray Firth coast supports a range of habitat types including rocky and high cliffed habitats and also extensive sand and shingle beach systems. The Firth itself encompasses a number of estuarine habitats that form important overwintering or temporary feeding areas for migrant birds. The northeast coast of Scotland has small inlets and larger tidal basins created by several small to medium sized rivers that are important from a conservation perspective. Many rivers in the region receive designations for internationally important populations of diadromous fish such as Atlantic salmon and lamprey, including the Rivers South Esk, Tay and Spey SACs. This coastline also has many extensive sand dune systems, in association with extensive beaches. Cliff sections are less common but are locally important for geological and ornithological purposes. The combination of these features has created a high density of areas of conservational interest. The Firth of Forth and surrounding area has many important geological sites. The coastline from North Berwick to Berwick-upon-Tweed is home to St Abb's Head and Bass Rock, both prominent conservation areas. Bass Rock is one of several volcanic islands that are major conservational sites for breeding seabirds.

Stretches of the Northumberland coast support a very extensive range of intertidal mudflats and sandflats. Lindisfarne situated off the Northumberland coast is important for wintering birds due to its mudflats with extensive beds of eelgrass *Zostera* sp., an important source of food for several species. Hard cliffs of chalk, limestone and sandstone largely dominate the North Yorkshire coastline. Flamborough Head with its high chalk cliffs is an important site for breeding populations of seabirds. In offshore waters, extensive areas of pockmarks exist, including the two small areas of the Braemar Pockmarks and Scanner Pockmark - both of which are being considered as features of international importance.

Typical coastal features such as the east coast firths, the high rugged cliffs that stretch along much of the northeast coast of Scotland, Orkney and Shetland, and adjacent wetlands and

moorlands, are extremely important for seabird and coastal waterbirds. These habitats support large numbers of seabird breeding colonies and many areas for breeding, wintering and migratory waterbirds. The area also includes many important offshore areas which seabirds occupy for large proportions of the year, and depend upon for prey.

Regional Sea 1 has a moderate to high diversity and density of cetaceans, with a general trend of increasing diversity and abundance of cetaceans with increasing latitude. Coastal waters of the Moray Firth and east coast of Scotland support an important population of bottlenose dolphins, with the inner Moray Firth designated an SAC for this species. Other features of particular note include numerous important grey and common seal breeding colonies, many of which are designated SACs whose adjacent waters support high densities of foraging seals. Orkney and Shetland are of particular importance to seals, while Shetland also supports internationally important numbers of otter.

Sites and species

The nature conservation importance of this section of coast is acknowledged through the designation of conservation sites at international, national and local levels. The locations and spatial extents of the different designations are shown in the maps below (Figures A3j.1-4). The tables in Section A3j.9.1 provide detailed information about the features, vulnerability and management of SACs and SPAs in the Regional Sea 1 area.

Potential marine sites and initiatives

There are two candidate SACs in offshore waters of Regional Sea 1; both of which contain the Annex I habitat 'submarine structures made by leaking gases'. The Braemar Pockmarks cSAC and Scanner Pockmark cSAC both lie in the northern North Sea approximately 180km from the nearest land. The location of these sites is shown in Figure A3j.2. Section A3j.10 provides further information on these sites including the features of conservation interest. A small proportion of the Dogger Bank draft SAC, which primarily lies in Regional Sea 2 in the central/southern North Sea, lies in the southern section of Regional Sea 1 approximately 130km northeast of Whitby.

A total of thirteen SPAs for breeding seabirds along the coast of Regional Sea 1 qualify for marine extensions, the majority of which are to 2km offshore. Qualifying sites are identified in the SPA table in Section A3j.9.1. Regarding inshore SPAs for aggregations of non-breeding waterbirds, the JNCC are currently reporting to Scottish Natural Heritage about potential sites, five of which lie within or adjacent to Regional Sea 1: Scapa Flow, the Moray Firth, Aberdeen Bay, the Firth of Forth, and the Firth of Tay. There are other areas of search for inshore aggregations of non-breeding waterbirds and also terns along much of the east coast of England and Scotland.

There are nine coastal and marine SACs in Regional Sea 1 which have also been nominated as potential OSPAR MPAs, these are identified in the SAC table in Section A3j.9.1. Additionally, part of the Berwickshire and north Northumberland coast SAC is designated the St. Abbs and Eyemouth Voluntary Marine Reserve; the use of certain mobile fishing gear (trawls, dredges) is banned in this area.

Figure A3j.1 – Special Protection Areas

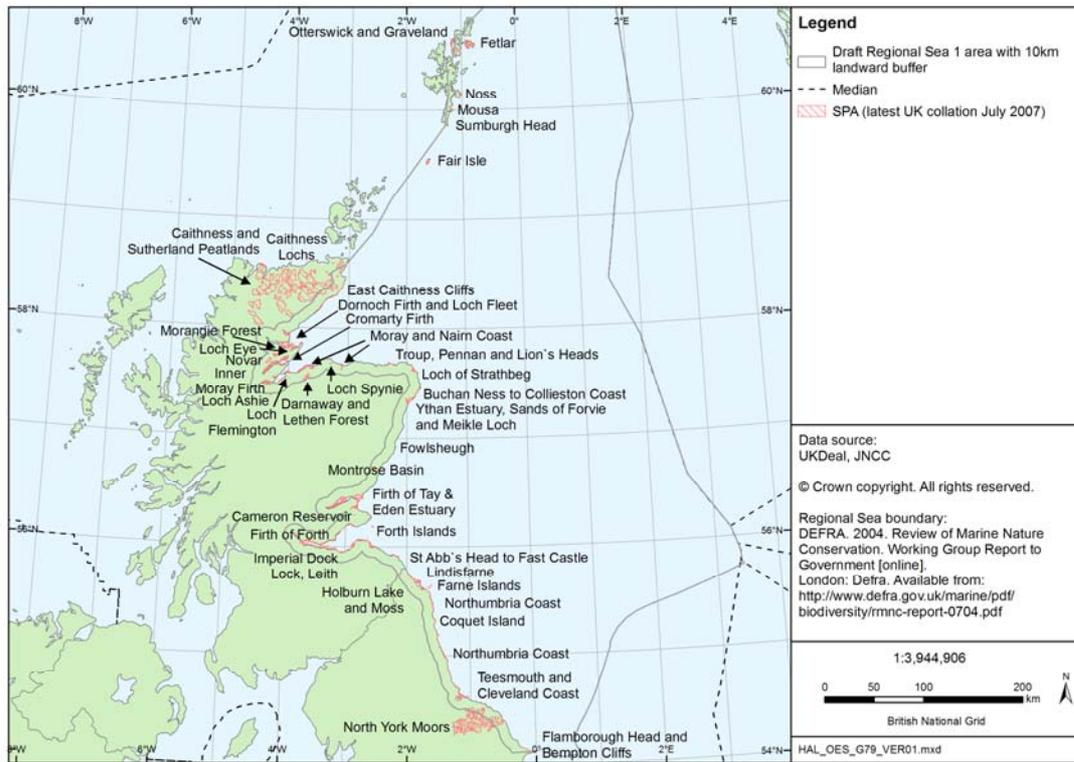


Figure A3j.2 – Special Areas of Conservation

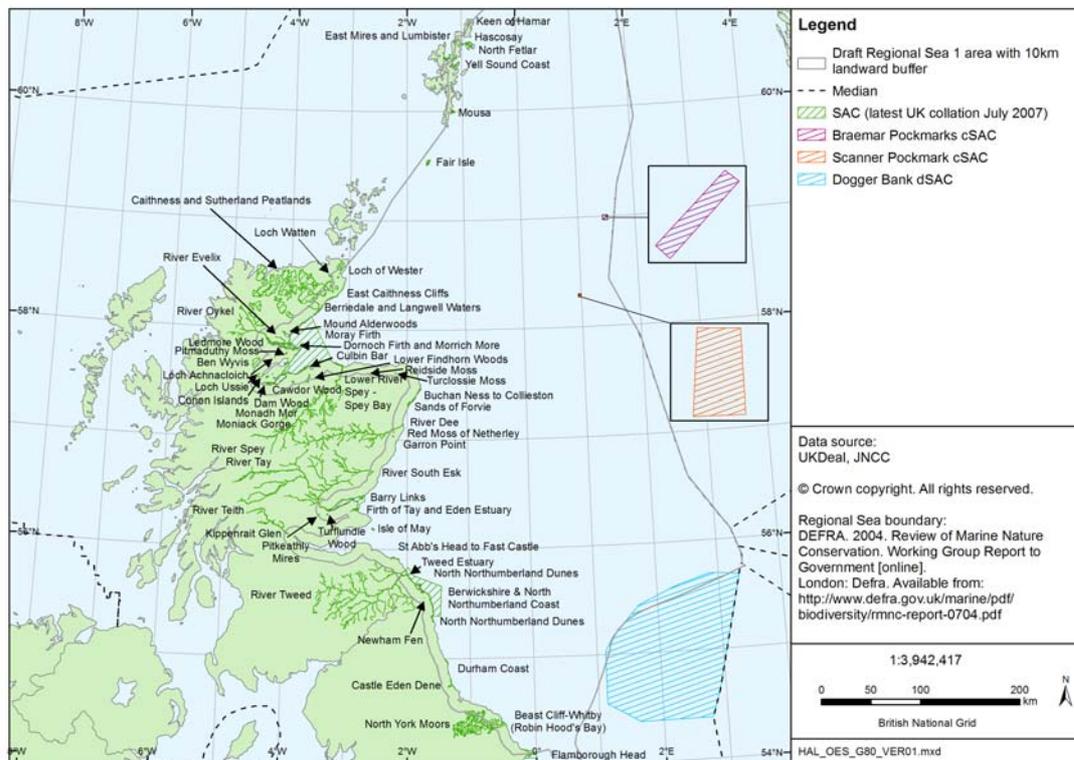


Figure A3j.3 – International, national and local sites

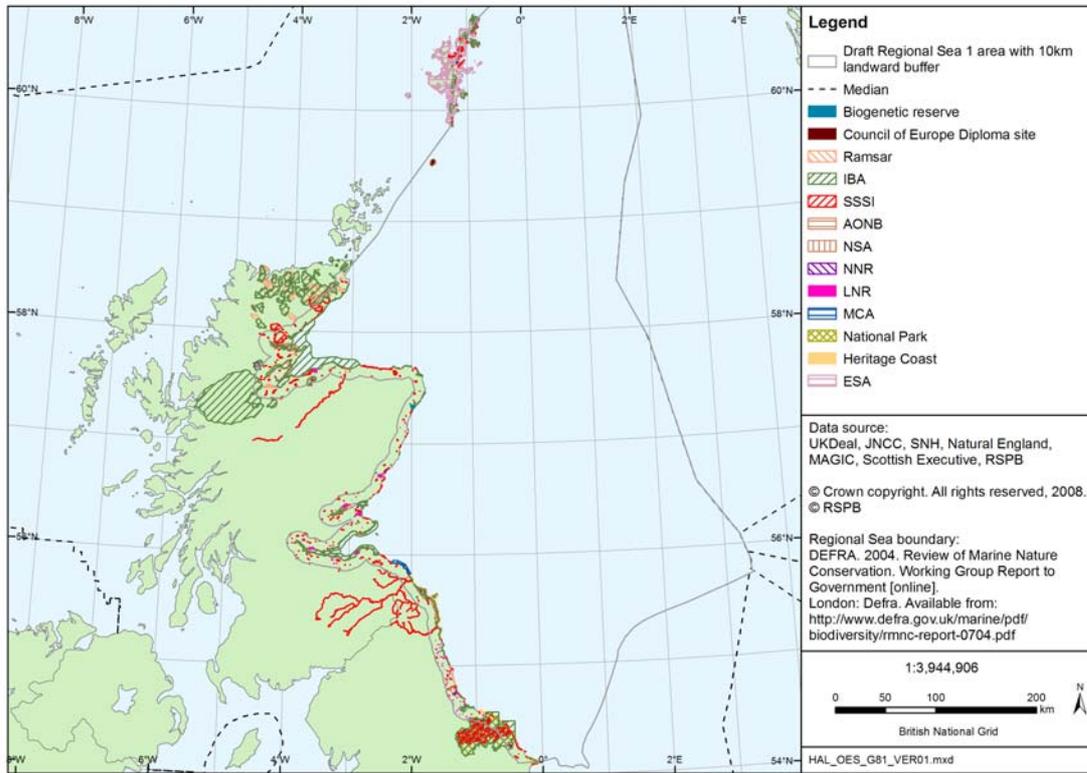
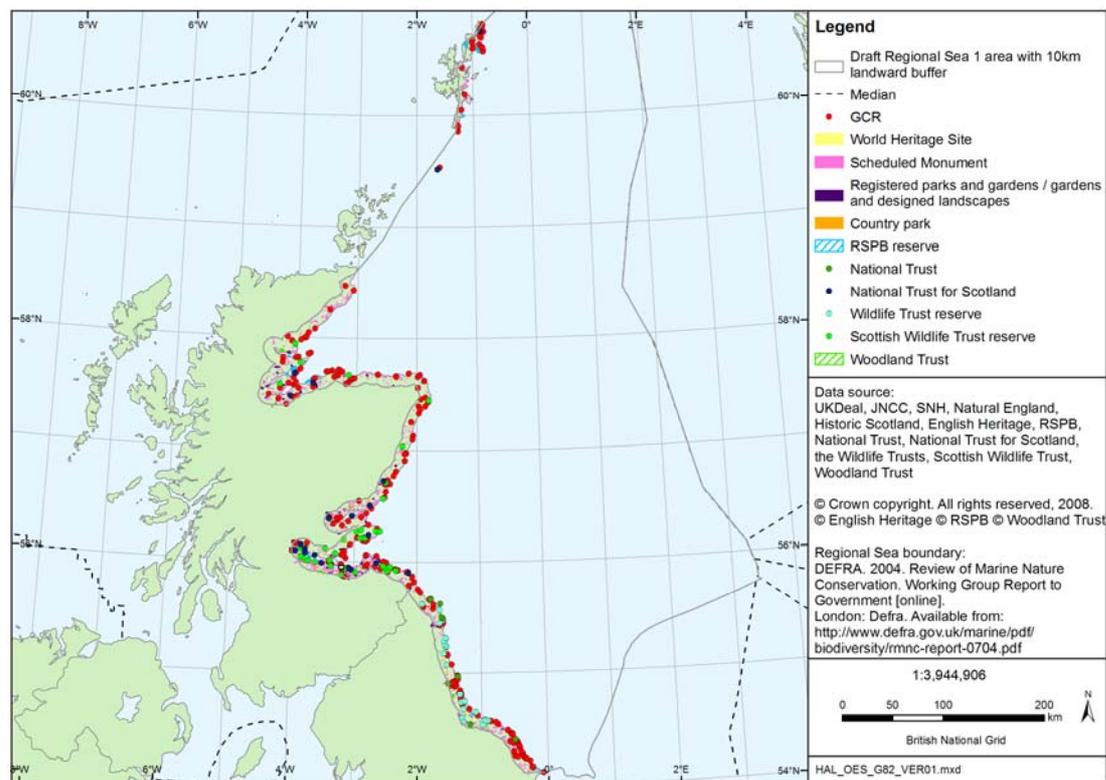


Figure A3j.4 – International, national and local sites



A3j.8.2 Regional Sea 2

Regional sea 2 covers the southern North Sea and adjacent UK coastline from Flamborough Head, Yorkshire, in the north to Dover, Kent, in the south. This area hosts a variety of important coastal and marine habitats and species which are protected under international, national and local designations.

The marine environment of the southern North Sea is physically characterised by shallow water depths and typically sandy seabed sediments. In offshore waters, large areas of submerged sandbanks exist, including the North Norfolk Sandbanks and Dogger Bank - both of which are being considered as features of international conservation importance.

On the coast, the chalk cliffs of Flamborough Head host an important colony of breeding seabirds, and are intersected with important sea cave features and surrounded by rocky reefs. Further south along the coast is the Humber Estuary, providing the largest single input of freshwater from Britain into the North Sea. Extensive and varied intertidal habitats are present, and provide internationally important wintering and breeding grounds for many waterbird populations. The coastline south of the Humber to the Wash is a dynamic environment dominated by sand dune systems and saltmarsh communities. The Wash presents an array of important marine and coastal habitats, including extensive sublittoral sandbanks and the second largest area of intertidal flats in the UK, which provide important habitat and refuge for a huge number of waterbirds and other animals, including one of the largest breeding colonies of common seals in the UK. To the east, along the adjacent north Norfolk coast, important coastal lagoon, salt marsh, mobile and stable dune habitats are present along with otters and important species of flora.

On the northeast coast of Norfolk, the Overstrand cliffs provide an important example of natural vegetated soft cliffs. Further south are the Broads, a large mosaic of varied wetland habitats adjacent to the coast, also supporting otter. The Suffolk coast contains many areas of marsh and reedbed habitat, along with estuaries, dunes, vegetated stony banks and coastal lagoons. Together, these support a range of floral and faunal communities from brackish through to freshwater. The ecological significance of much of the Essex coast lies in the large number of estuaries present in the area. These display a wide variety of habitats which include tidal creeks and islands, intertidal mud and sandflats, grazing marsh and saltmarsh. The chalk sea cliffs of Kent mark the most southern point of this regional sea area.

Sites and species

The nature conservation importance of this section of coast is acknowledged through the designation of conservation sites at international, national and local levels. The locations and spatial extents of the different designations are shown in the maps below (Figures A3j.5-8). The tables in Section A3j.9.2 provide detailed information about the features, vulnerability and management of SACs and SPAs in the Regional Sea 2 area.

Potential marine sites and initiatives

There is one possible SAC in offshore waters of Regional Sea 2; the North Norfolk Sandbanks and Saturn Reef, which extends from approximately 40-110km northeast of the Norfolk coast. The main feature of the site is a large area of the Annex I habitat subtidal sandbanks, and a small area where biogenic reef (*Sabellaria*) habitat has been observed. A large proportion of the Dogger Bank is currently classified as a draft SAC, also due to the presence of subtidal sandbanks. Located 90km from the nearest landfall at Flamborough Head, the site extends north and east to the UK-Netherlands median line. The location of

these sites is shown in Figure A3j.6. Section A3j.10 provides further information on these sites including details of their features of conservation interest.

Two areas of search for marine SACs in inshore waters lie within Regional Sea 2: the outer Wash sandbanks and Greater Thames estuary. Both of these areas are under investigation for subtidal sandbank features, while the outer Wash is also being considered for biogenic reef (*Sabellaria*) features (Natural England website).

One SPA for breeding seabirds along the coast of Regional Sea 2, Flamborough Head and Brompton Cliffs SPA, qualifies for a marine extension of 2km offshore. Regarding inshore SPAs for aggregations of non-breeding waterbirds, the JNCC are currently reporting to Natural England about potential sites, one of which lies within Regional Sea 2: the Greater Thames. There are other areas of search for inshore aggregations of non-breeding waterbirds and also terns along much of the east coast of England.

There are five coastal and marine SACs in Regional Sea 2 which have also been nominated as potential OSPAR MPAs, these are identified in the SAC table in Section A3j.9.2.

Figure A3j.5 – Special Protection Areas

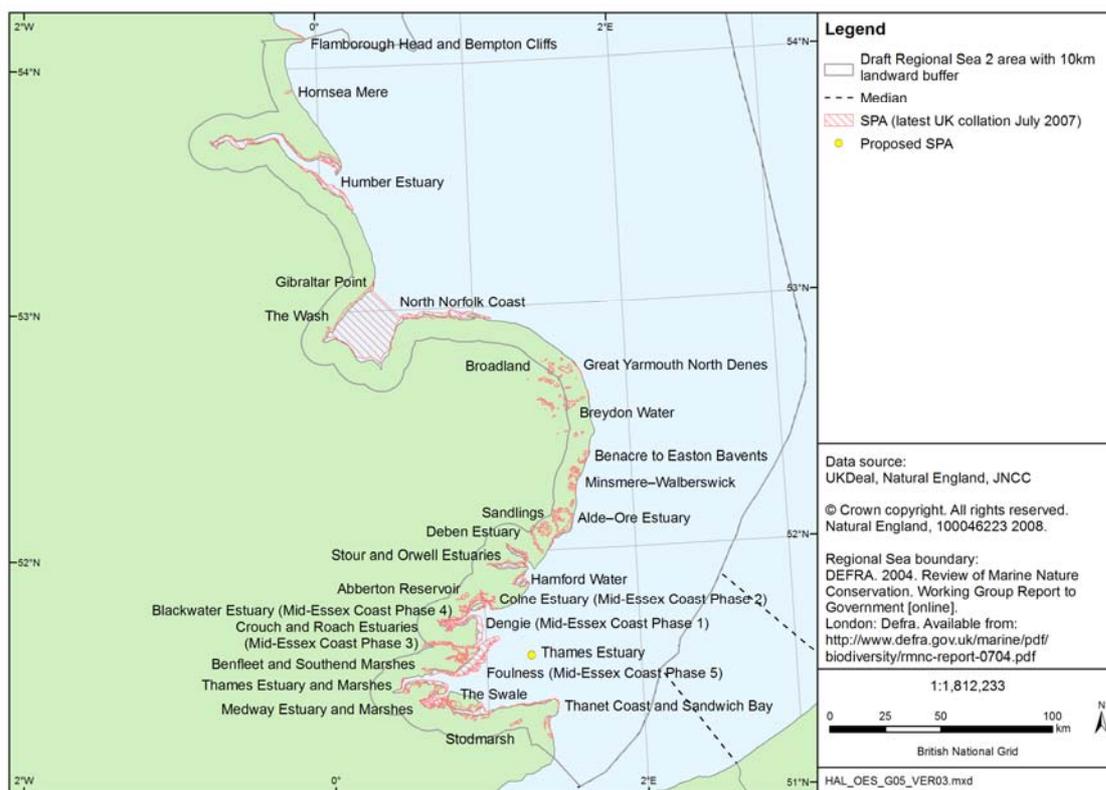


Figure A3j.6 – Special Areas of Conservation

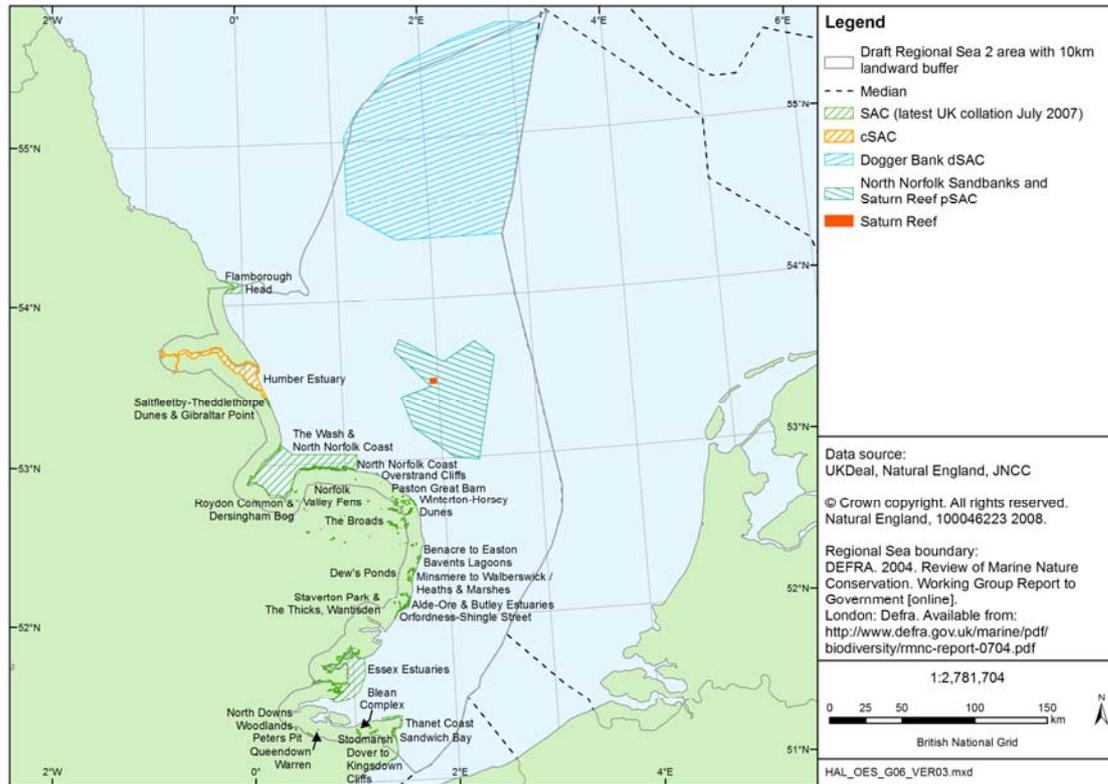


Figure A3j.7 – International, national and local sites

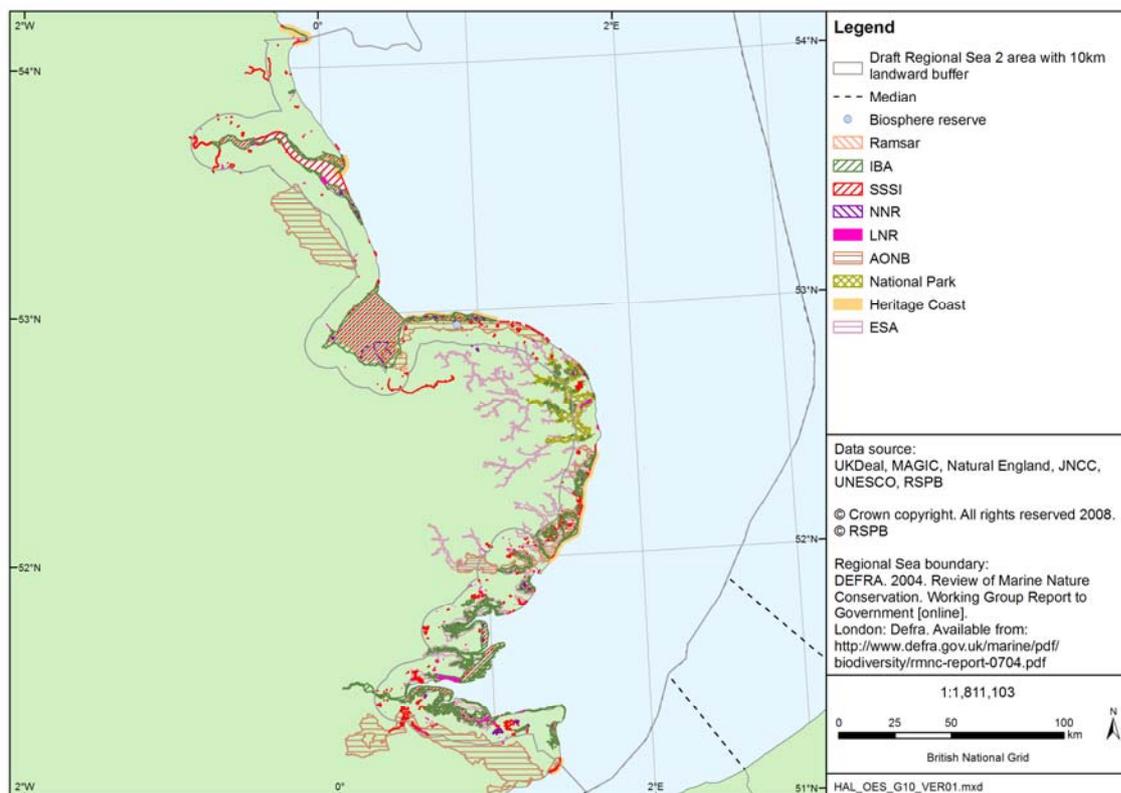
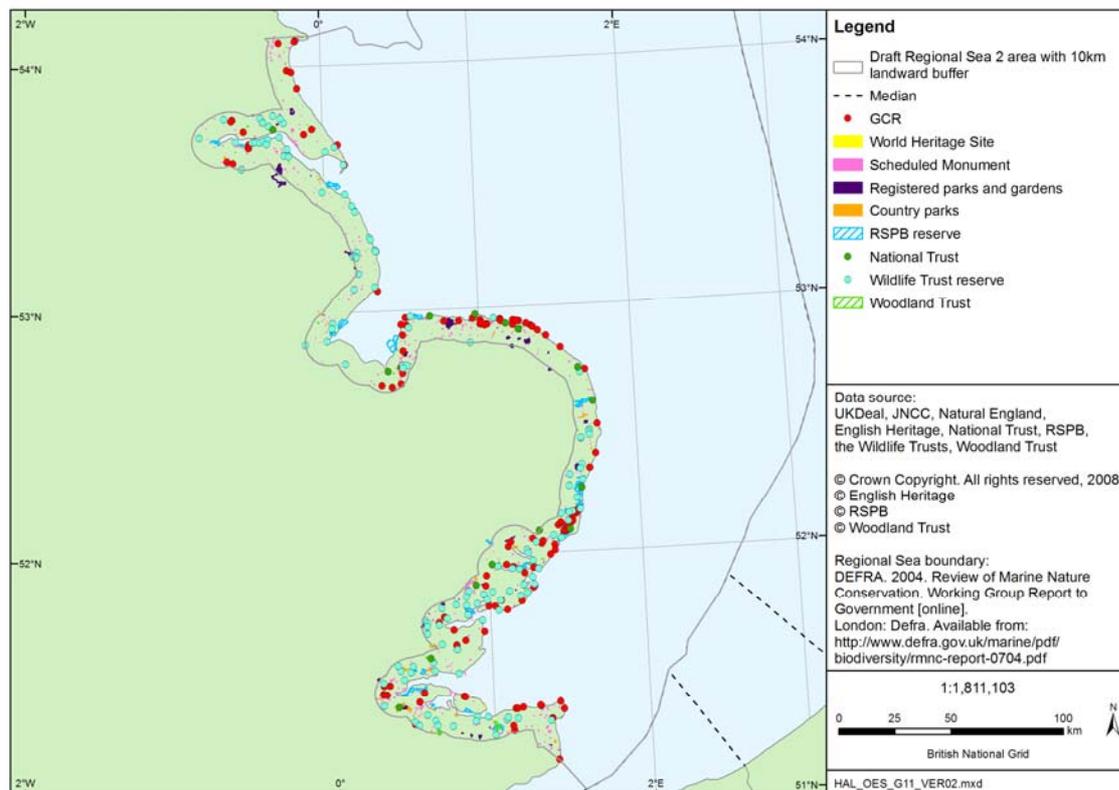


Figure A3j.8 – International, national and local sites



A3j.8.3 Regional Sea 3

Regional sea 3 covers the waters of the Eastern Channel and the associated UK coastline stretching westwards from Dover, Kent, in the east to Portland Bill, Weymouth, in the west. This area hosts a variety of important coastal and marine habitats and species which are protected under international, national and local designations.

The marine environment of this region is influenced mainly by a body of water that flows along the English Channel from the southwest; there is some influence from water coming from the North Sea, though to a far lesser degree. The seabed consists of a varied series of substrates, including sheltered and exposed chalk, limestone ridges, tide-swept pebbles and cobbles. The combination of varied substrates and the wide range in sea temperatures give rise to a rich and diverse marine fauna and flora. Along the Sussex coastline between Brighton and Eastbourne, extensive wave-cut chalk platforms occur, extending 500m from the shore. This is the only location in the British Isles where chalk appears as offshore cliffs as well as reefs.

The varied and geomorphologically dynamic coastline features a number of important habitats, including shingle structures, lagoons, estuaries and cliffs. Sea cliffs are very common in the area and are of major nature conservation significance for their flora, invertebrate fauna, fossils and geological interest. The Dover to Folkstone and Purbeck Heritage coasts can both be found along this stretch of coastline. The southeast coast of Kent has extensive fringing shingle beaches and Dungeness, possibly the largest shingle cusped foreland in Europe, contains over 42% by area of Britain's shingle.

Dungeness is a designated SPA due to the breeding populations of common tern, little tern and Mediterranean gull that gather there. Chichester Harbour, Langstone Harbour, Portsmouth Harbour and the Solent, Southampton Water, Poole Harbour and the Fleet are individually and collectively of international importance for their waterfowl populations. The most important seabird breeding colonies are of species nesting on saltmarsh or shingle, notably gulls and terns. There are internationally important colonies of two species: black-headed gull in the Beaulieu Estuary and little tern in Langstone Harbour. Poole Harbour, together with Portland and the harbours of the Solent, is important for three species of marine wintering waterfowl: great-crested grebe, cormorant and red-breasted merganser, the latter probably occurring in internationally important numbers.

In addition to supporting significant bird populations, the diversity of coastal habitats supports numerous other fauna and flora. The sparsely vegetated chalk cliff-tops along the Sussex coastline support one nationally rare Red Data Book (RDB) plant, hoary stock, as well as the nationally scarce wild cabbage. Many cliffs in the region have excellent invertebrate lists, with Fairlight, Beachy Head and the Seven Sisters Park each supporting large numbers of notable and rare RDB species. This coastline is protected by Areas of Outstanding Natural Beauty designations and hosts a number of Local Nature Reserves and Country Parks.

Sites and species

The nature conservation importance of this section of coast is acknowledged through the designation of conservation sites at international, national and local levels. The locations and spatial extents of the different designations are shown in the maps below (Figures A3j.9-12). The tables in Section A3j.9.3 provide detailed information about the features, vulnerability and management of SACs and SPAs in the Regional Sea 3 area.

Potential marine sites and initiatives

There are no potential SACs in offshore waters of Regional Sea 3 and no SPAs qualifying for marine extensions. One area of search for marine SACs in inshore waters lies partially within Regional Sea 3: Lyme Bay to Poole Bay. This area is under investigation for sandbank (Maerl), biogenic reef (*Modiolus*), rocky reef and biogenic reef (*Mytilus*) features (Natural England website).

There are areas of search for inshore aggregations of non-breeding waterbirds and also terns along much of the south coast of England. The western end of Regional Sea 3 also overlaps an area of search for Balearic shearwater.

There are two coastal and marine SACs in Regional Sea 3 which have also been nominated as potential OSPAR MPAs: the Solent Maritime and South Wight Maritime. Additionally, there are three voluntary marine reserves in the area, including the Purbeck Marine Wildlife Reserve, Durlston Marine Research Area and Seven Sisters Voluntary Marine Conservation Area.

Figure A3j.9 – Special Protection Areas

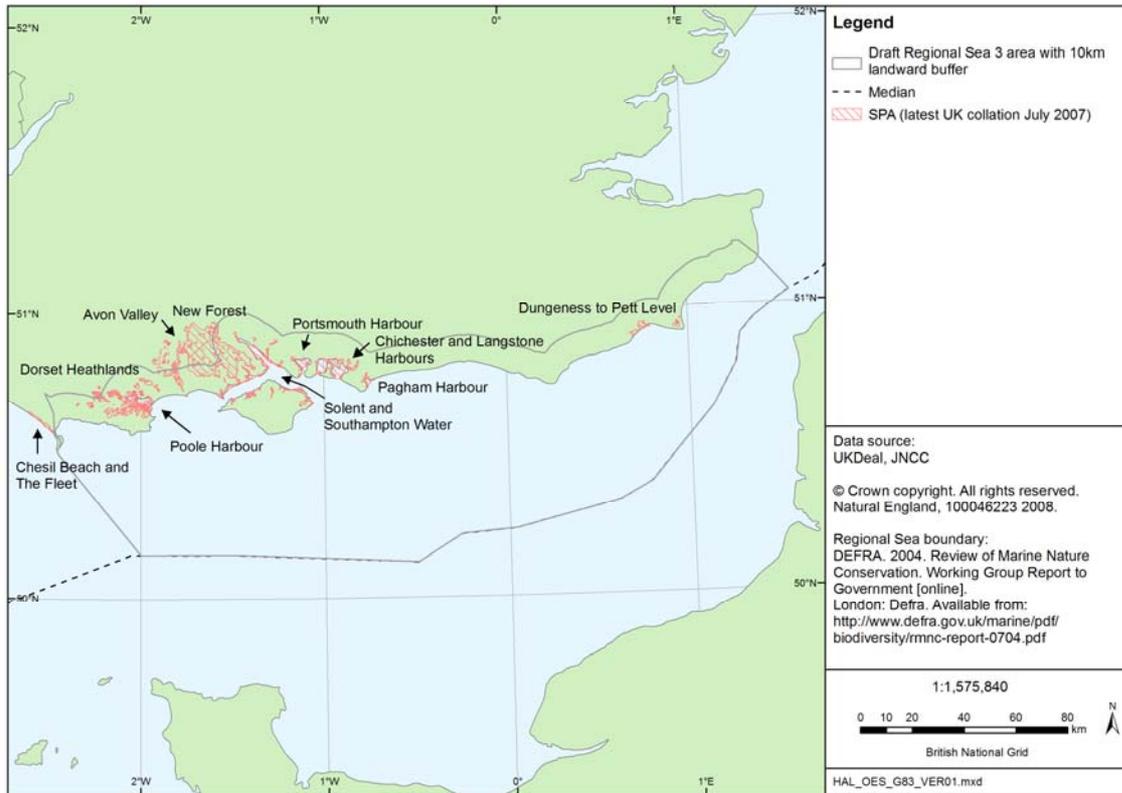


Figure A3j.10 – Special Areas of Conservation

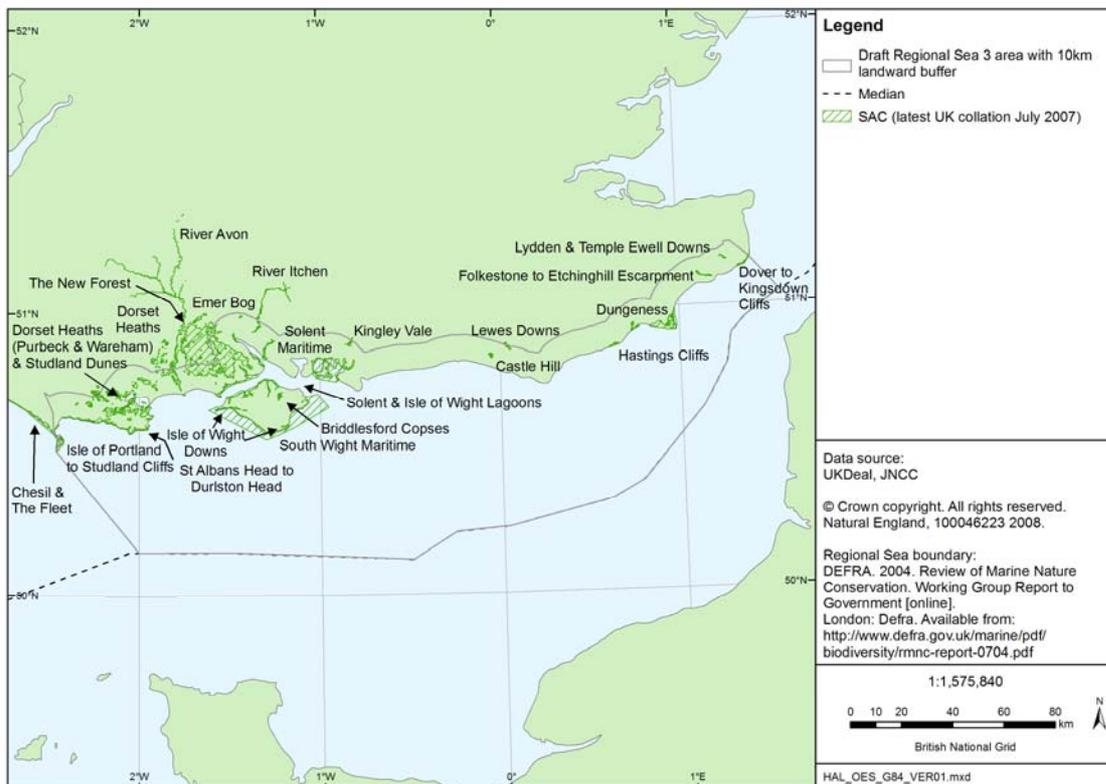


Figure A3j.11 – International, national and local sites

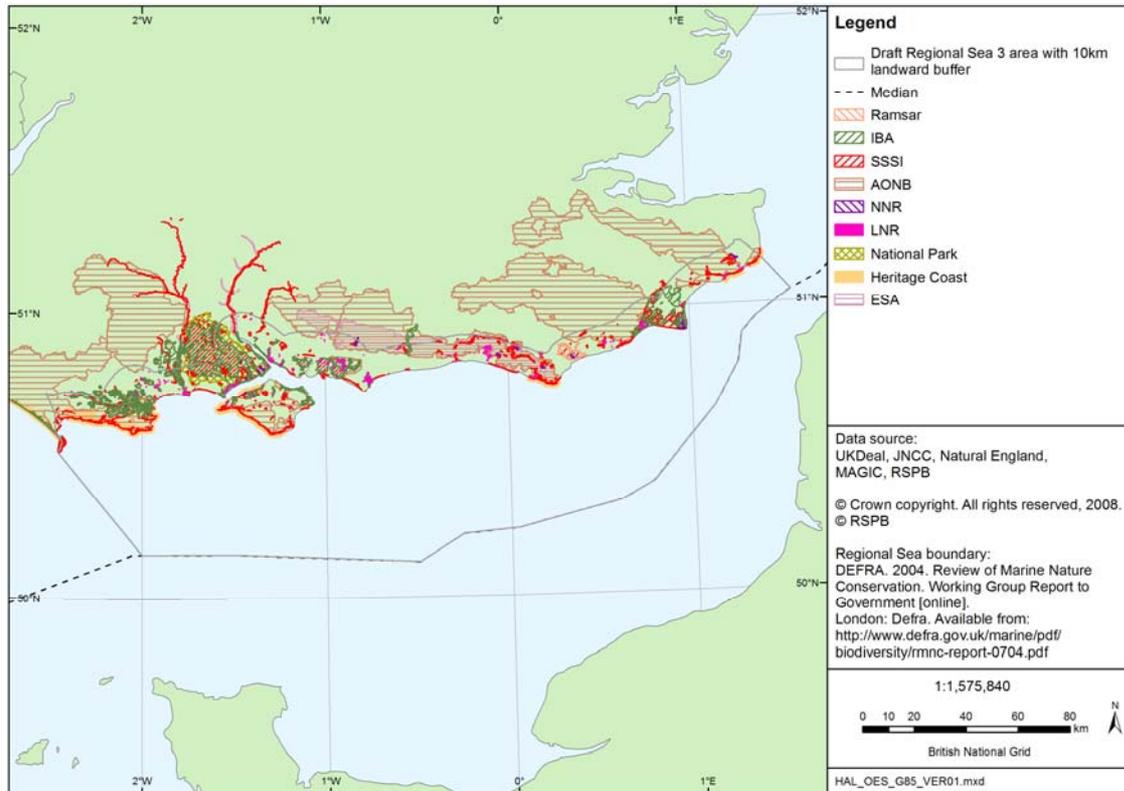
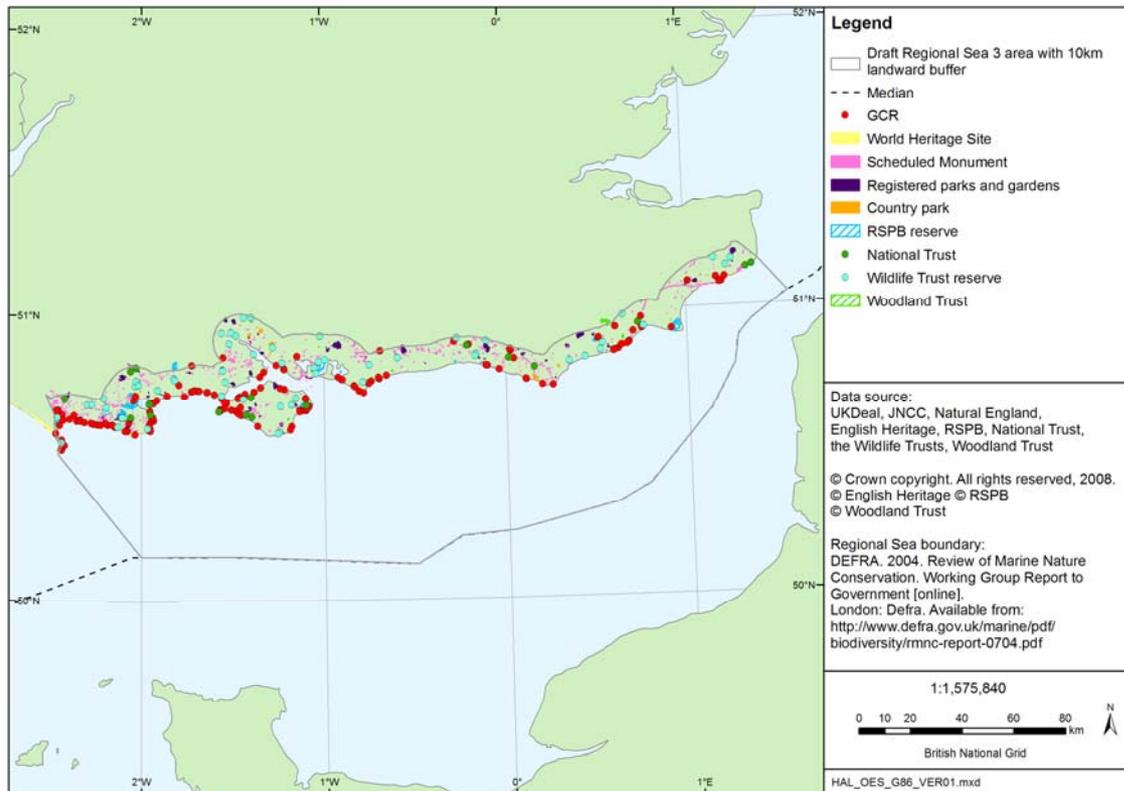


Figure A3j.12 – International, national and local sites



A3j.8.4 Regional Sea 4

Regional Sea 4 extends south and west from the Pembrokeshire coast to the edge of the UK continental shelf and east to the Isle of Portland on England's south coast, and encompasses the water masses of the Celtic Sea, South Western Approaches and western English Channel and associated coasts thereof. The marine area has shallow water depths not exceeding 180m until the shelf break and the seabed is generally featureless with the exception of some igneous outcrops, one of which, Haig Fras, represents the only candidate offshore SAC in the Regional Sea.

The area is host to numerous SACs with marine components qualifying as reefs (e.g. Isles of Scilly, Plymouth Sound and Estuaries, Lundy) or sandbanks, with notable maerl beds located in the Fal and Helford estuaries SAC. At the coast, Carmarthen Bay and the Burry Inlet have an extremely varied assemblage of features and have been relatively undisturbed from anthropogenic activities. Sitting at the mouth of the Taf, Twyi and Gwendraeth estuaries, the area includes major dunes (including shifting 'white dunes' and priority 'grey dunes'), sand spits, barrier beaches, hard- and soft-rock cliffs, rias, raised beaches, intertidal sandflats and saltmarshes and has both SAC and SPA designations. Notable fauna include the otter (e.g. Carmarthen Bay and Estuaries), numerous lamprey species, the oystercatcher and pintail.

Regional Sea 4 includes a number of estuaries supporting internationally important populations of waterfowl (e.g. the Severn and Exe), in addition to the significant seabird colonies located on Skokholm and Skomer, Middlehorn, and the Isles of Scilly which host species including the storm petrel, lesser black-backed gull, puffin and Manx shearwater. Along the coast of the western Channel there are few locations of grassland and saltmarsh, with the result, the diversity and numbers of breeding waterbirds are relatively low though there are still a few locations supporting internationally important numbers. The macrotidal Severn Estuary supports over 90,000 overwintering waterfowl which include the shelduck, redshank, lapwing, teal, mallard, dunlin and Bewick's swan. On the southern English coast the smaller Exe Estuary hosts over 20,000 overwintering birds including nearly a third of the UK wintering avocet population.

In addition to supporting significant bird populations, coastal habitats support numerous other fauna and flora. Many of the saltmarsh communities support *Zostera* eelgrass, considered nationally scarce, and the extensive and geologically diverse cliffed coast of the southwest is recognised by designations including Areas of Outstanding Natural Beauty and Heritage Coasts. Notable shingle and dune structures, for instance Chesil Beach and Dawlish Warren, are also located on the southern English coast.

Parts of Regional Sea 4 have designations reflecting culturally significant landscape and built environment features. Five Heritage Coasts and several hundred Scheduled Ancient Monuments are located within 10km of the coast and an area encompassing Cornwall and West Devon is recognized as a cultural World Heritage Site on account of its unique and well preserved 18th and 19th century mining heritage.

Several cetacean species occur frequently in Regional Sea 4, with large numbers of short-beaked common dolphin seasonally present. Grey seals are present in the area, but in low densities relative to the rest of UK shelf waters, recognised as a qualifying feature in the Lundy and Isles of Scilly SACs and as a primary feature in the Pembrokeshire Marine SAC.

Sites and species

The nature conservation importance of this section of coast is acknowledged through the designation of conservation sites at international, national and local levels. The locations and spatial extents of the different designations are shown in the maps below (Figures A3j.13-16). The tables in Section A3j.9.4 provide detailed information about the features, vulnerability and management of SACs and SPAs in the Regional Sea 4 area.

Potential marine sites and initiatives

There is one candidate SAC in offshore waters of Regional Sea 4; Haig Fras, which lies approximately 130km west of Cornwall. This site contains the Annex I habitat reefs. The location of this site is shown in Figure A3j.17. Section A3j.10 provides further information, including details of the features of conservation interest.

Four areas of search for marine SACs in inshore waters lie within Regional Sea 4: Land's End and Cape Bank, Lizard Point, Salcombe to Yealm and Eddystone (all for rocky reef features), and Lyme Bay to Poole Bay (for sandbanks (*Maerl*), biogenic reef (*Modiolus*), biogenic reef (*Mytilus*) and rocky reef) (Natural England website).

There are no SPAs for breeding seabirds along the coast of Regional Sea 4 qualifying for marine extensions. There are areas of search for inshore aggregations of non-breeding waterbirds at several sites around the coast and also an area of search for Balearic shearwater off the south coast of England close to and overlapping the boundary with Regional Sea 3.

There are seven coastal and marine SACs in Regional Sea 4 which have also been nominated as potential OSPAR MPAs, these are identified in the SAC table in Section A3j.9.4. Off the coast of Devon lies Lundy Island statutory Marine Nature Reserve, part of which is a no-take zone. Additionally, there are six voluntary marine reserves in the area, including North Devon, Wembury, Helford, Charmouth and Looe Voluntary Marine Conservation Areas and St Georges Island Marine Nature Reserve (part of Looe VMCA).

Figure A3j.13 – Special Protection Areas

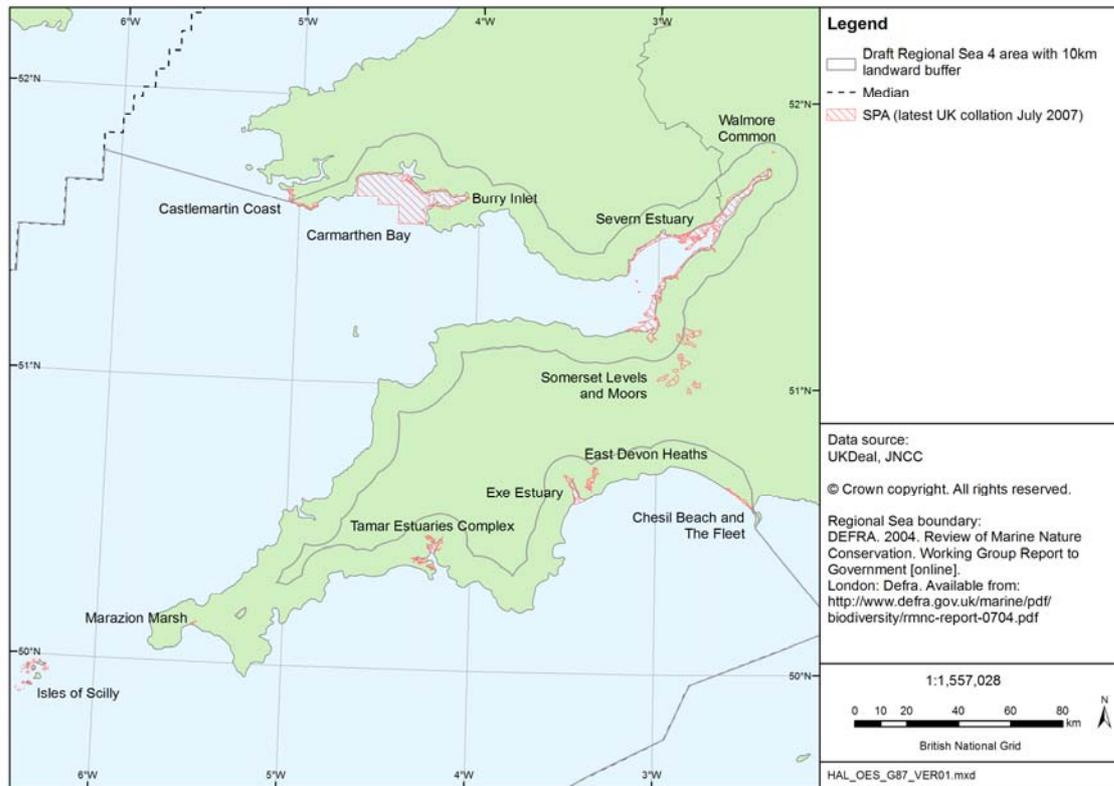


Figure A3j.14 – Special Areas of Conservation

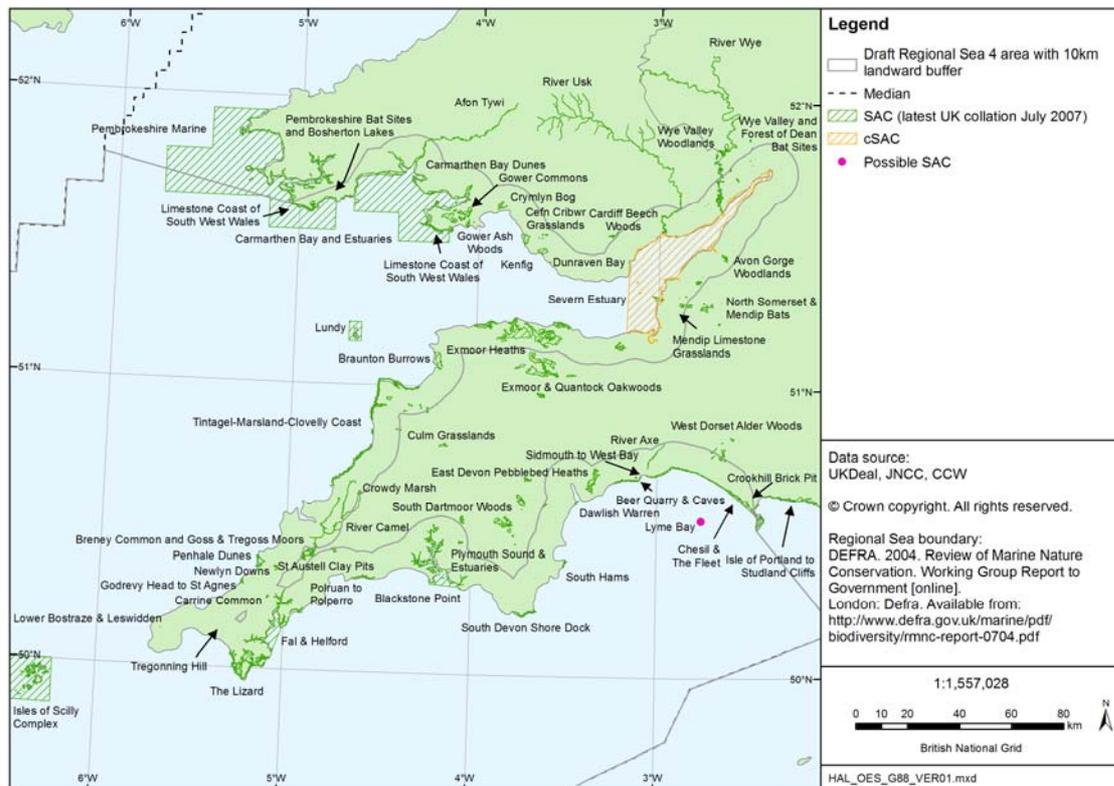


Figure A3j.15 – International, national and local sites

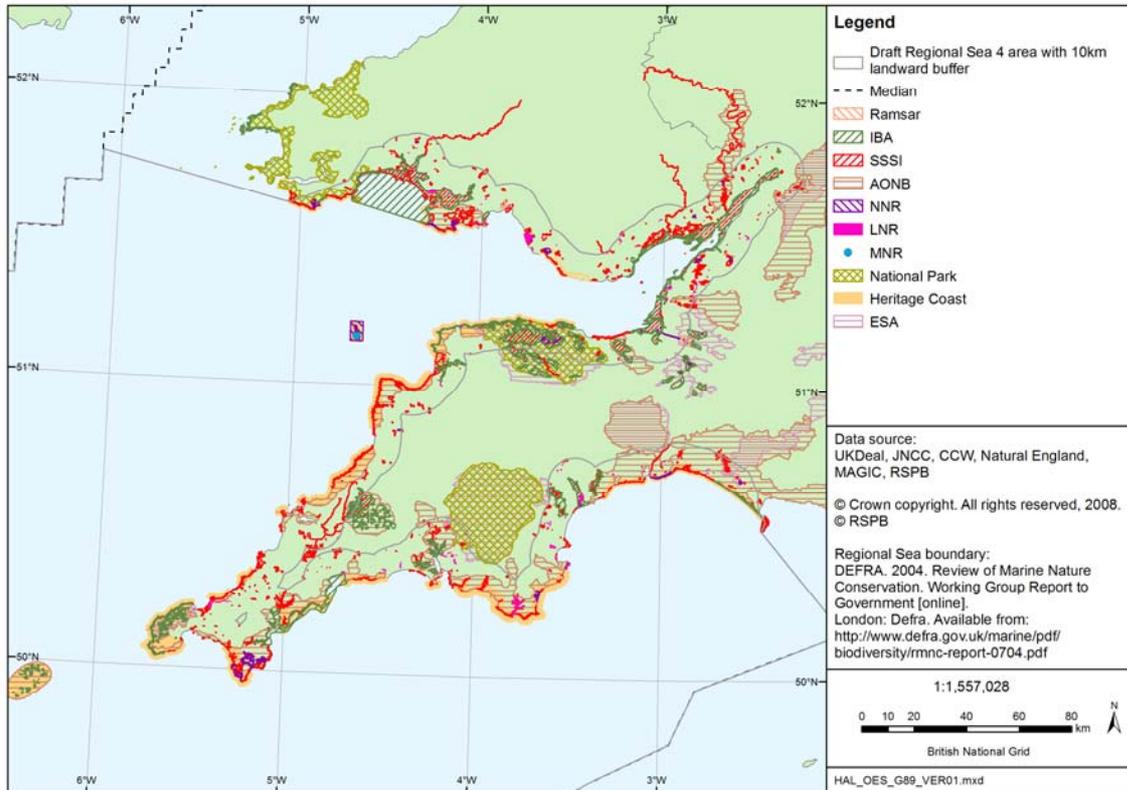


Figure A3j.16 – International, national and local sites

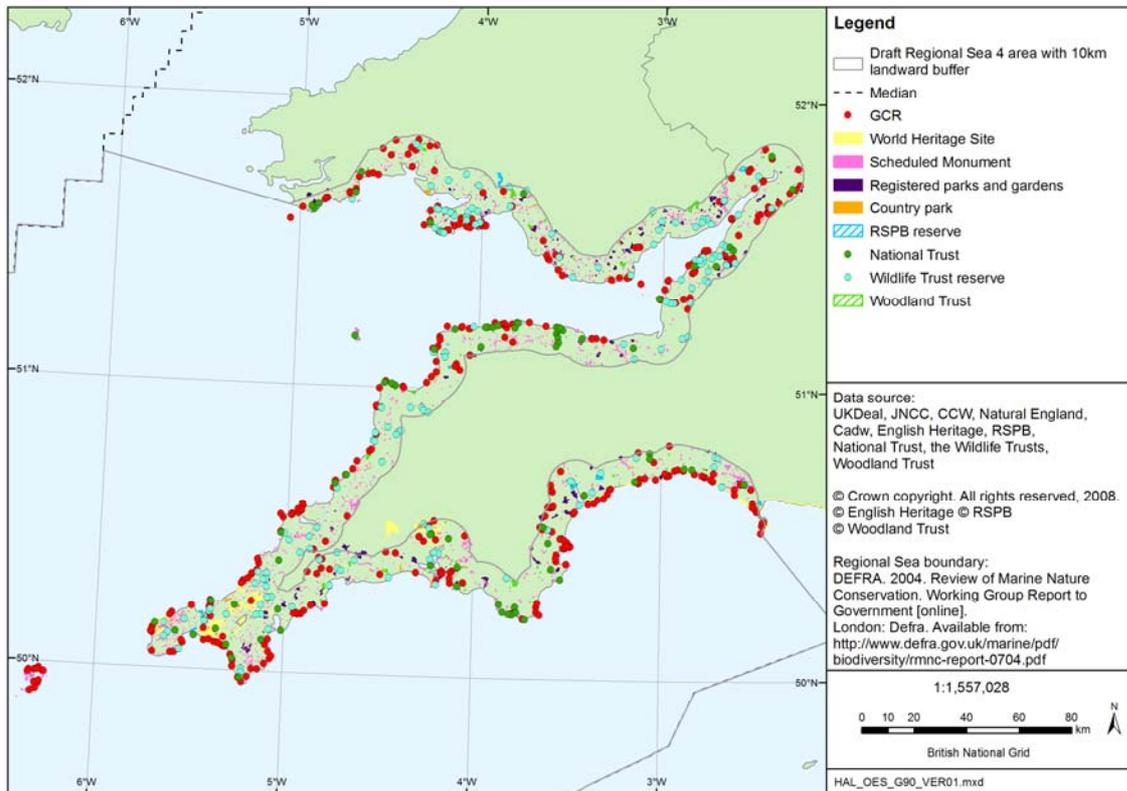
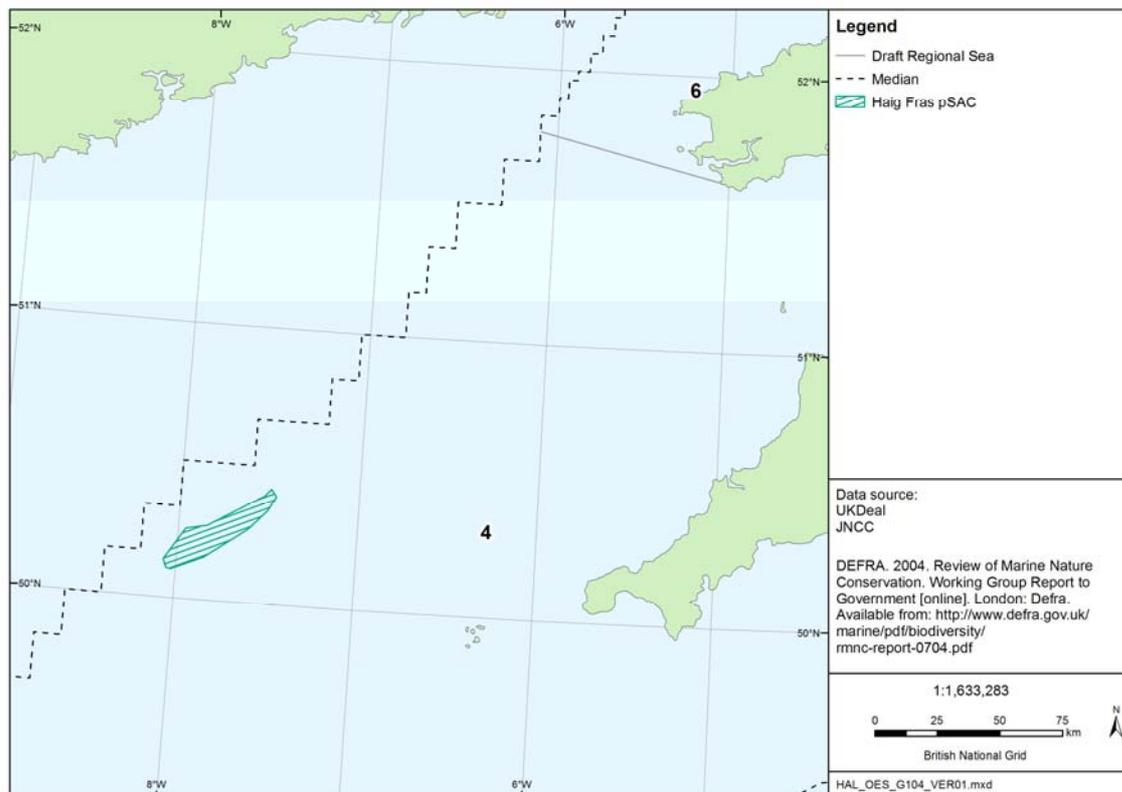


Figure A3j.17 – Haig Fras pSAC



A3j.8.5 Regional Sea 5

Regional Sea 5 has no contiguous coastline and to date no offshore conservation sites proposed.

A3j.8.6 Regional Sea 6

The Irish Sea is bounded to the south approximately by the Celtic Sea front, and extends north to a line from the Mull of Kintyre in Scotland, to Fair Head in Northern Ireland, and includes the North Channel. Hydrographical features of the region are heavily influenced by coastal waters and influxes from the Celtic Sea and the continental shelf current. The coastline of the region is extensive, with a variety of important habitats and species protected under international, national and local designations.

Coastal cliffs are characteristic of the Pembrokeshire Coast National Park, Llyn Peninsula, Anglesey, St. Bees Head, the Isle of Man and Mull of Galloway. These cliffs vary in composition from consolidated granite and softer limestones and sandstones to unconsolidated, predominantly Quaternary deposits. These cliffs are recognised as part of designations including Heritage Coasts, SSSIs and NNRs. Associated designations include those for cliff top vegetation and large cliff-nesting seabird colonies.

Major estuaries are a particular feature of the coasts of North Wales and Cumbria. The Dee, Mersey, Duddon, Morecambe Bay, Ribble, and Alt and Dyfi Estuaries are all designated SPAs and Ramsar sites, and in some cases support overwintering waterfowl populations of international significance. The saltmarshes located in these estuaries areas support a

diverse array of fauna and flora, recognised not only in avian specific designations, but also in NNRs and SSSIs (e.g. North Walney, Upper Solway Flats and Marshes, Pembrey Coast). The pioneer grass species, *Spartina anglica*, has become ubiquitous in salt marshes in the region since its introduction in the 1930s. Morecambe Bay is one of the largest estuarine areas in the UK and supports both international seabird and waterfowl populations exceeding 20,000 individuals. Over winter, the waterfowl population increases to over 210,000 individuals.

The coast of Northern Ireland is extremely diverse incorporating high cliffs, extensive sand dunes, mudflats and rocky shores. Of particular note are the sea loughs (Larne, Strangford, Belfast and Carlingford) which are characterised by fine sand and muddy sediments, and all of which have Ramsar designations. In addition, Northern Ireland supports numerous artificial coastal lagoons which are considered nationally rare and are a 'priority habitat type' under Annex I of the Habitats Directive.

Numerous species of seabird breed in the Irish Sea area, with the Manx shearwater a particular feature of the region. In addition, five species of cetacean are known to occur regularly in this area. The population of bottlenose dolphins occurring off the west coast of Wales is a primary feature of the Cardigan Bay SAC and a qualifying feature of the neighbouring Llyn Peninsula and the Sarnau SAC. Harbour porpoise and grey seals are also abundant in the region, with common seals numerous in the north of the region.

Regional Sea 6 area is also recognised for its culturally significant resources including the Liverpool and Hadrian's Wall World Heritage Sites, 12 Heritage Coasts and nearly 1300 scheduled ancient monuments within 10km of the coast.

Sites and species

The nature conservation importance of this section of coast is acknowledged through the designation of conservation sites at international, national and local levels. The locations and spatial extents of the different designations are shown in the maps below (Figures A3j.18-21). The tables in Section A3j.9.5 provide detailed information about the features, vulnerability and management of SACs and SPAs in the Regional Sea 6 area.

Potential marine sites and initiatives

There are currently no SACs in offshore waters of Regional Sea 6. One area of search for marine SACs in inshore waters lies within Regional Sea 6: Outer Morecambe Bay, Shell Flat and Lune Deep (for subtidal sandbank and boulder reef features) (Natural England website).

There are four SPAs for breeding seabirds along the coast of Regional Sea 6 qualifying for marine extensions, two for extensions of 4km and two for 2km. Qualifying sites are identified in the SPA table in Section A3j.9.5. Regarding inshore SPAs for aggregations of non-breeding waterbirds, the JNCC are currently reporting to the countryside agencies about potential sites, one of which lies within Regional Sea 6: Liverpool Bay. Additionally, there are areas of search for inshore aggregations of non-breeding waterbirds and also terns at several sites around the coast.

There are thirteen coastal and marine SACs in Regional Sea 6 which have also been nominated as potential OSPAR MPAs, these are identified in the SAC table in Section A3j.9.5. Statutory Marine Nature Reserves are present at Skomer Island and Strangford Lough.

Figure A3j.18 – Special Protection Areas

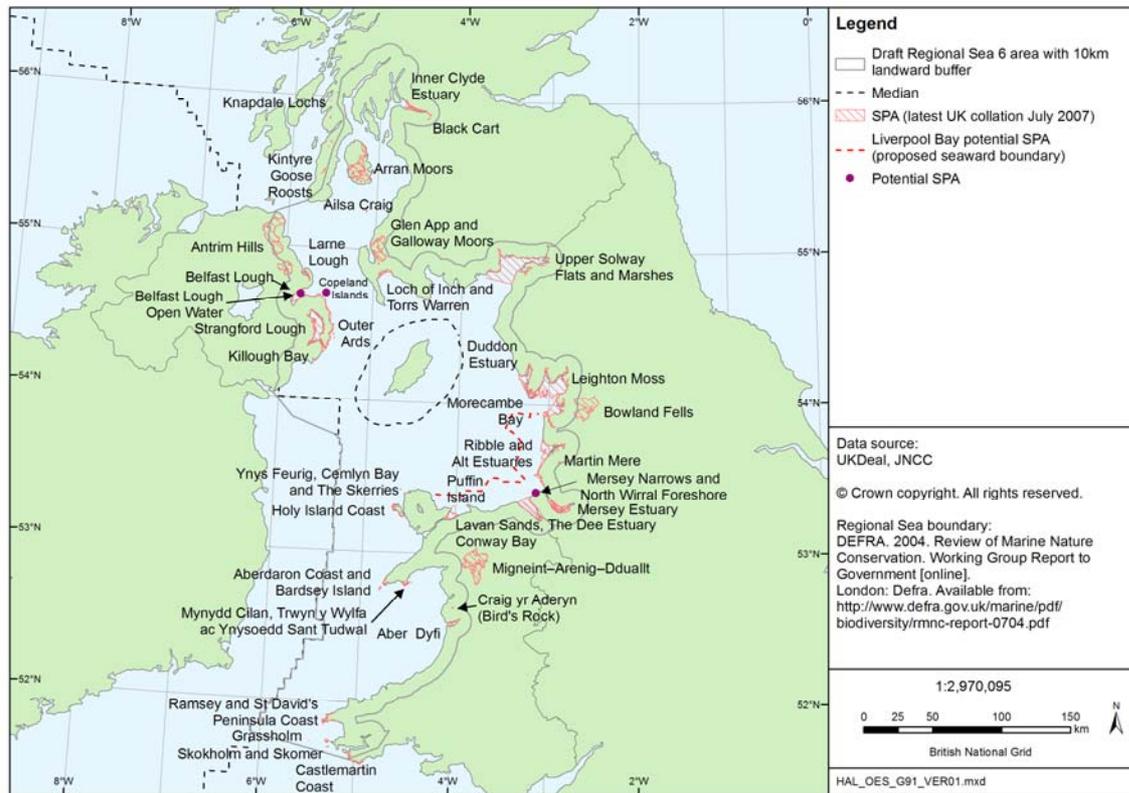


Figure A3j.19 – Special Areas of Conservation

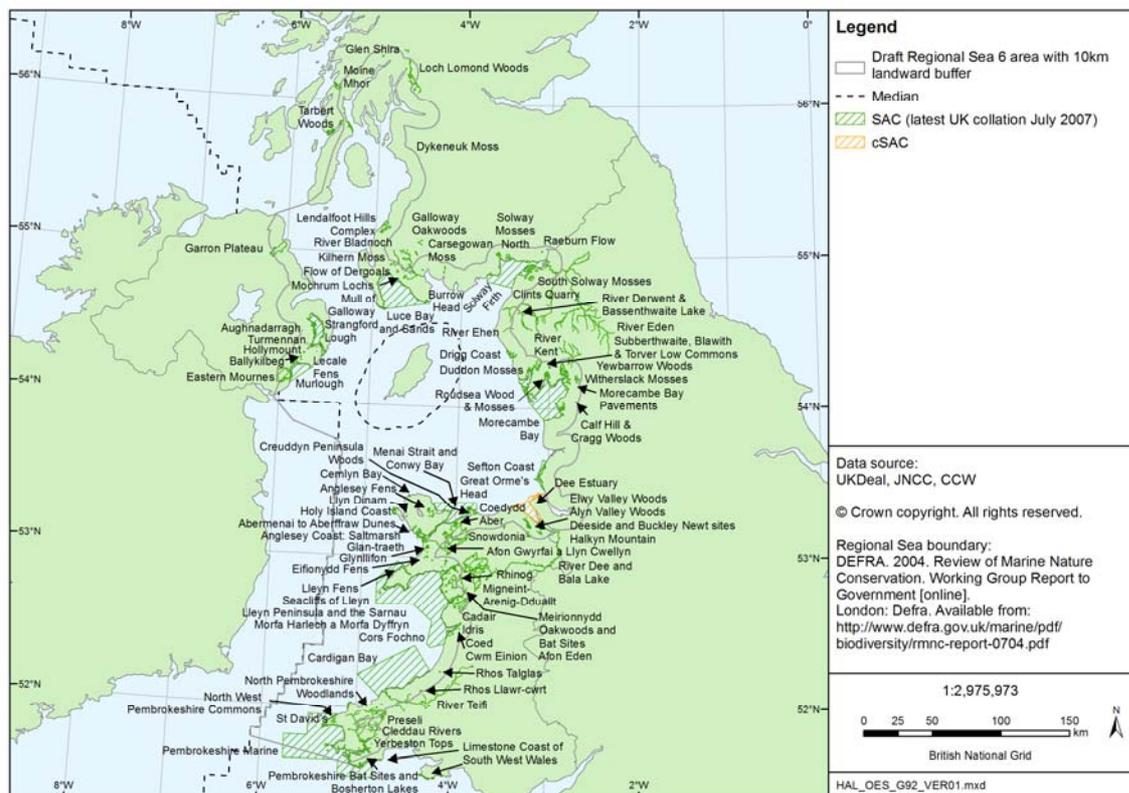


Figure A3j.20 – International, national and local sites

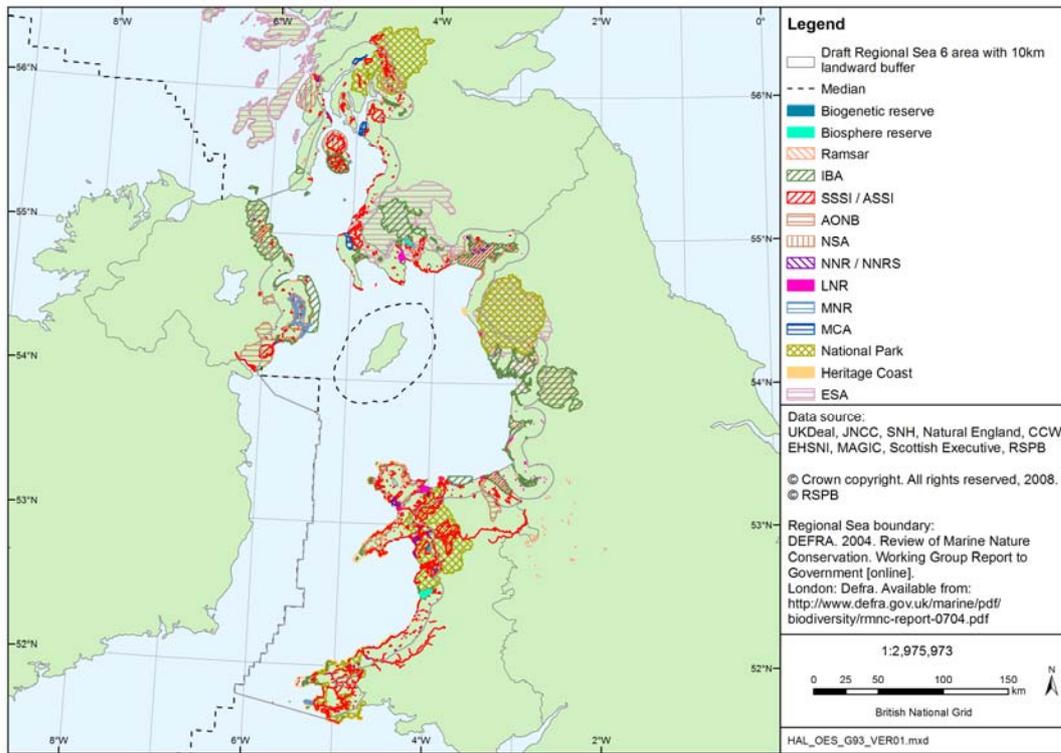
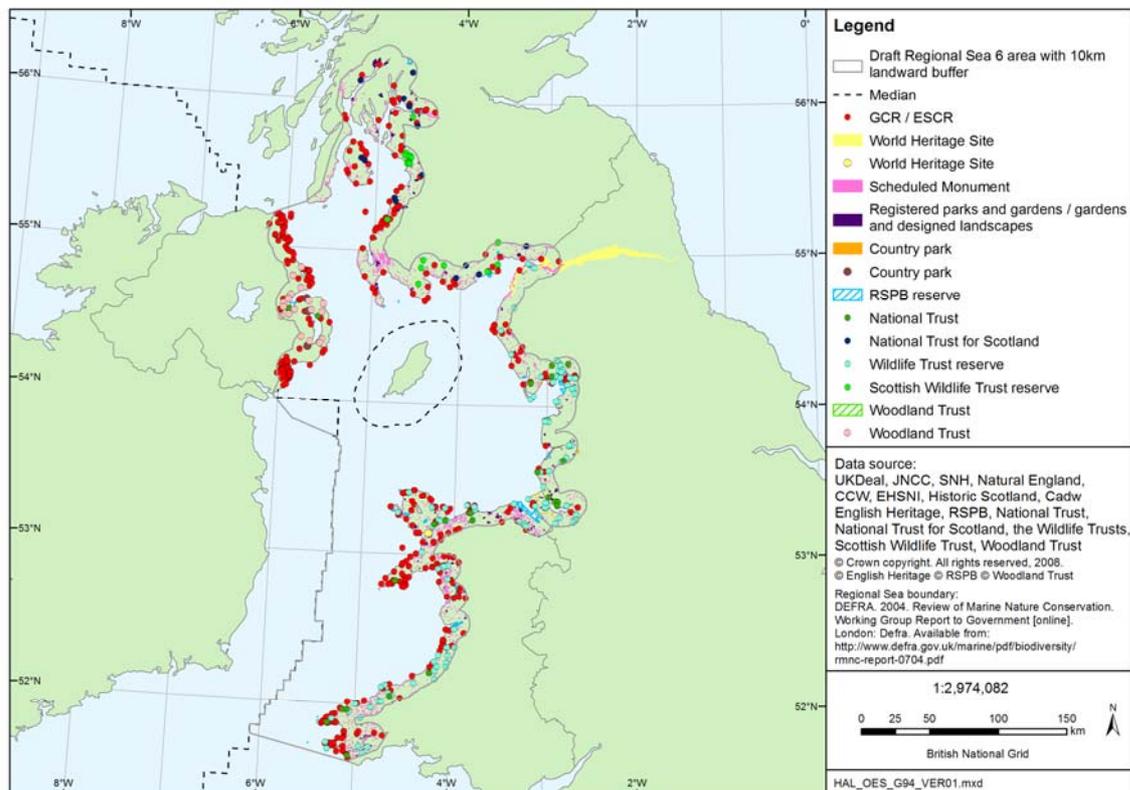


Figure A3j.21 – International, national and local sites



A3j.8.7 Regional Sea 7

The Minches and west Scotland region is bounded to the south by a line from the Mull of Kintyre to Fair Head, to the west by the Malin front, and to the north by a line from the Butt of Lewis to Cape Wrath. The region encompasses waters which are largely sheltered from Atlantic swells by Northern Ireland and the Outer Hebrides and consequently heavily influenced by coastal processes. Within the numerous islands, lochs and inlets of the region is a variety of important coastal and marine habitats and species which are protected under international, national and local designations.

A high proportion of the coastline is made up of steep rocky shores and sea cliffs. The flat cultivated machair plains of North and South Uist are primary Annex 1 habitats and are designated SAC sites. Sea lochs are a key feature of the region, along with extensive areas of blanket bog, peatland and forest, as well as large shallow inlets, bays, lagoons and quasi-lagoonal areas. The sound of Arisaig is a designated SAC due to the presence of sandbanks which are slightly covered by seawater at all times.

The sea cliffs associated with Western Scotland are of national and international importance for breeding seabirds. Wetland habitats support a number of important waterbird species including breeding populations of black-throated divers and wintering barnacle and Greenland white-fronted geese. The Cuillin on the Isle of Skye is a site of European importance for its successfully breeding golden eagle population. The Isle of Rum is a designated SPA for the presence of golden eagle, migratory Manx shearwater and important assemblages of breeding seabirds.

The west coast of Scotland is littered with large and small islands, relatively free from predators and disturbance making them ideal for nesting seabirds, while sea lochs and sheltered sounds are suitable for breeding, wintering and migrating waterbirds. The region supports a high diversity of marine and coastal mammals, including the otter, which is present in internationally important numbers at several sites in the area. Harbour porpoise and white-beaked dolphins are widespread and numerous, with several other species frequently encountered in summer. Both grey and harbour seals are abundant throughout the area; the waters around the Inner Hebrides and western Scotland are some of the most important in the UK, with a large proportion of the UK population breeding on the adjacent coast.

The quality of the landscape in the region is reflected in by large proportion of the coastline receiving National Scenic Area status. Such sites include The Cuillin, Ben Nevis and Glen Coe, Jura and part of the Outer Hebrides. In addition, the Giant's Causeway and Causeway Coast on the northern coast of Northern Ireland is a World Heritage Site.

Sites and species

The nature conservation importance of this section of coast is acknowledged through the designation of conservation sites at international, national and local levels. The locations and spatial extents of the different designations are shown in the maps below (Figures A3j.22-25). The tables in Section A3j.9.6 provide detailed information about the features, vulnerability and management of SACs and SPAs in the Regional Sea 7 area.

Potential marine sites and initiatives

A very small proportion of the Stanton Banks candidate SAC overlaps the offshore waters of Regional Sea 7, this is described in further detail under Regional Sea 8.

There are eight SPAs for breeding seabirds along the coast of Regional Sea 7 qualifying for marine extensions. These are generally recommended extensions of 1 or 2km, with the exception of Rum at 4km. Qualifying sites are identified in the SPA table in Section A3j.9.6. There are areas of search for inshore aggregations of non-breeding waterbirds and also terns at several sites around the coast.

There are fourteen coastal and marine SACs in Regional Sea 7 which have also been nominated as potential OSPAR MPAs, these are identified in the SAC table in Section A3j.9.6. Consultations recently ended on a proposed no-take zone and fisheries management area at Lamlash Bay, Isle of Arran.

Figure A3j.22 – Special Protection Areas

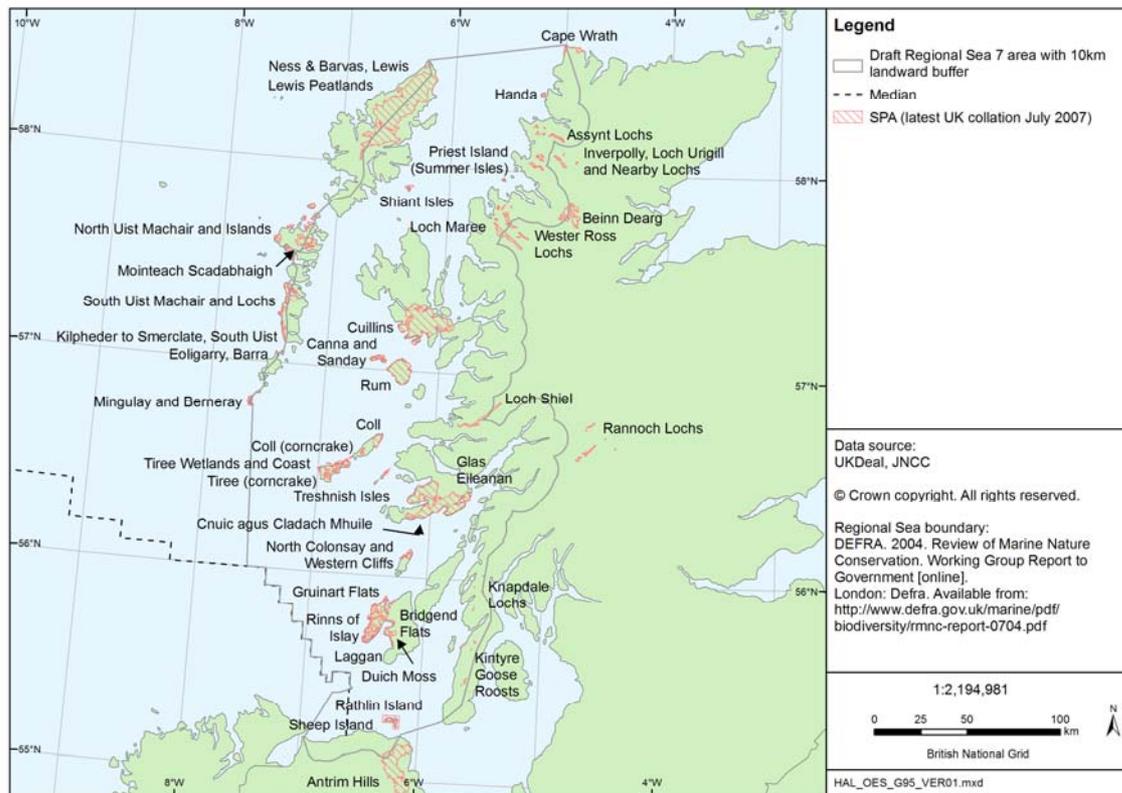


Figure A3j.23 – Special Areas of Conservation

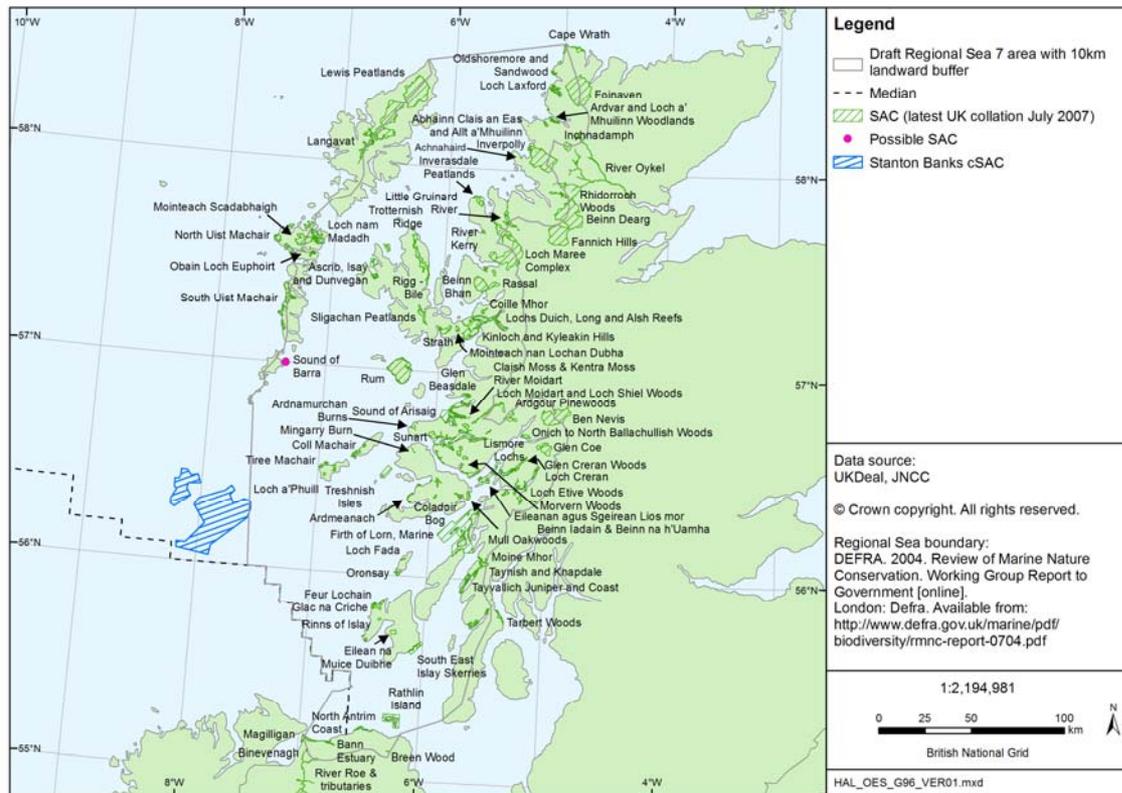


Figure A3j.24 – International, national and local sites

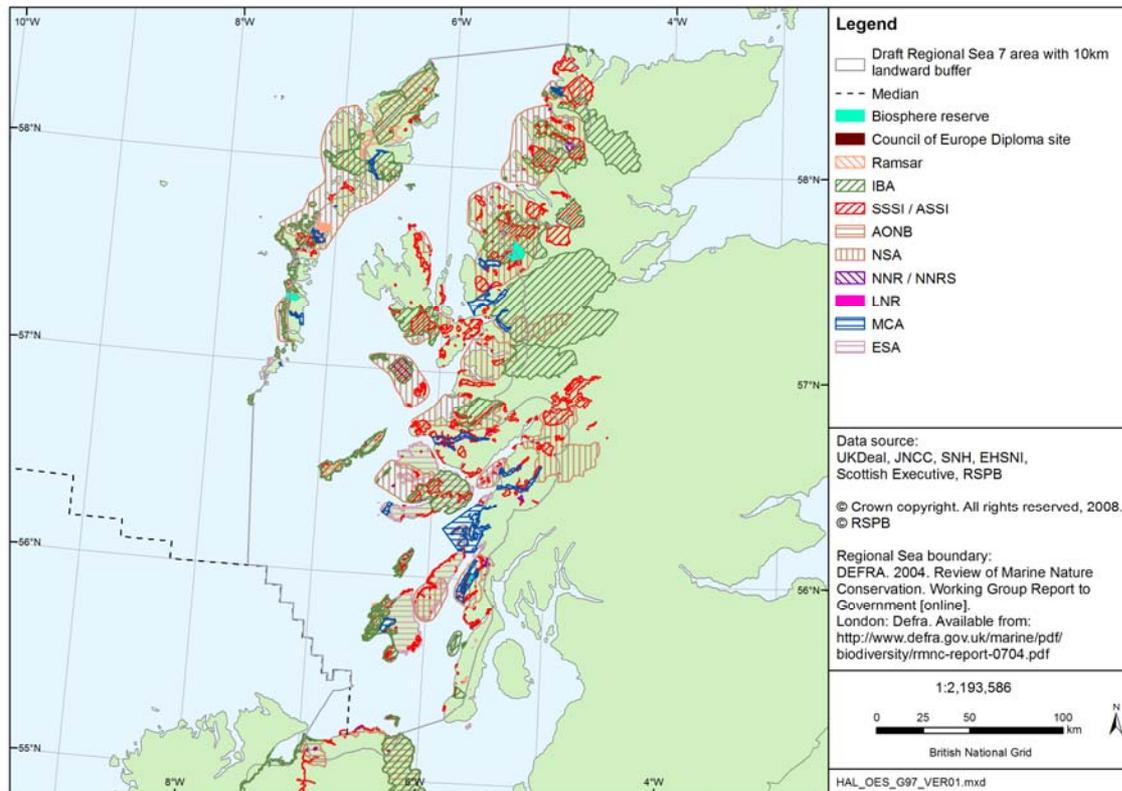
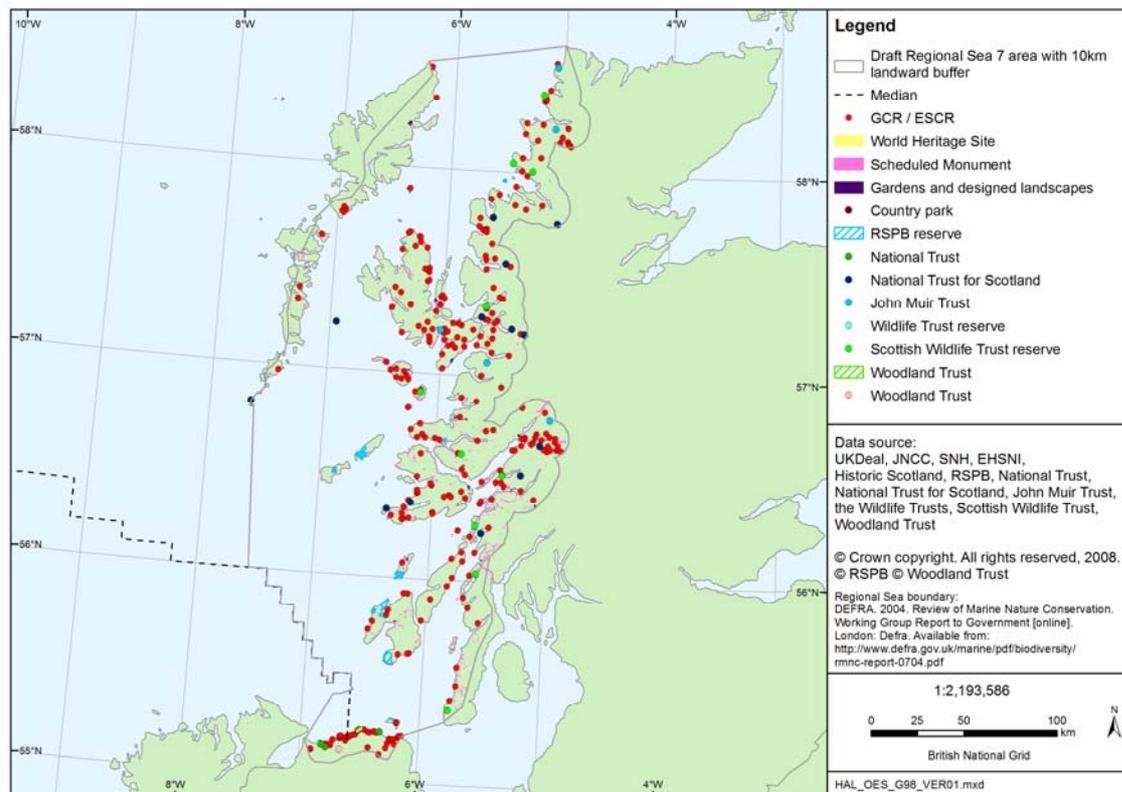


Figure A3j.25 – International, national and local sites



A3j.8.8 Regional Seas 8, 9 & 10

Regional Sea 8 includes the waters of the Scottish Continental Shelf and the most northerly coastline of the United Kingdom from Duncansby Head in the east to Cape Wrath in the west. The southeast boundary of this area transects Shetland to include only the western coastline and islands. Orkney and the west coastline of the Outer Hebrides are also included in this area. Regional Sea 9 includes the deep (>600m) waters of the Faro-Shetland Channel, while Regional Sea 10 covers the Rockall Trough and Bank, comprising a variety of deep water habitats including seamounts and other deep-water rises.

The coastal habitats in this region range from extensive and diverse cliff formations, stacks, voes, and sand dune, saltmarsh and estuarine systems. These habitats present, along with a variety of important coastal and marine species, are protected under international, national and local designations. The rivers Naver and Thurso, both found in the Scottish Highlands, are of international conservation importance due to the presence of Atlantic salmon. The Loch of Stenness, on Orkney, is the largest brackish lagoon in the UK and of particular conservation interest due to its size, stability and northern location; the salinity gradient present results in communities representative of sheltered marine, brackish and freshwater conditions.

The high cliffs which stretch along much of the north coast of Scotland, Orkney and Shetland form an important habitat for large numbers of breeding seabirds. For example, Cape Wrath SAC, located at the northwest tip of mainland Scotland, is of international importance for its sea cliff habitat and large population of seabirds during the breeding season. The Yell Sound Coast SAC in Shetland is the most northerly UK site selected for the common seal and the low-lying peaty coastline make ideal habitat for otter. Moorland areas adjacent to the coast also provide key breeding habitats for many seabirds and other waterbirds, such

as skuas, divers and plovers. For example, the moorland areas of Noss, Foula and Hoy support large numbers of breeding great skua.

Lying 66km west of the Outer Hebrides, the islands of the St Kilda archipelago are a strategic nesting location for seabirds that feed in the rich waters to the west of Scotland. The total population of seabirds exceeds some 600,000 pairs during the breeding season, making this one of the largest concentrations in the North Atlantic and the largest in the UK. Notable among the many breeding species are auks, petrels and shearwaters, gulls and large proportions of the national and international populations of gannet and puffin. St Kilda is one of only seven known nesting localities in the EU for Leach's petrel. The archipelago is one of only a few places in the world designated a World Heritage Site for both natural and cultural significance. North Rona and Sula Sgeir are two small, remote islands in the North Atlantic. They are an internationally important conservation site for features such as sea inlets and submerged caves. These features also make the islands an ideal breeding site for grey seal, with North Rona supporting the third largest breeding colony in the UK. Further offshore, several deep-sea reefs of conservation importance for reef features are present; a number of these sites are in the process of designation as SACs.

The waters north and west of Scotland support a rich diversity and density of marine mammals, and are considered one of the most important areas for these animals in northwest European waters. Containing a variety of habitats, the region supports species commonly associated with shallower coastal areas, offshore shelf waters, and those occupying the deeper waters of the shelf edge and beyond. Evidence suggests that the deep waters of Regional Seas 9 and 10 provide a migratory route for several large cetaceans, including sperm, blue and humpback whales. The majority of the UK population of grey seals and a large proportion of the UK population of common seals breed on Shetland, Orkney and the Outer Hebrides. Many colonies in this area are designated SACs, and both species forage widely in waters surrounding colonies.

The landscape character of the area is largely remote from human influences. The quality of the landscape is particularly notable across much of the western Outer Hebrides, which is designated a National Scenic Area.

Sites and species

The nature conservation importance of this section of coast is acknowledged through the designation of conservation sites at international, national and local levels. The locations and spatial extents of the different designations are shown in the maps below (Figures A3j.26-30). The tables in Section A3j.9.7 provide detailed information about the features, vulnerability and management of SACs and SPAs in the Regional Sea 8 area.

Potential marine sites and initiatives

A total of three potential SACs lie in offshore waters of Regional Sea 8, all for Annex I reef habitats. Stanton Banks candidate SAC lies in the south of Regional Sea 8, approximately 40km west of the island of Tiree. The majority of the Wyville Thomson Ridge possible SAC lies in the northwest of Regional Sea 8 (also overlapping Seas 9 and 10), approximately 150km northwest of Cape Wrath. The Darwin Mounds candidate SAC lies to the southwest of the Wyville Thomson Ridge, with the majority in the northeast corner of Regional Sea 10 and also overlaps into Regional Sea 8. The location of these sites is shown in Figure A3j.27. The Northwest Rockall Bank draft SAC is within Regional Sea 10, lying some 340km west-northwest of North Uist – see Figure A3j. 28. Further information on the features of these sites is provided in Section A3j.10.

There are fifteen SPAs for breeding seabirds along the coast of Regional Sea 8 qualifying for marine extensions. The majority of these are recommended extensions of 2km, with the largest at 4km around St. Kilda. Qualifying sites are identified in the SPA table in Section A3j.9.7. JNCC are currently reporting to SNH about a potential inshore SPA for aggregations of non-breeding waterbirds in Scapa Flow. There are areas of search for inshore aggregations of non-breeding waterbirds and also terns at many sites around the coast, particularly for terns around Orkney and Shetland.

There are eight coastal and marine SACs in Regional Sea 8 which have also been nominated as potential OSPAR MPAs, these are identified in the SAC table in Section A3j.9.7.

Figure A3j.26 – Special Protection Areas

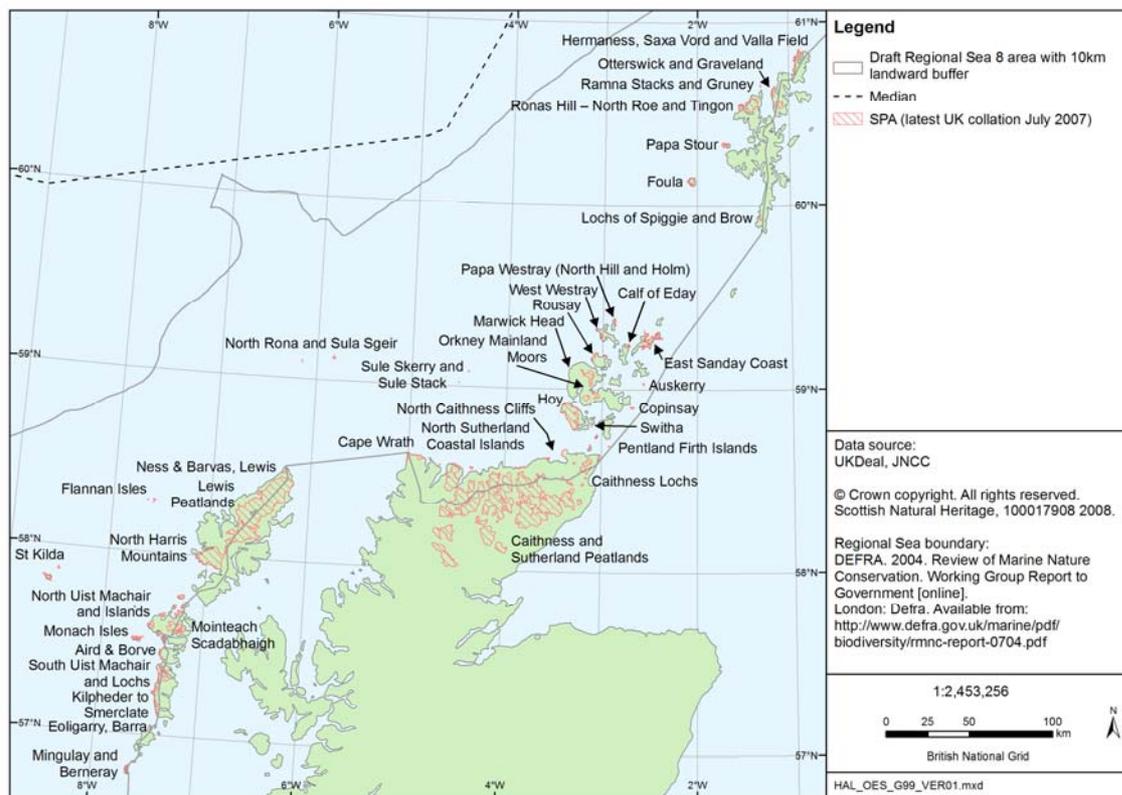


Figure A3j.27 – Special Areas of Conservation

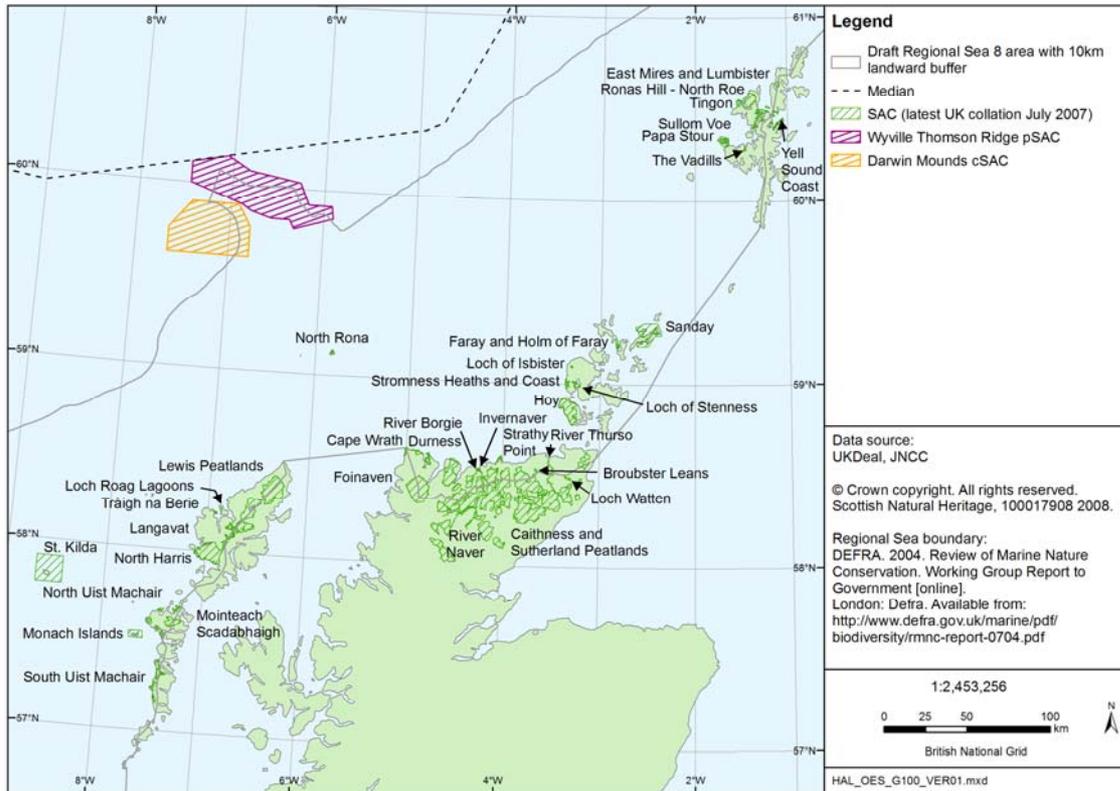


Figure A3j.28 – North West Rockall Bank dSAC

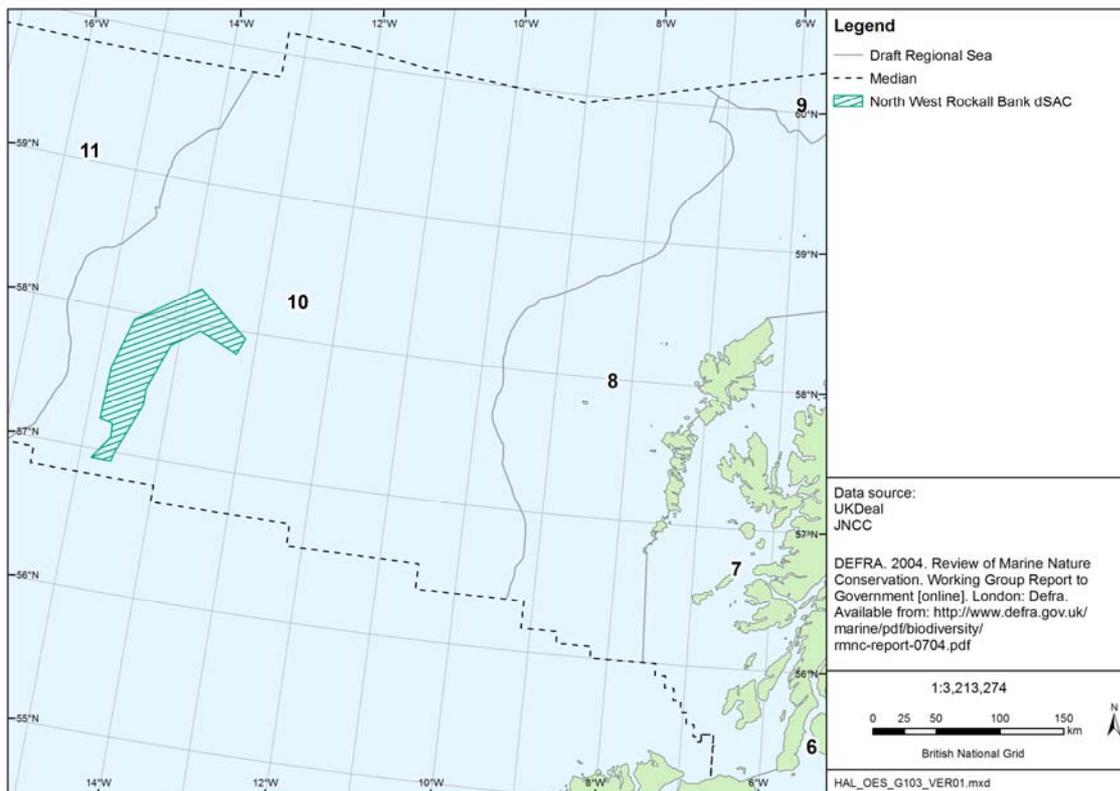


Figure A3j.29 – International, national and local sites

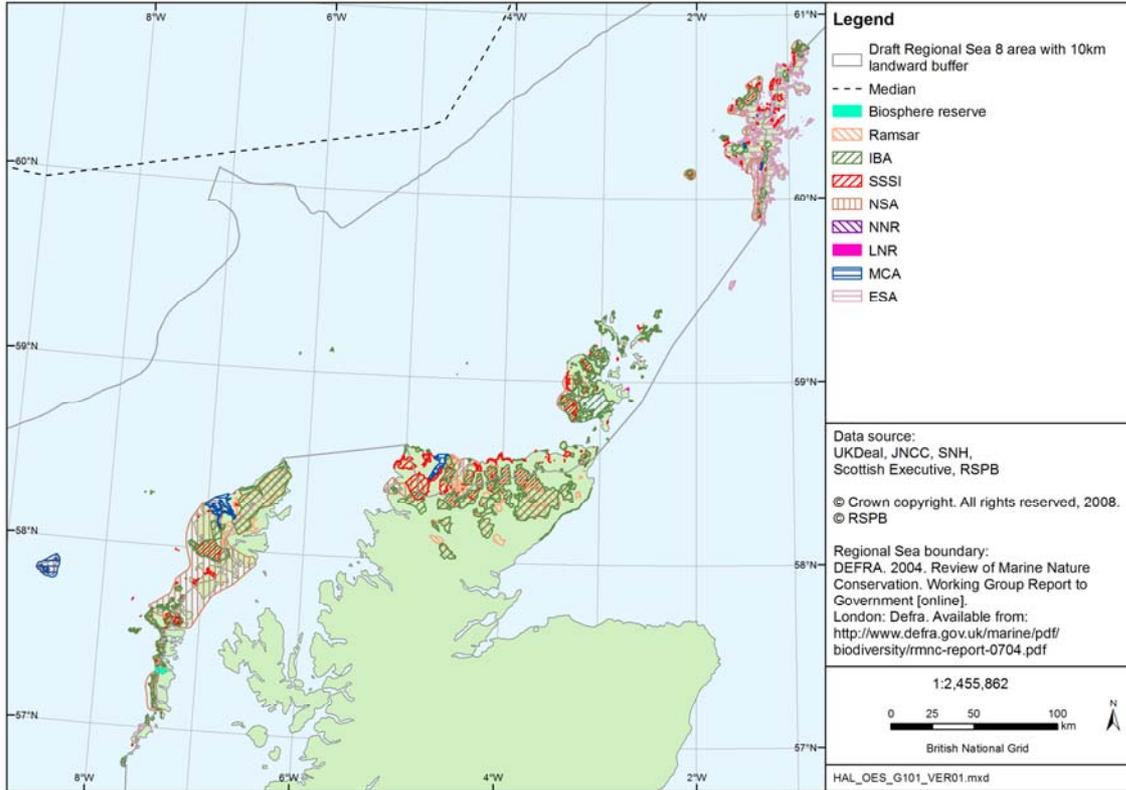
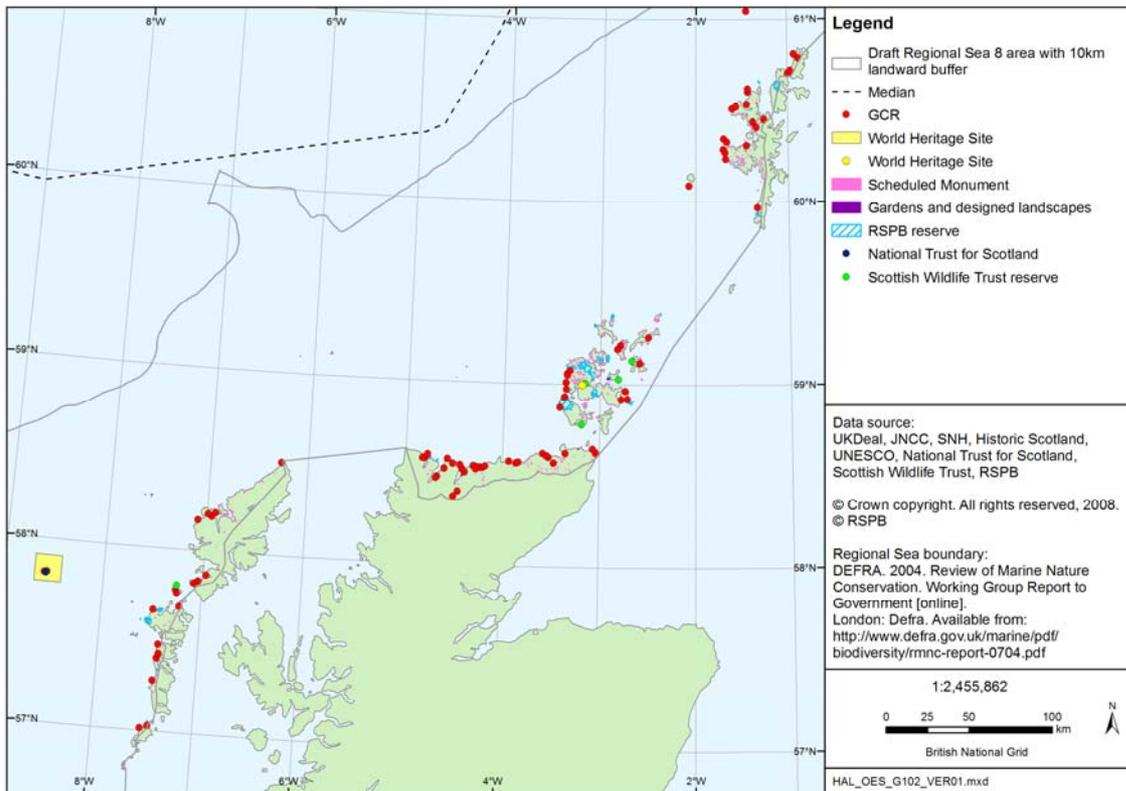


Figure A3j.30 – International, national and local sites



A3j.8.9 Regional Sea 11

Regional Sea 11 has no contiguous coastline no offshore conservation sites have been proposed in this area to date.

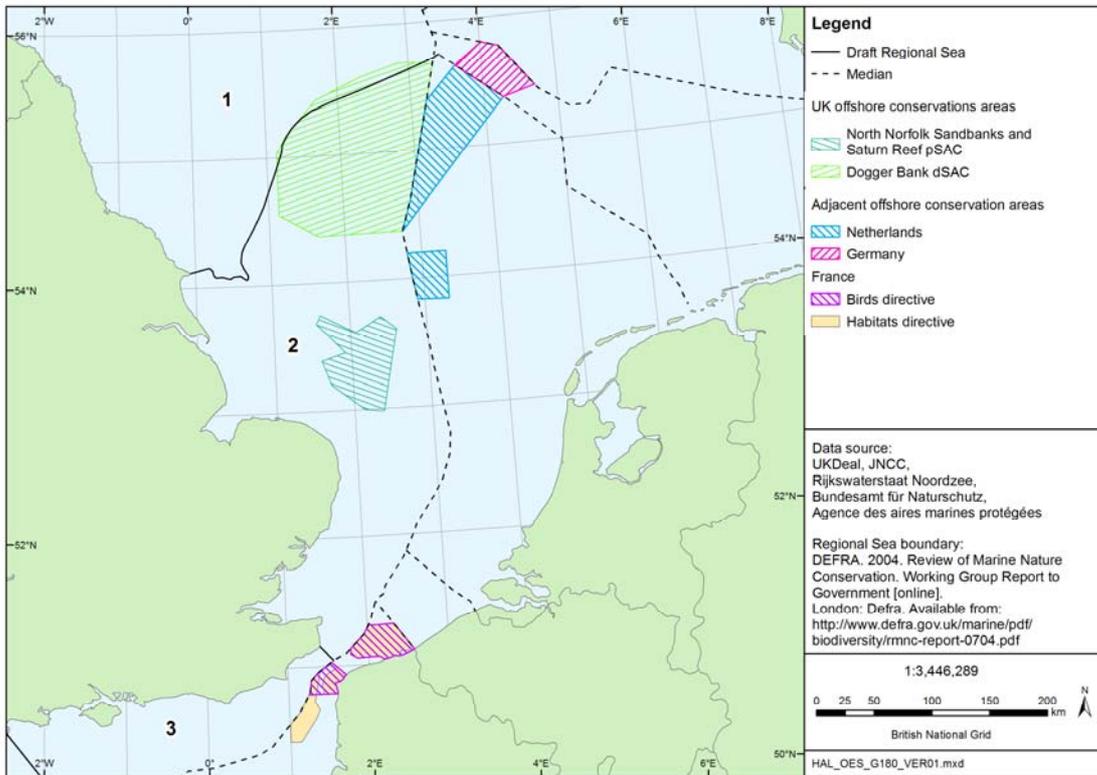
A3j.8.10 Non UK Offshore Natura 2000 sites adjacent to UK waters

Several nations whose waters border those of the UK have identified sites in their waters for designation under the Habitats and Birds Directives. Of these sites, only those lying in the southern North Sea and eastern Channel are either immediately adjacent to, or within a few tens of kilometres of, the limit of UK waters. Figure A3j.31 shows the locations of these sites, while Table [above] provides summary information of their location and features of conservation interest. Marine conservation sites in Norwegian, Danish, Belgian and Irish Republic waters are all located a considerable distance from their respective UK median lines.

In the north of Regional Sea 2, and overlapping Regional Sea 1, lies the Dogger Bank. In UK waters, a large proportion (1,485,715ha) of this area of shallow sandy substrate has been identified as a draft SAC for the Annex I habitat sandbanks which are slightly covered by seawater all the time. This habitat extends beyond the UK-Netherlands and UK-Germany medians, with ca. 170,000ha and 471,772ha identified for designation in German and Dutch waters respectively. Approximately 20km south of the Dogger Bank in Dutch waters abutting the UK-Netherlands median, an area of 123,764ha over the 'Klaverbank' (Clover Bank) has been identified for designation for the Annex I habitat reefs. The presence of the Annex II species harbour porpoise is acknowledged for all of the aforementioned areas, along with the presence of common and grey seals in the Dutch 'Doggersbank' and 'Klaverbank'.

In French waters of the far southern North Sea and eastern Channel, a number of sites lie adjacent to the UK-France median, relating to both Habitats and Birds Directives. Extending from the French coast to the median line south and east of the Kent coastline lie two areas identified for their importance to seabirds. The 'Sandbanks of Flanders' are of importance to seabirds (inc. some wildfowl) on three levels: as a feeding ground for several species breeding on the French coast, as a migratory flyway for a high number and diversity of species, and also as a winter feeding area for many species. Further south, the 'Cap Gris-Nez' is also of importance as a flyway and stop-over area for migrating and wintering seabirds. The majority of both these areas have also been identified under the Habitats Directive for their sandbank habitats, and also reefs within 'Recifs gris nez blanc nez'. Another area of important sandbanks and reef features exists slightly further south, named 'Megaripples and hydraulic dunes in the Pas-de-Calais/Dover Strait', and extending south and west for some 54km. The presence of the Annex II species harbour porpoise, common and grey seals is acknowledged for all of these sandbanks or sandbanks/reefs sites.

Figure A3j.31 – A3j.8.10 Natura 2000 sites adjacent to the median line



A3j.9 COASTAL AND MARINE SACS AND SPAS

Notes:

- A. Tables of SACs:
 1. Grid reference of site centre.
 2. Sites marked * are also nominated MPAs. Source OSPAR website.
 3. Source: JNCC website

- B. Tables of SPAs
 1. Grid reference of site centre.
 2. JNCC recommended seaward extension.
 3. Scientific names of all SPA bird species are listed in Box A3j.1
 4. Abbreviations (B) = breeding (OP) = on passage (OW) = over-winter.
 5. Source: JNCC website

Detailed information on offshore SACs is provided in Section A3j.10.

A3j.9.1 Regional Sea 1

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Moniack Gorge UK0012583 NH559425	32.16	Primary: N/A Qualifying: N/A	Primary: green shield-moss <i>Buxbaumia viridis</i> Qualifying: N/A	Green shield-moss is an ephemeral species living on well-rotted conifer logs.	Consideration may be given to strategic felling to increase the habitat.
Yell Sound Coast UK0012687 HU467755	1540.55	Primary: N/A Qualifying: N/A	Primary: otter <i>Lutra lutra</i> , common seal <i>Phoca vitulina</i> Qualifying: N/A	There are no obvious threats to the otter and seal populations at present.	N/A

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Tweed UK0012691 NT503338	3795.88	Primary: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion vegetation</i> Qualifying: N/A	Primary: atlantic salmon <i>Salmo salar</i> , otter <i>Lutra lutra</i> Qualifying: sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i>	The main impacts on the river are from pollution, acidification and eutrophication, river-works and bankside management, genetic pollution and disease, abstraction and impoundment management.	Aspects of pollution and eutrophication from point-sources are addressed in Scotland through current SEPA regulations and will be enhanced through the Water Framework Directive which will also tackle diffuse pollution. River-works are controlled by fisheries legislation, planning control and guidance through Tweed Forum River-Works Subgroup. The River Tweed Catchment Management Plan, SSSI consents and Habitats Directive regulation will combine to effect long-term protection of the site and its features.
Mousa * UK0012711 HU462241	530.6 (OSPAR MPA = 527)	Primary: N/A Qualifying: Reefs, submerged or partially submerged sea caves	Primary: common seal <i>Phoca vitulina</i> Qualifying: N/A	The current level of visitors to the island seems to be compatible with the maintenance of the seal population.	An interpretative board has been put on site to advise visitors on responsible behaviour, and a ranger service for the island and adjacent mainland is being developed.
Castle Eden Dene UK0012768 NZ435397	194.4	Primary: <i>Taxus baccata</i> woods of the British Isles Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	Yew woodlands are distributed throughout the site in a matrix of other woodland types. The site is managed as a National Nature Reserve and the Management Plan provides for regeneration of this special woodland type.
Keen of Hamar UK0012815 HP645098	38.52	Primary: calaminarian grasslands of the <i>Violetalia calaminariae</i> , calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>) Qualifying: european dry heaths	Primary: N/A Qualifying: N/A	N/A	A Management Agreement preventing grazing and agricultural improvements on this National Nature Reserve ensures that there are no current threats to the site interests.
Newham Fen UK0012890 NU169295	13.49	Primary: alkaline fens Qualifying: N/A	Primary: N/A Qualifying: N/A	In recent decades, scrub and woodland have spread at the expense of fen vegetation due to changes in springflowand drainage.	This site is managed as a National Nature Reserve and much work has been carried out to improve the site. Three hectares of woodland was removed in 1997-1998, a borehole was installed in 1997 and the hydrological infrastructure was completed in 1999. This has led to re-wetting of the fen; the site is also cut and grazed to maintain species richness.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Ben Wyvis UK0012950 NH480686	5387.45	Primary: alpine and boreal heaths, siliceous alpine and boreal grasslands, blanket bogs Qualifying: oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , european dry heaths, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), siliceous rocky slopes with chasmophytic vegetation.	Primary: N/A Qualifying: N/A	An assessment of browsing levels, especially by red deer, is under consideration to determine any effects on the blanket bog vegetation.	Visitor numbers are monitored and there are proposals to improve some of the access paths and to increase awareness of the vulnerability of the habitats to erosion damage.
Loch Watten UK0012983 ND226562	428.35	Primary: Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation Qualifying: N/A	Primary: N/A Qualifying: N/A	The water quality of Loch Watten is influenced by land use practices in the catchment area. Current traditional trout fishing management and recreational uses of the Loch are fully compatible with the interests of the site.	The site is extensively monitored and the effects of any changes will be assessed.
Flamborough Head * UK0013036 TA257701	6311.96 (OSPAR MPA = 6,202)	Primary: Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, Submerged or partially submerged sea caves Qualifying: N/A	Primary: N/A Qualifying: N/A	Physical damage and toxic contamination	Addressed by relevant authorities in a management scheme being developed for the European Marine Site.
Sands of Forvie UK0013042 NK020270	734.05	Primary: Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Decalcified fixed dunes with <i>Empetrum nigrum</i> , Humid dune slacks Qualifying: N/A	Primary: N/A Qualifying: N/A	The Reserve has a visitor centre and is popular for recreational activities. Staff based on the Reserve undertake wardening duties.	The land is a National Nature Reserve managed to an agreed management plan. Very little active management is required to maintain the habitats of interest.
Barry Links UK0013044 NO538321	789.67	Primary: Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes'), Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>), Humid dune slacks Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	Management of this site is addressed through a joint MoD/SNH Concordat – this includes grazing management, an SSSI and scrub management plan. There is also an active Conservation Group.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Mound Alderwoods UK0013574 NH763991	297.33	Primary: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	This site is a National Nature Reserve and is managed primarily for conservation.
Conon Islands UK0013575 NH537546	120.11	Primary: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) Qualifying: N/A	Primary: N/A Qualifying: N/A		Some woodland management takes place, on one island under a management agreement with Scottish Natural Heritage and in another area through a Woodland Grant Scheme. The Wet Woods LIFE Project hopes to extend the area of active management within the designated site by encouraging landowners to enter into further Woodland Grant Schemes.
Caithness and Sutherland Peatlands UK0013602 NC866402	143538.7	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Blanket bogs Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , Transition mires and quaking bogs, Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: Otter <i>Lutra lutra</i> , marsh saxifrage <i>Saxifraga hirculus</i> Qualifying: N/A	The current levels of activity are compatible with the nature conservation interests.	This extensive peatland site is managed for a range of crofting, sporting and farming interests. The site contains two National Nature Reserves and much of the remainder is subject to Peatland Management Schemes and other management agreements which encourage traditional management practices
Monadh Mor UK0013618 NH582537	251.79	Primary: Transition mires and quaking bogs, bog woodland. Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	Part of this site was previously planted with non-native conifers that have now been removed. Some forestry drains have also been blocked to encourage bog woodland development. This restoration work was undertaken as part of the Wet Woods LIFE Project. Seeding from adjacent conifer plantations will be monitored and addressed by appropriate management measures if necessary

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Pitmaduthy Moss UK0013619 NH781778	121.78	Primary: Bog woodland Qualifying: N/A	Primary: N/A Qualifying: N/A	This bog and its associated woodland lie in a natural hollow and are dependent on the flow of water from surrounding land. A recent survey has shown that changes in the woodland community may be due to a change in the nutrient status of the water regime	The Wet Woods LIFE Project has commissioned a study of the nutrient status of the adjacent agricultural land as a first stage in this process.
Berwickshire and North Northumberland Coast * UK0017072 NU206401	65045.5 (OSPAR MPA = 65,035)	Primary: Mudflats and sandflats not covered by seawater at low tide, large shallow inlets and bays, reefs, Submerged or partially submerged sea caves. Qualifying: N/A	Primary: grey seal <i>Halichoerus grypus</i> Qualifying: N/A	The varied geological sequence along the coast forms a mixture of cliffs, rocky shores and sandy bays that attract a variety of recreational users for angling, diving, watersports, etc. Wastewater discharges could have a localised effect on the site but will be subject to EC water quality legislation.	In the case of diving, the most popular areas are subject to a voluntary code of practice.
North Northumberland Dunes UK0017097 NU126435	1147.56	Primary: Embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes'), dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), humid dune slacks Qualifying: N/A	Primary: petalwort <i>Petalophyllum ralfsii</i> Qualifying: N/A	Principal pressures on the site include insufficient grazing management in some areas and damage by overintensive overwintering of cattle and sheep in others. Invasion by the non-native plant <i>Acaena novae-zealandiae</i> is a problem in some areas.	<i>Acaena novae-zealandiae</i> is difficult to eradicate or control. Different control methods are currently under evaluation. English Nature is working with the local authorities and site managers to address the impact of recreational activities on the dunes, which can be localised.
Reidside Moss UK0019767 NJ602568	87.17	Primary: Active raised bogs. Qualifying: Degraded raised bogs still capable of natural regeneration.	Primary: N/A Qualifying: N/A	N/A	There is a management agreement covering part of the site that controls afforestation, grazing and cultivation. Assessment of the impact of existing drains and woodland encroachment will allow any necessary management options to be considered.
Hascosay UK0019793 164.92	164.92	Primary: Blanket bogs Qualifying: N/A	Primary: N/A Qualifying: otter <i>Lutra lutra</i>	The ecological character of this blanket bog is compatible with, and maintained by, the current agricultural management, which ensures low grazing pressure over the site.	There is a management agreement with the agricultural tenants that prescribes the grazing levels and other agricultural management practices and thus maintains the interest of the site.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
East Mires and Lumbister UK0019795 HU492954	620.32	Primary: Blanket bogs Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i>	Primary: N/A Qualifying: N/A	Although this site is grazed, the high quality and high proportion of active bog suggest that existing livestock levels are not damaging to the interests of the site.	N/A
Turclossie Moss UK0019800 NJ885575	62.77	Primary: Active raised bogs Qualifying: Degraded raised bogs still capable of natural regeneration	Primary: N/A Qualifying: N/A	At present there are no damaging activities being carried out on the site	A hydrological study will inform the restoration management of this site.
Dornoch Firth and Morrich More * UK0019806 NH788863	8700.53 (OSPAR MPA =6,933)	Primary: Estuaries, Mudflats and sandflats not covered by seawater at low tide, Salicornia and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes'), Decalcified fixed dunes with <i>Empetrum nigrum</i> , Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>), Humid dune slacks, Coastal dunes with <i>Juniperus spp</i> Qualifying: Sandbanks which are slightly covered by sea water all the time, Reefs	Primary: otter <i>Lutra lutra</i> , common seal <i>Phoca vitulina</i> Qualifying: N/A	The collection of shellfish, other than mussels, by mechanical means is controlled by a Nature Conservation Order made under the Wildlife and Countryside Act 1981. The site contains a long-established wild mussel fishery, which is managed sustainably. All of these activities will be included within an integrated site management scheme.	The majority of the site is owned by the Ministry of Defence, and management is discussed regularly at a Ministry of Defence Conservation Group.
Moray Firth * UK0019808 NH976821	151341.67 (OSPAR MPA = 151,341)	Primary: N/A Qualifying: Sandbanks which are slightly covered by sea water all the time	Primary: Bottlenose dolphin <i>Tursiops truncatus</i> Qualifying: N/A	A strategy for dumping and dredging activities is also being developed to address these very localised activities adjacent to the coastline	Under the auspices of the Moray Firth Partnership, a SAC management group was set up in October 1999 with EC LIFE Project funding. The group aims to develop management measures to restore and maintain the bottlenose dolphin population at a viable level. The dolphin population is monitored by Aberdeen University.
Culbin Bar UK0019807 NH940613	612.88	Primary: Perennial vegetation of stony banks Qualifying: Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>), Embryonic shifting dunes	Primary: N/A Qualifying: N/A	A strategy for dumping and dredging activities is also being developed to address these very localised activities adjacent to the coastline	Under the auspices of the Moray Firth Partnership, a SAC management group was set up in October 1999 with EC LIFE Project funding. The group aims to develop management measures to restore and maintain the bottlenose dolphin population at a viable level. The dolphin population is monitored by Aberdeen University.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Spey UK0019811 NJ095319	5729.48	Primary: N/A Qualifying: N/A	Primary: freshwater pearl mussel <i>Margaritifera margaritifera</i> , sea lamprey <i>Petromyzon marinus</i> , atlantic salmon <i>Salmo salar</i> , otter <i>Lutra lutra</i> Qualifying: N/A	N/A	The long-term wellbeing of the river and its catchment is being promoted through the development of an integrated Catchment Management Plan undertaken in partnership with others. Guidance on best practice for river engineering works has been prepared to ensure that such activities are compatible with the conservation of the species of interest in the SAC.
Lower River Spey – Spey Bay UK0019978 NJ334650	652.6	Primary: perennial vegetation of stony banks, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) Qualifying: N/A	Primary: N/A Qualifying: N/A	Parts of this large coastal shingle system have been modified by afforestation and shingle extraction and part of it is used as a military firing range.	In some parts of the flood plain, natural woodland has been replaced by planted conifers. Consideration is being given to the restoration of these areas to flood-plain woodland. The rest is unmodified shingle ridges and slacks, and part of this area is managed as a nature reserve by the Scottish Wildlife Trust. The site will be monitored for damaging activities.
Beast Cliff – Whitby (Robin Hood's Bay) UK0030086 NZ962031	260.2	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	These cliffs are subject to active erosion processes in parts, particularly those areas of soft clay where coastal erosion maintains a cycle of erosion, landslip and colonisation. The location of this site is rural, but occasional settlements may give rise in the future to coast protection proposals which may interfere with natural coastal erosion processes.	Any management of these cliffs is difficult due to their unstable nature, but they are sometimes grazed in conjunction with adjacent cliff-top pastures. There is a current Shoreline Management Plan for this section of the coast; the preferred coastal defence option as outlined in the plan is 'do nothing', which should contribute to maintaining active coastal processes.
Berriedale and Langwell Waters UK0030088 ND107238	57.62	Primary: N/A Qualifying: N/A	Primary: atlantic salmon <i>Salmo salar</i> Qualifying: N/A	River engineering works have been undertaken to enhance fishing activities. Guidance on best practice on this topic is being prepared to ensure that such activities are compatible with the conservation of the species of interest in the SAC.	Future river management issues will be discussed with the land managers and the relevant District Salmon Fishery Board.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Buchan Ness to Collieston UK0030101 NK115387	207.52	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: Qualifying: N/A	The varied vegetation would be vulnerable to changes in the management of these cliff-top grasslands. A coastal path runs along the cliff-top and is in part well used by walkers and naturalists. Parts of the site are also used by climbers. Current levels of recreational activity are compatible with maintenance of the cliff vegetation.	Parts of the site are managed for grazing; others have not been grazed for some time.
Cawdor Wood UK0030112 NH847487	161.6	Primary: Old sessile oak woods with Ilex and Blechnum in the British Isles Qualifying: N/A	Primary: N/A Qualifying: N/A	Visitors are welcome to the area during the summer months. A number of nature trails facilitate access and minimise disturbance to other parts of the woodland.	These woodlands are privately-owned, and management is primarily for nature conservation. An existing Management Agreement allows for commercial extraction of hardwood.
Dam Wood UK0030129 NH643571	18.98	Primary: <i>Juniperus communis</i> formations on heaths or calcareous grasslands Qualifying: Alkaline fens	Primary: N/A Qualifying: N/A	The alkaline fen interest is dependent on water emanating from springs that lie on surrounding Forest Enterprise land (a commercial plantation) outside the boundary of the site. Appropriate management of a buffer zone within the plantation around the springs and seepage lines is proposed.	This site is owned by Forest Enterprise and managed by the Scottish Wildlife Trust as a Nature Reserve.
Durham Coast UK0030140 NZ455407	393.63	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	Parts of the site are managed as National Nature Reserve, and plans provide for the non-interventionist management of the vegetated cliffs. The majority of the site is in public ownership and an agreed management plan is being developed to protect nature conservation interests.
East Caithness Cliffs UK0030143 ND215331	442.64	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	Changes to the maritime cliff plant communities are not expected as a result of current activity.	The majority of the site is ungrazed and most of the cliff-tops are fenced off as the steep slopes present a danger to livestock. Sheep grazing, where present, is usually light.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Fair Isle UK0030149 HZ264720	561.27	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: European dry heaths	Primary: N/A Qualifying: N/A	N/A	A management agreement controls the number of sheep grazing the site and thus maintains the heathland in a favourable condition.
Isle of May * UK0030172 NT644999	356.75 (OSPAR MPA = 332)	Primary: N/A Qualifying: Reefs	Primary: Grey seal <i>Halichoerus grypus</i> Qualifying: N/A	The terrestrial part of the cSAC is a National Nature Reserve with a history of recreational pressure.	Visitor pressure to the island is concentrated outwith the seal-breeding season and is managed by a permit system for tourist boats. No landings are allowed during the seal-breeding season except by special permission and permit. At present, pressure from recreational divers is principally during the seals' non-breeding season.
Kippenrait Glen UK0030177 NS791997	61.56	Primary: Tilio-Acerion forests of slopes, screes and ravines Qualifying: N/A	Primary: N/A Qualifying: N/A	The impacts of roe deer on the site will be assessed. There are plans to obtain LIFE funding to tackle management issues and to monitor the impact of the landslides on the woodland ecology.	There is a Woodland Grant Scheme in operation over a part of the woodland that includes removal of sycamore and Rhododendron in some areas.
Ledmore Wood UK0030181 NH666895	93.37	Primary: Old sessile oak woods with Ilex and Blechnum in the British Isles Qualifying: N/A	Primary: N/A Qualifying: N/A	Deer control is undertaken to restrict deer numbers to levels that will allow regeneration.	The Woodland Trust owns the site and manages the woodland for conservation purposes. Present management is the subject of a Woodland Grant Scheme and is based on minimum appropriate intervention, natural regeneration of native species, enhancing public access, removing exotic regeneration and creating structural, species and age diversity. Loch Achnacloch
Loch Achnacloch UK0030189 NH665737	20.09	Primary: Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation Qualifying: N/A	Primary: N/A Qualifying: N/A	The water quality of this loch is influenced by agricultural run-off, septic tank discharges, and the felling of established forestry in the catchment. These are not seen as a problem but will be continually assessed.	Recreational use including fishing occurs but is thought to be compatible with the interest feature.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Loch of Wester UK0030194 ND322596	69.66	Primary: Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation Qualifying: N/A	Primary: N/A Qualifying: N/A	The site is potentially vulnerable to increased afforestation within the catchments, leading to acid runoff and increasing sedimentation, and agricultural intensification with associated nitrate run-off.	Water quality is regularly monitored by Scottish Environmental Protection Agency and the monitoring and regulation of forestry operations falls within the remit of the Forestry Commission.
Loch Ussie UK0030196 NH505566	102.62	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea Qualifying: N/A	Primary: N/A Qualifying: N/A	Some of the land in the catchment is under established commercial plantation but most is under relatively low-input agriculture. However, the loch is potentially vulnerable to eutrophication and this will be monitored.	N/A
Lower Findhorn Woods UK0030197 NJ003523	181.43	Primary: Tilio-Acerion forests of slopes, screes and ravines Qualifying: N/A	Primary: N/A Qualifying: N/A	Although three car parks allow public access to the site, this has not resulted in any significant damage to the woodland.	Parts of the site have been planted with beech and, to a lesser extent, commercial conifers. SNH is liaising with landowners to remove these plantations, associated regeneration and smaller areas of non-native species.
North Fetlar UK0030226 HU626931	1581.93	Primary: European dry heaths, Alkaline fens Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	Management agreements prescribe grazing levels on much of the site, preventing agricultural improvement and maintaining the condition of heathland and fens.
North York Moors UK0030228 NZ711021	44082.25	Primary: Northern Atlantic wet heaths with Erica tetralix, European dry heaths Qualifying: Blanket bogs	Primary: N/A Qualifying: N/A	The wetter communities, particularly blanket bog, are vulnerable to drainage and overburning, leading to the loss of structural diversity as well as the loss of mosses and lichens. The current poor economic return from sheep management is leading to a loss of sheep flocks from the moors, which is of concern.	The majority of the moorland is managed for both sheep farming (by farmers) and for the sporting shooting of grouse (by estates and their gamekeepers). Various ongoing schemes are/have been in place to help support continued moorland management.
Pitkeathly Mires UK0030239 NO107143	61.49	Primary: N/A Qualifying: Transition mires and quaking bogs	Primary: slender green feather-moss <i>Drepanocladus (Hamatocaulis) vernicosus</i> Qualifying: N/A	The mires, containing extensive and undisturbed areas of nutrient-poor and intermediate fen and flush vegetation, can sustain only modest levels of grazing. Grazing by cattle is subject to monitoring.	N/A

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Turflundie Wood UK0030240 NO196142	86.36	Primary: N/A Qualifying: N/A	Primary: great crested newt <i>Triturus cristatus</i> Qualifying: N/A	N/A	Part of Turflundie Wood cSAC is subject to a Management Agreement with Scottish Natural Heritage. Future management to maintain the great crested newt population may require the creation and restoration of ponds, the removal of trees shading the ponds, and management of the woodlands surrounding the ponds to provide ground vegetation for foraging and over-wintering amphibians.
River Dee UK0030251 NO493981	2446.82	Primary: N/A Qualifying: N/A	Primary: freshwater pearl mussel <i>Margaritifera margaritifera</i> , atlantic salmon <i>Salmo salar</i> , otter <i>Lutra lutra</i> Qualifying: N/A	Recreational use has not resulted in any significant disturbance to the features of interest.	The long term well-being of the river and its catchment will be promoted through the development of an Integrated Catchment Management Plan undertaken in partnership with others. Guidance on best practice for river engineering works has been prepared to ensure that such activities are compatible with the conservation of the species of interest in the SAC.
River Evelix UK0030254 NH744915	20.17	Primary: N/A Qualifying: N/A	Primary: freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: N/A	N/A	The long-term wellbeing of the burns and their catchment will be encouraged through discussion with land managers. Freshwater pearl mussels are directly reliant on a healthy salmonid population to complete successful recruitment, and these will form an essential part of management considerations.
River Oykel UK0030261 NH494999	960.42	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: Atlantic salmon <i>Salmo salar</i>	N/A	Future river management issues will be discussed with land managers and the relevant district Salmon Fishery Board. River engineering works have been undertaken where necessary to control natural processes such as flooding, bank erosion and to enhance fishing activities. Guidance on best practice regarding this issue is being prepared to ensure that such activities are compatible with the conservation of the species of interest in the SAC.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River South Esk UK0030262 NO450567	478.62	Primary: N/A Qualifying: N/A	Primary: freshwater pearl mussel <i>Margaritifera margaritifera</i> , atlantic salmon <i>Salmo salar</i> Qualifying: N/A	Salmon and freshwater pearl mussels are dependent on maintenance of high-quality river habitat, which is influenced by management of the river itself and by activities within the catchment. The freshwater pearl mussel population is in decline, partly due to the destruction of adult mussels by river engineering and due to low recruitment of juveniles	Measures to promote a healthy stock of salmon will benefit the mussels and the statutory protection now afforded them will help reverse past declines.
River Teith UK0030263 NN584126	1312.4	Primary: N/A Qualifying: N/A	Primary: sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> Qualifying: atlantic salmon <i>Salmo salar</i>	There are few significant threats to the qualifying interests at present. Water quality is generally high, with modern forestry practices and guidance minimising the disturbance to the river system in the heavily afforested upper catchment of the site.	Specific issues affecting habitat quality such as gravel extraction and river engineering will be addressed using practice and advice generated by SNH Research contracts on the Endrick Water cSAC and by the 'Safeguarding Natura Rivers in the UK' LIFE Project.
St Abb's Head to Fast Castle UK0030281 NT878696	127.52	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	The cliffs themselves are largely inaccessible and not subject to the same recreational and grazing pressures as the grasslands bordering the cliffs.	Part of the site forms a National Nature Reserve and is managed for nature conservation (and for recreational enjoyment) by the National Trust for Scotland. Management is agreed through a Management Plan which is approved by the National Trust for Scotland, Scottish Natural Heritage and the Scottish Wildlife Trust.
Tweed Estuary * UK0030292 NT993531	155.93 (OSPAR MPA = 155)	Primary: estuaries, mudflats and sandflats not covered by seawater at low tide Qualifying: N/A	Primary: N/A Qualifying: Sea lamprey <i>Petromyzon marinus</i> , River lamprey <i>Lampetra fluviatilis</i>	The Tweed catchment is large and dominated by arable, leading to increased nutrient inputs.	There are small scale coast protection works proposed, and small-scale and infrequent dredging operations are undertaken in the Tweed dock.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Firth of Tay & Eden Estuary * UK0030311 NO420294	15412.53 (OSPAR MPA = 15,111)	Primary: Estuaries Qualifying: Sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide	Primary: common seal <i>Phoca vitulina</i> Qualifying: N/A	Tentsmuir Point is a National Nature Reserve and parts of the Eden Estuary and Inner Tay Estuary are Local Nature Reserves which attract many visitors. Levels of use are quite high, particularly between Tayport and Tentsmuir Point where large numbers of walkers (some with dogs), as well as illegal use by all-terrain bikes, cause some disturbance. Aggregate removal occurs in the Firth of Tay, but there are no apparent adverse effects of the Natura interests.	These issues are being addressed through the management plan for the National Nature Reserve which also has a resident warden. Any other issues that arise elsewhere will be dealt with via a wider management plan for the whole site.
River Tay UK0030312 NN818481	9497.72	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea Qualifying: N/A	Primary: atlantic salmon <i>Salmo salar</i> Qualifying: sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , otter <i>Lutra lutra</i>	There are no known current land or river management practices that are having an adverse impact on the integrity of the site.	Monitoring and survey will provide information on whether general catchment management, water abstraction, proposals for small hydro-schemes and fish farming are likely to have an impact on the qualifying interests, and will inform appropriate management of these activities.
Red Moss of Netherley UK0030315 NO860940	92.53	Primary: Active raised bogs Qualifying: N/A	Primary: N/A Qualifying: N/A	The bog was drained and extensively cut-over in the past, resulting in a lowered water table, local loss of bog vegetation and encroachment of open mire by scrub. Additional activities that may have caused damage to the site in the past include muirburn, grazing by livestock and prospecting for minerals (diatomite), but these are no longer a threat.	A large part of the site (47 ha) was recently purchased by the Scottish Wildlife Trust, which is developing a management plan for the site to include restorative management such as ditch-blocking. It is expected that restoration work will also include scrub clearance.

Regional Sea 1 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Garron Point UK0030356 NO890885	15.58	Primary: N/A Qualifying: N/A	Primary: Narrow-mouthed whorl snail <i>Vertigo angustior</i> Qualifying: N/A	Disturbance (including burning of driftwood and disposable barbecues) mainly takes place away from the snail colonies, which could be vulnerable to changes in the pattern of use by the public. The colonies might also be vulnerable to changes in patterns of grazing, currently limited to rabbits and roe deer. The introduction of livestock could have benefits for the site, providing this does not lead to erosion. Parts of the site might be vulnerable to certain forms of marine oil pollution, where oil is blown on shore. In the longer term, parts of the site are vulnerable to rising sea level.	If stock are introduced, management prescriptions will be put in place to ensure that erosion does not take place.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Caithness and Sutherland Peatlands UK9001151 NC866402	145516.75	(B) black-throated diver, golden eagle, golden plover, hen harrier, merlin, red-throated diver, short-eared owl, wood Sandpiper	(B) common scoter, dunlin, greenshank, wigeon	N/A	Current levels of activity are generally compatible with the nature conservation interests. Some areas are subject to moderate overgrazing by deer which in the long-term could result in deterioration of the habitat. Some disturbance to nesting birds can be caused by recreational activities such as angling.	Site contains two National Nature Reserves and an RSPB nature reserve managed for nature conservation. A significant proportion of the site is subject to Peatland Management Schemes and other management agreements administered by SNH in order to address threats to the site. Nesting bird disturbance- SNH is liaising with appropriate parties to minimise such impacts.
Caithness Lochs UK900117 ND223567	1378.57	(OW) greenland white-fronted goose, whooper swan	(OW) greylag goose	N/A	Angling occurs on several of the lochs but is mainly outside the wintering period and is not thought to have any impact. Feeding areas at some constituent sites are threatened by field drainage, rough grazing and afforestation.	Liasion with local wildfowlers and shooting guides is encouraging adherence to the BASC guide for inland goose shooting. Feeding areas - SNH is monitoring these activities and will encourage sympathetic land management, using wider countryside measures where appropriate.
East Caithness Cliffs UK9001182 ND215331	442.62 + 2km seaward extension ²	(B) peregrine	(B) guillemot, herring gull, kittiwake, razorbill, shag	Seabird: (B) puffin, great black-backed gull, cormorant, fulmar, razorbill, guillemot, kittiwake, herring gull, shag.	There are no on-site threats to the interest.	N/A
Loch Ashie UK9001554 NH627343	162.29	(B) (OP) slavian grebe	N/A	N/A	The water extraction body is sympathetic to the qualifying interest and there is currently no evidence to suggest that the fluctuating water levels are damaging the importance of the loch for pre- and postbreeding slavian grebes. Vulnerable to acidification from conifer plantations and fishing disturbance.	Loch Ashie is managed as a public water supply. The impact of specific forestry proposals in catchment area will be assessed when relevant. Fishing disturbance - grebe-friendly code of conduct to be distributed in Spring 1999 aimed at anglers.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Loch Eye UK9001621 NH831797	205.14	(OW) whooper swan	(OW) greylag goose	N/A	The suitability of the site as a roost for geese and swans is not thought to be under threat. There is no wildfowling but the neighbouring farms still scare (and occasionally kill) geese which are causing significant damage to agricultural crops. Suitability of the loch as a feeding site for swans is threatened by nutrient input from surrounding land uses. Algal blooms were a regular feature on the loch in the 1980s and early 1990s but there is some indication that the severity and frequency of these blooms are declining.	Research undertaken in 1990 has demonstrated that faeces from overwintering waterfowl especially geese make a significant contribution to phosphorus input.
Dornoch Firth and Loch Fleet UK9001622 NH788863	7836.33	(B) osprey (OW) bar-tailed Godwit	(OW) greylag goose, wigeon	Waterfowl: (OW) curlew, dunlin, oystercatcher, teal, wigeon, greylag goose, bar-tailed godwit.	There are few pressures on the bird interest of the site.	The collection of shellfish, other than mussels, by mechanical means is controlled by a Nature Conservation Order made under the Wildlife and Countryside Act 1981. Levels of wildfowling vary within the SPA but appear to be sustainable.
Cromarty Firth UK9001623 NH688680	3746.95	(B) common tern, osprey (OW) bar-tailed godwit, whooper swan	(OW) greylag goose	Waterfowl: (OW) redshank, curlew, dunlin, knot, oystercatcher, red-breasted merganser, scaup, pintail, wigeon, greylag goose, bar-tailed godwit, whooper swan.	The SPA is vulnerable to industrial development (including land-claim), some of which is associated with the port of Invergordon as well as wider oil-related activities. Threat of damage by mechanical cockle-harvesting. Cumulative impacts of a range of small-scale activities including disturbance from wildfowling and recreational activities are recognised pressures on the site.	Mechanical cockle-harvesting - addressed over a large part of the firth by the granting of the Nigg and Udale Bays Nature Conservation (Amendment) Order in 1996. Recent integrated management initiatives (The Cromarty Firth Liaison Group and the wider Moray Firth Partnership) provides a mechanism through which a range of interested parties can help alleviate the range of development and recreational threats to this site.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Inner Moray Firth UK9001624 NN564745	2339.23	(B) common tern, osprey (OW) Bar-tailed Godwit.	(OW) greylag goose, red-breasted merganser, redshank, Scaup.	Waterfowl: (OW) scaup, curlew, oystercatcher, goosander, goldeneye, teal, wigeon, cormorant, redshank, red-breasted merganser, greylag goose, bar-tailed Godwit	Parts of the Inner Moray Firth SPA are vulnerable to developmental pressures including land-claim and waste disposal. Disturbance through the cumulative impacts of a range of small-scale activities including baitdigging and wildfowling.	The Highland Council's Waste Management Strategy is looking at sustainable long-term options for waste disposal in the Highland area in consultation with SNH. The Moray Firth Partnership, an integrated management forum, provides a mechanism through which a range of interested parties can address the wide range of threats to this site.
Lairg and Strathbrora Lochs	286.3	(B) black-throated diver	N/A	N/A	Angling, water level fluctuation and predation are the key vulnerabilities at this site.	Disturbance from angling is minimised through liaison and awareness raising via a leaflet for anglers. The impact of water level fluctuations and ground predators is addressed by the provision of floating rafts for nesting on some of the lochs. Water quality is maintained by encouraging sympathetic catchment management.
Loch Knockie and Nearby Lochs	395.92	(B) Slavonian grebe	N/A	N/A	There are few threats to the interest at present. The loch is vulnerable to acidification from conifer plantations in the catchment and the impact of specific forestry proposals will be assessed when relevant.	A grebe friendly Code of Conduct distributed in spring 1999 aimed at anglers, will help to minimise fishing disturbance to the interest.
Loch Ruthven	201.15	(B) Slavonian grebe	N/A	N/A	The loch ecosystem is relatively stable although there are potential threats from acidification associated with conifer plantations and from the possible management of the loch as a public water supply.	Part of the Loch is owned by the RSPB which manages the reserve for the benefit of breeding Slavonian Grebe.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Loch Vaa	44.6	(B) Slavonian grebe	(B) goldeneye	N/A	Threat to interest at this site is from disturbance resulting from bird watchers.	The impact of disturbance from birwatching is not yet known but is the subject of ongoing RSPB research. SNH advises on the timing of timber operations in the surrounding plantation to avoid disturbance to the interest.
North Inverness Lochs	123.21	(B) Slavonian grebe	N/A	N/A	Threat to interest at this site is from disturbance resulting from bird watchers and passers-by. Plans by the water authority to improve the public water supply from this area may affect the interest.	The accessible Balnagrantach section of the site is monitored by local land managers and RSPB personnel.
Moray and Nairn Coast UK9001625 NH968633	2410.25	(B) osprey (OW) bar-tailed godwit	(OW) greylag goose, pink-footed goose, redshank	Waterfowl: (OW) pink-footed goose, dunlin, oystercatcher, red-breasted merganser, velvet scoter, common scoter, long-tailed duck, wigeon, redshank, greylag goose, bar-tailed godwit.	Disturbance by recreational users, including fishermen, may affect breeding success. Predation of nesting terns by mink may also be affecting breeding success. Recreational use, including wildfowling, in Findhorn Bay may cause disturbance to waterfowl but this will be addressed when the site is declared a Local Nature Reserve by the local authority later this year.	River engineering to maintain fishing interests and to protect adjacent agricultural land affects the natural fluvial and geomorphological processes which result in the formation of areas of bare shingle required for terns to nest. Issues are being addressed by the Scottish Wildlife Trust which leases part of the site as a reserve. Commercial cockle harvesting has affected the site in the past and shellfish farming has also been proposed. Both are prohibited by Nature Conservation Orders.
Loch Flemington UK9001691 NH810519	21	(B) slavonian grebe	N/A	N/A	Suffered from nutrient enrichment and algal blooms, one of which is thought to have caused the failure of slavonian grebe breeding in 1993. Diffuse run-off from adjacent farm land is likely to be exacerbating the problem together with other factors such as droppings from roosting wildfowl. Stock grazing has resulted in localised damage to sedge beds used for nesting.	SNH will encourage the establishment of buffer strips and a reduction in fertiliser application adjacent to the loch in order to mitigate this problem. SNH will encourage fencing of these areas to prevent further damage. Grebe-friendly Code of Conduct distributed in spring 1999 aimed at anglers.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Morangie Forest UK9001791 NH735802	3512.92	capercaillie	N/A	N/A	Disturbance of capercaillie is of concern so visitors are actively encouraged to keep to a network of established paths that avoid sensitive areas of the site.	The majority of the Morangie Forest is owned and managed for timber production by the Forestry Commission (FC). Capercaillie management plan forms part of the FC Forest Design Plan. Forestry operations are undertaken outwith the breeding season to avoid disturbance. A continuous cover system that avoids large coupes is being developed. Deer fences are being removed, marked or reduced to stock-fence height. Red and roe deer are subject to a culling regime to promote woodland regeneration across the site.
Fetlar UK9002031 HU626923	2594.91+ 2km seaward extension ²	(B) arctic tern, red-necked phalarope	(B) dunlin, great skua, whimbrel	(B) arctic skua, fulmar, great skua, arctic tern, red-necked phalarope.	There are no significant threats to the interest at present.	Parts of the site are managed by RSPB and they currently trap feral cats on part of the site and introductions in any other part of the sites would require control measures. On-going habitat creation/management is required to ensure suitable breeding habitats for the Phalaropus lobatus.
Noss UK9002081 HU546403	343.82+ 2km seaward extension ²	N/A	(B) gannet, great skua, guillemot	(B) puffin, kittiwake, fulmar, guillemot, great skua, gannet.	There are no threats to the interest at present. Currently the only threat to the bird populations from within the boundary of the site is Great Skua predation on Kittiwakes	In the past licences have been applied for to shoot great skuas which are attacking live stock. Following classification, SNH treat any further applications for licences on their own merits.
Fair Isle UK9002091 HZ217724	561.27+ 2km seaward extension ²	(B) arctic tern, fair isle wren	(B) guillemot	(B) puffin, razorbill, kittiwake, great skua, arctic skua, shag, gannet, fulmar, guillemot, arctic tern	There are no significant threats to the interest at present. Birds are also vulnerable to predation from domestic and feral cats.	SNH contribute to the funding of a ranger service on the island which helps to limit visitor disturbance to breeding seabirds.
Loch Spynie UK9002201 NJ238666	93.62	N/A	(OW) greylag goose	N/A	Current levels of shooting are not a threat but the geese are vulnerable to poisoning from lead shot deposited in the sediments of the loch.	The risk of lead poisoning has been reduced by the installation of a new embankment and sluice to control the water level in the loch.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Loch of Strathbeg UK9002211 NK070592	615.94	(B) sandwich tern (OW) barnacle goose, whooper swan	(OW) greylag goose, pink-footed goose	Waterfowl: (OW) teal, greylag goose, pink-footed goose, barnacle goose, whooper swan.	Shooting from adjacent land of birds leaving the roost is a source of disturbance- regulated by RSPB's purchase of some of the shooting rights and by licensing.	Almost the entire site is managed by the Royal Society for the Protection of Birds (RSPB). SNH have piloted a Loch of Strathbeg Goose Management Scheme to alleviate the conflict between the geese which roost on the loch and the surrounding farms where they feed.
Ythan Estuary, Sands of Forvie and Meikle Loch UK9002221 NK025279	1016.24	(B) common tern, little tern, sandwich tern	(OW) pink-footed goose	(OW) redshank, lapwing, eider, pink-footed goose.	Terns vulnerable to predation and the periodic overtopping of the favoured shingle beds by sand. Eutrophication- build up of algal mats has apparently lead to a reduction in the populations of invertebrates which are the prey of waterfowl.	The site forms the Forvie National Nature Reserve which is managed for its nature conservation interest under an agreed management plan. The reserve agreement restricts management activities such as burning. Byelaws are in force to prevent visitors to the reserve from carrying out damaging activities and disturbance to tern colonies. Fox control measures are in place to reduce predation
Fowlsheugh UK9002271 NO881801	10.15+ 2km seaward extension ²	N/A	(B) guillemot, kittiwake	Seabirds: (B) razorbill, herring gull, fulmar, guillemot, kittiwake.	There are no significant threats to the interest at present.	Managed as a nature reserve by the RSPB, who have upgraded the public footpath which runs along the cliff top and provided information boards.
Mousa UK9002361 HU462241	197.98	(B) arctic tern, storm petrel	N/A	N/A	Disturbance by summer visitors, potential competition from the sand-eel fishing with the food supply of breeding terns.	Research project is planned to assess the impact of disturbance. Although current fishing levels are low, bird populations will continue to be monitored.
Troup, Pennan and Lions Heads UK9002471 NJ850658	172.11+ 2km seaward extension ²	N/A	(B) guillemot	(B) razorbill, kittiwake, herring gull, fulmar, guillemot.	There are no significant threats to the interest at present.	SNH is engaged in a programme of monitoring seabird populations, and is working with the local authority, and owners and occupiers, to agree an access policy for the site.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Buchan Ness to Collieston UK9002491 NK115387	208.62+ 2km seaward extension ²	N/A	N/A	(B) guillemot, kittiwake, herring gull, shag, fulmar.	There are no significant threats to the interest at present.	SNH is engaged in a programme of monitoring seabird populations, and is working with the local authority, and owners and occupiers, to agree a programme of path improvements and site interpretation.
Sumburgh Head UK9002511 HU410091	39.04+ 2km seaward extension ²	(B) arctic tern	N/A	(B) guillemot, kittiwake, fulmar, arctic tern.	Main threat would be feral mammalian predators, e.g. rats, cats or ferrets.	Any observations of these predators on site should be monitored with a view to possible control.
Otterswick and Graveland UK9002941 HU488857	2241.41	(B) red-throated diver	N/A	N/A	Disturbance	A significant part of the SPA is covered by an agri-environment scheme which promotes conservation management.
Montrose Basin UK9004031 NO691578	984.61	N/A	(OW) greylag goose, knot, pink-footed goose, redshank.	(OW) dunlin, oystercatcher, eider, wigeon, shelduck, redshank, knot, greylag goose, pink-footed goose.	Potentially harmful activities to the interest are controlled by bylaws and wildfowling is controlled by zonation of the Basin and by consents at Dun's Dish.	Most of the Montrose Basin is a Local Nature Reserve, and is managed for its nature conservation interest by the Scottish Wildlife Trust on behalf of Angus Council.
Firth of Tay and Eden Estuary UK9004121 NO332245	6923.29	(B) little tern, marsh harrier (OW) bar-tailed godwit	(OW) greylag goose, pink-footed goose, redshank	(OW) velvet scoter, pink-footed goose, greylag goose, redshank, cormorant, shelduck, eider, bar-tailed godwit, common scoter, black-tailed godwit, goldeneye, red-breasted merganser, goosander, oystercatcher, grey plover, sanderling, dunlin, long-tailed duck.	Disturbance levels are quite high, particularly at Tentsmuir Point which is visited by large numbers of walkers (some with dogs), as well as illegal use by all-terrain vehicles. Jet planes from a large military airbase adjacent to the Eden Estuary cross the whole site but this has occurred for many years and has no apparent adverse affects on wildlife.	All-terrain vehicles issue is recognised and being addressed through the management plan for this National Nature Reserve which has a resident warden.
Cameron Reservoir UK9004131 NO472114	68.76	N/A	(OW) pink-footed goose	N/A	The long term future of the site is threatened by the proposed decommissioning of the reservoir as a public water supply.	The roosting geese are not thought to be suffer significant disturbance from current levels of shooting and fishing. SNH will continue to monitor these activities.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Forth Islands UK9004171 NT655994	106.01+ 2km seaward extension ²	(B) arctic tern, common tern, roseate tern, Sandwich tern	(B) gannet, lesser black-backed gull, puffin, shag	(B) razorbill, guillemot, kittiwake, herring gull, cormorant, fulmar, puffin, lesser black-backed gull, shag, gannet, arctic tern, common tern, roseate tern, sandwich tern.	There are few threats to the interest of the site. The Scottish Seabird Centre has raised awareness of the colonies on the East Lothian islands. Measures to prevent disturbance to breeding birds by increased visitor numbers have been taken, e.g. remotely-operated cameras give close-up views of birds without causing disturbance.	The various islands are managed by the following organisations:- Scottish Natural Heritage, Royal Society for the Protection of Birds, Fife Bird Club and the Scottish Wildlife Trust
St Abbs Head to Fast Castle UK9004271 NT893697	250.88+ 1km seaward extension ²	N/A	N/A	(B) razorbill, guillemot, kittiwake, herring gull, shag.	Visitor numbers are high but they are not thought to cause significant disturbance to the interest at present.	The site is managed by the full-time ranger and summer warden who work to the St Abb's Head Management Committee and to the current management plan for the site.
Firth of Forth UK9004411 NS970823	6313.72	(OP) sandwich tern (OW) bar-tailed godwit, golden plover, red-throated diver, slavonian grebe	(OW) knot, pink-footed goose, redshank, shelduck, turnstone	(OW) scaup, slavonian grebe, golden plover, bar-tailed godwit, pink-footed goose, shelduck, knot, redshank, turnstone, great crested grebe, cormorant, red-throated diver, Mallard, Curlew, Eider, long-tailed duck, common scoter, velvet scoter, goldeneye, red-breasted merganser, oystercatcher, ringed plover, grey plover, lapwing, dunlin, wigeon.	While the major factor potentially affecting the site is coastal industrial development, such development is subject to detailed planning control, ensuring that the site is not significantly affected. Oil and other industrial developments concentrated along the shore line do pose a threat, however rigorous emergency contingency plans are in place to minimise the impact of any incident. The potential for rising sea levels to remove important habitats is recognised.	Sea- level rise - a number of coastal realignment schemes (planned retreat) are planned. Localised tipping - mostly controlled by the relevant licensing authority and implementation of the Habitats Regulations will tighten control on these operations.
Imperial Dock Lock, Leith UK9004451 NT269773	0.11	(B) common tern	N/A	N/A	Site is in the centre of an active industrial area (Leith Docks) so there is a great risk of disturbance. The colony appears to be resilient to disturbance from port activities and has been steadily increasing in size.	Regular monitoring of the colony during the breeding season should highlight any increased disturbance.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Lindisfarne UK9006011 NU102422	3679.22	(B) little tern (OW) bar-tailed godwit, golden plover, whooper swan	(OP) ringed plover (OW) grey plover, greylag goose, knot, light-bellied brent goose, wigeon	(OW) pink-footed goose, golden plover, bar-tailed godwit, greylag goose, light-bellied brent goose, wigeon, whooper swan, knot, redshank, shelduck, eider, common scoter, ringed plover, lapwing, dunlin, grey plover.	The principal threats from human influences are water quality problems (from sewage discharges and agricultural run-off), wildfowling and recreational disturbance including bait-digging. Colonisation by <i>Spartina</i> poses a long-term threat to intertidal habitats.	The site is managed as a National Nature Reserve by English Nature. The issue of water quality in input streams and sedimentation/siltation within the site is currently being monitored by the Environment Agency. English Nature monitor and manage recreational and wildfowling use of the site in order to address issues of disturbance. Bait-digging is controlled by a SNCO. English Nature is currently trialing experimental management techniques to control <i>Spartina</i> .
Farne Islands UK9006021 NU221364	101.86 + 1km seaward extension ²	(B) arctic tern, common tern, roseate tern, sandwich tern	(B) guillemot, puffin	(B) Kittiwake, shag, cormorant, puffin, guillemot, arctic tern, common tern, roseate tern, Sandwich tern.	The thin soil cap found on the islands is easily disturbed by burrowing rabbits and puffins and by seals during their breeding season.	The site is managed by the National Trust as a National Nature Reserve in accordance with a management plan agreed with English Nature. Management of the vegetation/ soil cap and the pupping areas for seals is undertaken by the National Trust. Marine activities including inshore fishing, recreation and pleasure craft are currently being monitored to assess any potential impact within the SPA.
Coquet Island UK9006031 NU294047	22.28 + 1km seaward extension ²	(B) arctic tern, common tern, roseate tern, sandwich tern	(B) puffin	(B) black-headed gull, puffin, arctic tern, common tern, roseate tern, sandwich tern, whimbrel	The thin soils on the island are easily disturbed by burrowing rabbits and puffins which has led to concern over loss of vegetation and subsequent erosion.	The site is managed by the RSPB as a nature reserve within the terms of a management plan agreed with English Nature. The RSPB are currently undertaking vegetation management trials to limit erosion problems.
Holburn Lake & Moss UK9006041 NU051365	28.03	N/A	(OW) greylag goose	N/A	An adjacent peat extraction site is not currently considered to be affecting the SPA though monitoring of this activity will continue	The majority of the site is managed as a nature reserve by the Northumberland Wildlife Trust in accordance with a management plan agreed with English Nature. Limited wildfowling occurs on the site but is compatible with the SPA objectives.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Teesmouth & Cleveland Coast UK9006061 NZ569265	1247.31	(B) little tern (OP) sandwich tern	(OP) ringed plover (OW) knot, redshank	(OW) sanderling, lapwing, shelduck, cormorant, redshank, knot.	The natural incursion of coarse marine sediments into the estuary and the eutrophication of sheltered mudflats leading to the spread of dense Enteromorpha beds may impact on invertebrate density and abundance, and hence on waterfowl numbers. The future development of port facilities in areas adjacent to the site has potential to cause adverse effect.	future development - issues will be addressed through the planning system/Habitats Regulations, as will incompatible coastal defence schemes.
Flamborough Head & Bempton Cliff UK9006101 TA233723	212.17 + 2km seaward extension ²	N/A	(B) kittiwake	Seabird: (B) puffin, razorbill, guillemot, herring gull, gannet, kittiwake.	Natural England is working with local regulatory bodies to identify relevant issues through the Sensitive Marine Area (SMA) project.	Natural England will continue to work on the setting of conservation objectives; identify key human activities which may affect the ornithological interest & identify the necessary survey management & monitoring systems.
Northumbria Coast UK9006131 NU260193	1107.98	(B) little tern	(OW) purple sandpiper, turnstone	N/A	Little terns are vulnerable to disturbance by tourists in the summer causing reduced breeding success.	The National Trust employs wardens each summer to protect the little tern colony at Beadnell Bay.
North York Moors UK9006161 NZ725006	44087.68	(B) golden plover, merlin	N/A	N/A	The most vulnerable plant communities are the heaths and mires which are susceptible to overgrazing, gripping and too frequent heather burning leading to species impoverishment and a loss of structural diversity. A lack of keeping and undergrazing on some moors has resulted in large areas of undermanaged old heather lacking structural diversity	Moorland management carried out by farmers and gamekeepers to maintain the moorland plant communities and grouse populations. A lack of keeping could be addressed by looking at payments for positive heather management, such as cutting and burning.

Regional Sea 1 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Darnaway and Lethen Forest UK9020292 NH985519	1828.61	capercaillie	N/A	N/A	SPA comprises several areas of forest managed commercially for timber production.	Forest managers are sympathetic to the needs of capercaillie in planning and undertaking forest operations, and are in the process of formulating forest plans which will fully take into account its needs. The extent of invasive species is being monitored and controlled. Open ground habitats including heathland and wetland will be retained or reinstated. Key predators of capercaillie are controlled.
Novar UK9020293 NH606696	1054.65	capercaillie	N/A	N/A	Disturbance of capercaillie is of potential concern as there is a popular local viewpoint within the SPA. However, visitors are encouraged to use the network of established paths that avoid sensitive areas of the site.	The majority of the Novar SPA is managed for timber production by Novar Estate. Forestry operations are undertaken outwith the breeding season to avoid disturbance of capercaillie. A continuous cover system that avoids large coupes is being developed. Deer fences have been removed, marked or reduced to stock-fence height, thus reducing collision risk for capercaillie and other species. Red and roe deer are subject to a culling regime to promote woodland regeneration across the site.

A3j.9.2 Regional Sea 2

Regional Sea 2- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Staverton Park and The Thicks, Wantisden UK0012741 TM356509	81.45	Primary: Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains. Qualifying: N/A	Primary: N/A Qualifying: N/A	Fire due to dense ground cover dominated by bracken. Veteran trees subject to decay.	If veterans become unhealthy - re-pollarding to prolong their life. In order to maintain long-term age structure the collection of indigenous seed and replanting of seedlings is ongoing. Site has an agreed Site Management Statement.
Roydon Common and Dersingham Bog UK0012801 TF686224	351.83	Primary: Northern Atlantic wet heaths with <i>Erica tetralix</i> ; depressions on peat substrates of the <i>Rhynchosporion</i> . Qualifying: European dry heaths.	Primary: N/A Qualifying: N/A	Bogs vulnerable to pollution of catchment water by agricultural run-off. Scrub and woodland spread.	Environment Agency's North West Norfolk River catchment plan. Review of consents. Management agreements and countryside stewardship payments go some way towards reintroducing traditional scrub management.
Minsmere to Walberswick Heaths and Marshes UK0012809 TM468682	1,265.52	Primary: Annual vegetation of drift lines, European dry heaths. Qualifying: Perennial vegetation of stony banks	Primary: N/A Qualifying: N/A	Scrub and tree invasion. Human disturbance of vegetated shoreline.	Heathland forms part of an RSPB reserve and part of the SAC is Heath Nature Reserve. Site Management plan includes actions to ensure open heathland is maintained. RSPB visitor management plan to ensure that significant human disturbance to the vegetated shore zone does not occur.
Queendown Warren UK0012833 TQ827629	14.28	Primary: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites). Qualifying: N/A	Primary: N/A Qualifying: N/A	Site managed as a nature reserve so not under current threat.	Continuous grazing management is essential. Managed as a nature reserve funded through English Natures Reserve Enhancement scheme.

Regional Sea 2- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Norfolk Valley Fens UK0012892 TL937960	616.21	Primary: Alkaline fens. Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> ; European dry heaths; semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>); <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>); calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> (priority feature); alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) (priority feature).	Primary: narrow-mouthed whorl snail <i>Vertigo angustior</i> , desmoulin's whorl snail <i>Vertigo moulinsiana</i> Qualifying: N/A	Surrounded by intensively farmed land - vulnerable to reductions in water table due to groundwater extraction.	Cutting and grazing management promotion and re-introduction with help from Management agreements, Countryside Stewardship and ESA payments. Environment Agency and Natural England looking at water needs of wetlands. Effects of groundwater abstraction - licensing regimes, forthcoming Environment Agency Review of consents and AMP3 programme.
Flamborough Head * UK0013036 TA257701	6,311.96 (OSPAR MPA = 6,202)	Primary: Reefs; vegetated sea cliffs of the Atlantic and Baltic coasts; submerged or partially submerged sea caves. Qualifying: N/A	Primary: N/A Qualifying: N/A	Physical damage and toxic contamination	Addressed by relevant authorities in a management scheme being developed for the European Marine Site.
Winterton – Horsey Dunes UK0013043 TG491204	425.94	Primary: Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) (priority feature); humid dune slacks. Qualifying: Embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes').	Primary: N/A Qualifying: N/A	Beach feeding operations pose threat through the possible use of sand with shell fragments, water abstraction, visitor pressure high in summer resulting in erosion, fire and disturbance impacts	Coastal Habitat Action Plan (chaMP) is scheduled to be produced in 2002 to address these issues. Relies on rabbits to maintain open habitats and is therefore vulnerable to outbreaks of disease.
Sandwich Bay UK0013077 TR354617	1,137.87	Primary: Embryonic shifting dunes; fixed dunes with herbaceous vegetation ('grey dunes') (priority feature); dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>). Qualifying: Humid dune slacks.	Primary: N/A Qualifying: N/A	Damper areas prone to invasion by willow/reed - tall-fen vegetation	Control of scrub is being undertaken through management agreements and as a consented operation.
Benacre to Easton Barents Lagoons UK0013104 TM524830	366.93	Primary: Coastal lagoons (priority feature). Qualifying: N/A	Primary: N/A Qualifying: N/A	Lagoons experiencing erosion and landwards movement of the confining barrier	Potential management actions being addressed through the Shoreline Management Plan Process.
Thanet Coast * UK0013107 TR348711	2,803.84 (OSPAR MPA = 2,761)	Primary: Reefs; submerged or partially submerged sea caves. Qualifying: N/A	Primary: N/A Qualifying: N/A	Soft upper chalk vulnerable to erosion and natural physical destruction. High levels of tourism and recreation. Commercial fishing, harvesting of bait and shellfish	Human activities evaluated with stakeholders and management agreed. New wildlife project established to draft agreed voluntary codes and promote the site.

Regional Sea 2- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
The Broads UK0013577 TG438209	5,865.6	Primary: Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.; natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation; transition mires and quaking bogs; calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> (priority feature); alkaline fens; alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) (priority feature). Qualifying: <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>).	Primary: desmoulin's whorl snail <i>Vertigo moulinsiana</i> , fen orchid <i>Liparis loeselii</i> Qualifying: otter <i>Lutra lutra</i>	Saline intrusion due to sea level rise and abstraction, eutrophication primarily from sewage outfalls, tourism, flooding	Environment Agency, Broads Authority and Natural England investigating options to remedy saline intrusion. Some sewage works now phosphorus stripping and programme of mud pumping to remove enriched material from lakes, followed by biomanipulation. Broads Authority considers tourism through the Broads Plan. Water Level Management plans and the Environmentally Sensitive Area scheme are starting to raise water levels. Flood defence works proceeding under the Environment Agency Broads Strategy
Essex Estuaries * UK0013690 TM103048	46,140.82 (OSPAR MPA = 38,246)	Primary: Estuaries; mudflats and sandflats not covered by seawater at low tide; <i>Salicornia</i> and other annuals colonising mud and sand; <i>Spartina</i> swards (<i>Spartinion maritimae</i>); Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>); Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>). Qualifying: Sandbanks which are slightly covered by sea water all the time.	Primary: N/A Qualifying: N/A	Coastal Squeeze- man-made sea defences prevent landward migration of these habitats in response to sea-level rise. Vulnerable to plans and projects that have impacts on sediment transport.	Natural England's regulation 33 advice was issued June 2000. A scheme of management is being established with the aim of addressing such problems.
Blean Complex UK0013697 TR111603	520.62	Primary: Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> . Qualifying: N/A	Primary: N/A Qualifying: N/A	Coppicing to maintain features of interest.	Coppice management in areas of site maintained as nature reserves by Natural England, Kent Wildlife Trust and the RSPB but has been difficult to maintain elsewhere.
Orfordness – Shingle Street UK0014780 TM440486	901.19	Primary: Coastal lagoons (priority feature); annual vegetation of drift lines; perennial vegetation of stony banks. Qualifying: N/A	Primary: N/A Qualifying: N/A	Recreational pressures.	Managed to limit recreational pressures. Must of the interest is self-sustaining with little need for intervention.

Regional Sea 2- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
The Wash and North Norfolk Coast * UK0017075 TF558403	107,761.28 (OSPAR MPA = 104,412)	Primary: Sandbanks which are slightly covered by sea water all the time; mudflats and sandflats not covered by seawater at low tide; large shallow inlets and bays; reefs; <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>); Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>). Qualifying: Coastal lagoons (priority feature).	Primary: common seal <i>Phoca vitulina</i> Qualifying: otter <i>Lutra lutra</i>	Coastal Squeeze as a result of land-claim and coastal defence works as well as sea-level rise and storm surges. Dredging and coastal protection works alter the sediment characteristics. Seal populations vulnerable to disturbance and disruption of marine ecosystem.	Management underway to address the decline in shellfisheries. Seal issues addressed through the Marine Scheme of Management.
North Norfolk Coast UK0019838 TF752445	3,207.37	Primary: Coastal lagoons (priority feature); perennial vegetation of stony banks; Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>); embryonic shifting dunes; shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'); fixed dunes with herbaceous vegetation ('grey dunes') (priority feature); humid dune slacks. Qualifying: N/A	Primary: N/A Qualifying: otter <i>Lutra lutra</i> , petalwort <i>Petalophyllum ralfsii</i>	Flood defence, sea-level rise, coastal retreat, water level, visitor pressure and habitat loss.	Issues being addressed by a Shoreline Management Plan, local biodiversity action plan, water level management plans, site management statements and Wildlife enhancement scheme agreements. The cSAC includes a number of National Nature Reserves.
Alde, Ore and Butley Estuaries * UK0030076 TM444509	1,561.53 (OSPAR MPA = 1,108)	Primary: Estuaries. Qualifying: Mudflats and sandflats not covered by seawater at low tide; Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>).	Primary: N/A Qualifying: N/A	Past canalisation and erosion together with sea -level rise has resulted in the loss of much of the saltmarsh.	There are plans for managed coastal retreat, which in the long term will result in the creation of saltmarsh.
Dew's Ponds UK0030133 TM387718	6.74	Primary: N/A Qualifying: N/A	Primary: great crested newt <i>Triturus cristatus</i> Qualifying: N/A	Remaining ponds in different ownership, are vulnerable to lack of appropriate management such as stocking with fish. Countryside management has been applied for and a site management plan will be prepared for these ponds.	Majority of ponds and grassland are under sympathetic conservation management from one landowner and therefore not vulnerable.
North Downs Woodlands UK0030225 TQ674629	287.58	Primary: <i>Asperulo-Fagetum</i> beech forests; <i>Taxus baccata</i> woods of the British Isles (Priority feature). Qualifying: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>).	Primary: N/A Qualifying: N/A	N/A	Yew woodland managed as minimum intervention. Beech woodland is managed as high forest with active encouragement of beech regeneration. Chalk grassland requires continuous grazing, which is not achieved over parts of this site.

Regional Sea 2- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Overstrand Cliffs UK0030232 TG235414	30.02	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts. Qualifying: N/A	Primary: N/A Qualifying: N/A	Landslips, coastal protection measures & possible artificial drainage of seepages to reduce slippages.	The current shoreline management plan allows for 'do nothing' therefore site is probably of low vulnerability.
Paston Great Barn UK0030235 TG322345	0.95	Primary: N/A Qualifying: N/A	Primary: barbastelle <i>Barbastella barbastellus</i> Qualifying: N/A	Sensitive to disturbance. Proposals to develop outbuildings.	Barn scheduled as an ancient monument. Natural England considers a sympathetic development with legally-binding safeguards to reduce disturbance to a minimum a sustainable approach to maintaining building and therefore the roost site. The barn will not be used at all during the breeding season.
Peter`s Pit UK0030237 TQ717628	28.3	Primary: N/A Qualifying: N/A	Primary: great crested newt <i>Triturus cristatus</i> Qualifying: N/A	Neglect resulting in invasion of the newt breeding ponds by scrub.	Natural England is working with site owners to make site secure nature reserve managed by a conservation organisation. Creation of clay-lined ponds within former arable fields should make it more likely that ponds will retain water long enough on the site to permit breeding.
Saltfleetby– Theddlethorpe Dunes and Gibraltar Point UK0030270 TF480906	960.2	Primary: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'); fixed dunes with herbaceous vegetation ('grey dunes') (priority feature); dunes with <i>Hippophae rhamnoides</i> ; humid dune slacks. Qualifying: Embryonic shifting dunes.	Primary: N/A Qualifying: N/A	Vulnerable to changes in sedimentation rates along the coast caused by coastal protection schemes further north. Disturbance and damage by tourists.	Majority of sites declared as National Nature Reserves.
Stodmarsh UK0030283 TR211612	564.64	Primary: N/A Qualifying: N/A	Primary: desmoulin`s whorl snail <i>Vertigo moulinsiana</i> Qualifying: N/A	N/A	Approximately half the site is managed as a National Nature Reserve, Remainder of the site is managed in a way that is compatible with nature conservation.
Dover to Kingsdown Cliffs UK0030330 TR372448	183.85	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts. Qualifying: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) (priority feature).	Primary: N/A Qualifying: N/A	Subject to natural coastal erosion, main pressure on cliff-top grassland which is being squeezed between the eroding cliff and arable land behind.	The cliff-top grassland requires grazing, but where this is not feasible mowing is the preferred management

Regional Sea 2- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Humber Estuary (candidate SAC) ² UK0030170 SE838110	36,657.15	Primary: Estuaries; mudflats and sandflats not covered by seawater at low tide. Qualifying: Sandbanks which are slightly covered by sea water all the time; coastal lagoons (priority feature); <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>); embryonic shifting dunes; shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'); fixed dunes with herbaceous vegetation ('grey dunes') (priority feature); dunes with <i>Hippophae rhamnoides</i> .	Primary: N/A Qualifying: sea lamprey <i>Petromyzon marinus</i> , river lamprey <i>Lampetra fluviatilis</i> , grey seal <i>Halichoerus grypus</i>	Subject to the impacts of human activities (past and present) as well as ongoing processes such as sea level rise and climate change. Key issues include coastal squeeze, impacts on the sediment budget, and geomorphological structure and function of the estuary, changes in water quality and flows, pressure from additional built development, and damage and disturbance arising from access, recreation and other activities.	Humber Flood Risk Management Strategy to address coastal squeeze. Diffuse pollution will be addressed through measures including implementation of the Waste Water Framework Directive and Catchment Sensitive Farming initiatives. Other measures include regulation of on-site land management activities.

Regional Sea 2- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Flamborough Head and Bempton Cliffs UK9006101 TA233723	212.17 + 2km seaward extension ²	N/A	(B) kittiwake.	Seabird: (B) puffin, razorbill, guillemot, herring gull, gannet, kittiwake.	Natural England is working with local regulatory bodies to identify relevant issues through the Sensitive Marine Area (SMA) project.	Natural England will continue to work on the setting of conservation objectives; identify key human activities which may affect the ornithological interest & identify the necessary survey management & monitoring systems.
Humber Flats, Marshes and Coast UK9006111	15,202.53	(B) little tern, marsh harrier; (OW) bar-tailed godwit, bittern, golden plover, hen harrier.	(OP) redshank, sanderling; (OW) dunlin, knot, redshank, shelduck.	Waterfowl: (OW) mallard, golden plover, bar-tailed godwit, shelduck, knot, dunlin, redshank, cormorant, dark-bellied brent goose, bittern, teal, curlew, pochard, goldeneye, oystercatcher, ringed plover, grey plover, lapwing, sanderling, black-tailed godwit, wigeon, whimbrel.	Human activities (past & present), sea level rise, climate change. Key issues include coastal squeeze, impacts on sediment budget and geomorphological structure and function of the estuary, changes in water quality and flow, pressure from additional built development.	Coastal squeeze being addressed through the development and implementation of the Humber Flood Risk Management Strategy. Proposals subject to assessment under Conservation (Natural Habitats, &c.) Regulations 1994. Humber management scheme developed by all relevant statutory bodies.

Regional Sea 2- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Hornsea Mere UK9006171 TA188469	231.2	N/A	(OW) gadwall	N/A	N/A	Natural England is working with the owners of Hornsea Mere and regulatory bodies to develop and agree a Heritage Management Plan. Issues regarding water levels, water quality and habitat management to ensure that the ornithological interests of the Mere safeguarded and will be addressed in the plan.
The Wash UK9008021 TF537403	62,211.66	(B) common tern, little tern, marsh harrier; (OW) avocet, bar-tailed godwit, golden plover, whooper swan.	(OP) ringed plover, sanderling; (OW) black-tailed godwit, curlew, dark-bellied brent goose, dunlin, grey plover, knot, oystercatcher, pink-footed goose, pintail, redshank, shelduck, turnstone.	Waterfowl: (OW) black-tailed godwit, avocet, golden plover, bar-tailed godwit, pink-footed goose, dark-bellied brent goose, shelduck, pintail, oystercatcher, grey plover, whooper swan, dunlin, sanderling, curlew, redshank, turnstone, little grebe, cormorant, white-fronted goose, wigeon, mallard, ringed plover, lapwing, knot, whimbrel.	Biological richness is largely dependent on the physical processes that dominate the natural systems and consequently the ecological vulnerability is closely linked to physical environment. Coastal squeeze as result of land-claim, coastal defence works, sea-level rise and storm surges, dredging, gas exploration.	Issues addressed in Wash Estuary Management Plan and by local Environment Agency plans and will be extended through Marine Scheme of Management which is now in progress.
Gibraltar Point UK9008022 TF565585	414.09	(B) little tern; (OW) bar-tailed godwit.	(OW) grey plover, knot.	Waterfowl: (OW) oystercatcher, knot, grey plover, bar-tailed godwit.	Sea defences, high number of visitors, seaborne pollution, particularly accidental discharge from shipping or from inshore oil and gas drilling operations.	The Ramsar site and SPA broadly coincide with the area declared as a National Nature reserve and managed for nature conservation by the local Wildlife Trust.
North Norfolk Coast UK9009031 TF745446	7,886.79	(B) avocet, bittern, common tern, little tern, marsh harrier, Mediterranean gull, roseate tern, sandwich tern; (OW) avocet, bar-tailed godwit, bittern, golden plover, hen harrier, ruff.	(B) redshank, ringed plover; (OP) ringed plover; (OW) dark-bellied brent goose, knot, pink-footed goose, pintail, redshank, wigeon.	Waterfowl: (OW) shelduck, avocet, golden plover, ruff, bar-tailed godwit, pink-footed goose, dark-bellied brent goose, wigeon, pintail, knot, redshank, bittern, white-fronted goose, dunlin, gadwall, teal, shoveler, common scoter, velvet scoter, oystercatcher, ringed plover, grey plover, lapwing, sanderling, cormorant.	Natural sea-level rise, storm surges and changes in erosion patterns, increasing interest in abstraction of groundwater for irrigation of arable land and large number of summer tourists.	Environment Agency investigating the establishment of freshwater habitats. Abstraction of groundwater addressed through application of provisions under the Habitat Regulations. A visitor management strategy has been developed through the Norfolk coast project. Large parts of the site are managed as Nature Reserves either directly by Natural England or through voluntary sector.

Regional Sea 2- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Minsmere–Walberswick UK9009101 TM476748	2,018.92	(B) avocet, bittern, little tern, marsh harrier, nightjar, woodlark; (OW) avocet, bittern, hen harrier.	N/A	N/A	Scrub and tree invasion.	Land managed by conservation organisations and positively by private landowners through ESA and Countryside Stewardship schemes. Shoreline Management plan.
Alde–Ore Estuary UK9009112 TM433487	2,416.87	(B) avocet, little tern, marsh harrier, sandwich tern; (OW) avocet.	(B) lesser black-backed gull; (OW) redshank.	Seabird: (B) herring gull, black-headed gull, lesser black-backed gull, little tern, sandwich tern. Waterfowl: (OW) black-tailed godwit, dunlin, lapwing, shoveler, teal, wigeon, shelduck, white-fronted goose, redshank, avocet.	Sea - level rise and coastal squeeze, flooding, human disturbance from recreation is minimal as this is a reasonably robust system.	The Environment Agency Local Environment Action Plan, Estuary Management Plan. Considerable part of site is managed sympathetically by Suffolk Wildlife Trust, National Trust, RSPB and Natural England.
Stour and Orwell Estuaries UK9009121 TM172331	3,676.92	(OW) hen harrier.	(OW) black-tailed godwit, dunlin, grey plover, pintail, redshank, ringed plover, shelduck, turnstone.	Waterfowl: (OW) cormorant, pintail, ringed plover, grey plover, dunlin, black-tailed godwit, redshank, shelduck, great crested grebe, curlew, dark-bellied brent goose, wigeon, goldeneye, oystercatcher, lapwing, knot, turnstone.	Increased port development and marine recreation, river dredging, and salt marsh erosion.	Estuary Management Plan, public enquiry, Habitats Regulations, beneficial dredging.
Hamford Water UK9009131 TM231251	2,187.21	(B) little tern; (OW) avocet, golden plover, ruff.	(OP) ringed plover; (OW) black-tailed godwit, dark-bellied brent goose, grey plover, ringed plover, teal.	Waterfowl: (OW) redshank, dunlin, lapwing, wigeon, shelduck, black-tailed godwit, grey plover, ringed plover, teal, dark-bellied brent goose, ruff, golden plover, avocet.	Natural changes in sea-level leading to accelerated erosion of saltmarshes. Discharge from boats and from local sewage works as well as small industrial discharges. Occasional disturbance due to water and jet skiers.	Reinforcement of beaches using dredged sand and gravel. Water quality control officers of the Environment Agency. Authorised discharges reviewed under provisions of Habitat Regulations. Wardening scheme.
Abberton Reservoir UK9009141 TL979182	726.2	(OW) golden plover.	(B) cormorant; (OW) gadwall, shoveler, teal.	Waterfowl: (OW) black-tailed godwit, lapwing, coot, goldeneye, tufted duck, pochard, pintail, wigeon, cormorant, great crested grebe, shoveler, teal, gadwall, golden plover.	Public water supply reservoir. Elevated nitrate levels leading in most summers to algal blooms.	The water company has a consultative committee which addresses conservation issues at all its sites, and the Abberton Reserve committee (involving Essex Wildlife Trust and EN) addresses local issues.

Regional Sea 2- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Benfleet and Southend Marshes UK9009171 TQ861845	2,251.31	N/A	(OP) ringed plover; (OW) dark-bellied brent goose, grey plover, knot.	Waterfowl: (OW) dunlin, ringed plover, oystercatcher, knot, grey plover, dark-bellied brent goose.	Coastal squeeze, wildfowling and cockle fishing, dredging, herbicides and low rainfall.	Sea fisheries regulated by Kent and Essex Sea Fisheries. The Environment Agency has instituted a Water Management Plan. Sewage outfalls recently upgraded to comply with EC Directives. Most of the foreshore is a Local Nature Reserve and covered by the Thames Estuary Management Plan.
Breydon Water UK9009181 TG453047	1,202.94	(B) common tern; (OW) avocet, Bewick's swan, golden plover.	N/A	Waterfowl: (OW) black-tailed godwit, dunlin, lapwing, shoveler, wigeon, white-fronted goose, cormorant, golden plover, avocet, Bewick's swan.	Robust ecosystem. Efficient drainage, recent droughts and poor water management systems have adversely affected the wet grassland part of the site.	A water level management plan and a feasibility study to overcome water resource problems- hoped scheme will commence shortly with MAFF support. Environment Agency Broads Strategy-area falls within the Broads National Park.
Dengie (Mid-Essex Coast Phase 1) UK9009242 TM045033	3,127.23	(OW) bar-tailed godwit, hen harrier.	(OW) grey plover, knot.	Waterfowl: (OW) black-tailed godwit, dunlin, lapwing, oystercatcher, dark-bellied brent goose, cormorant, great crested grebe, knot, grey plover, bar-tailed godwit.	Erosion of intertidal habitats.	Shoreline Management Plan for Essex coast. Fishery controls- Kent and Essex sea fisheries committee.
Colne Estuary (Mid-Essex Coast Phase 2) UK9009243 TM040172	2,701.43	(B) little tern; (OW) avocet, golden plover, hen harrier.	(OW) dark-bellied brent goose, redshank.	Waterfowl: (OW) black-tailed godwit, dunlin, lapwing, grey plover, ringed plover, shelduck, cormorant, great crested grebe, redshank, dark-bellied brent goose, golden plover, avocet.	Coastal squeeze, changes to sediment budget, recreational pressures, low water levels, unregulated samphire harvesting.	Beach feeding, most grazing marshes managed under ESA/Countryside Stewardship Agreements, Estuarine management plan is in preparation which will work alongside Essex SMP and the emerging Marine scheme of management. Environment Agency's local plan aims to reduce the nutrient enrichment arising from sewage and fertiliser run-off.

Regional Sea 2- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) UK9009244 TQ881970	1,735.58	N/A	(OW) dark-bellied brent goose.	N/A	Coastal squeeze, changes to sediment budget and recreational use of sea wall footpaths.	Recreational issues will be tackled through the management scheme for this European marine site. Countryside stewardship agreements or management agreements with Natural England. Marine scheme of management is in preparation which will work alongside the Essex Shoreline Management Plan.
Blackwater Estuary (Mid-Essex Coast Phase 4) UK9009245 TL978100	4,395.15	(B) little tern; (OW) avocet, golden plover, hen harrier, ruff.	(OP) ringed plover; (OW) black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, redshank, ringed plover, shelduck.	Waterfowl: (OW) great crested grebe, golden plover, ruff, dark-bellied brent goose, shelduck, ringed plover, grey plover, dunlin, avocet, redshank, curlew, cormorant, wigeon, teal, pintail, shoveler, goldeneye, red-breasted merganser, lapwing, black-tailed godwit.	Coastal erosion, nutrient enrichment, water-based recreation and drought.	A Shoreline Management Plan has been prepared for the Essex coast which seeks to provide a blueprint for managing the coastline sustainably. Nutrient enrichment - Essex Estuaries candidate SAC scheme of management as well as a review of discharge consents under the Habitats Regulations. Water-based recreation- Blackwater Estuary Management Plan. Drought - pumping water and use of tertiary treated sewage effluent.
Foulness (Mid-Essex Coast Phase 5) UK9009246 TR024902	10,968.9	(B) avocet, common tern, little tern, sandwich tern; (OW) avocet, bar-tailed godwit, golden plover, hen harrier.	(OP) redshank; (OW) dark-bellied brent goose, grey plover, knot, oystercatcher.	Waterfowl: (OW) redshank, curlew, black-tailed godwit, dunlin, lapwing, wigeon, shelduck, little grebe, knot, grey plover, oystercatcher, dark-bellied brent goose, bar-tailed godwit, golden plover, avocet.	Erosion, drought, offshore aggregate dredging and seismic surveys.	Dredging and surveys addressed through the Essex Estuaries marine Special Area of Conservation (SAC) management scheme. Soft sea defence measures, managed retreat and foreshore recharge. Main ditch in area of grazing marsh deliberately fed with sea water to keep it topped up.

Regional Sea 2- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Broadland UK9009253 TG430211	5,462.4	(B) bittern, marsh harrier; (OW) Bewick's swan, bittern, hen harrier, ruff, whooper swan.	(OW) gadwall, pink-footed goose, shoveler.	Waterfowl: (OW) cormorant, Bewick's swan, whooper swan, ruff, pink-footed goose, gadwall, bittern, great crested grebe, coot, bean goose, white-fronted goose, wigeon, teal, pochard, tufted duck, shoveler.	Saline Intrusion, eutrophication, recreation.	Saline intrusion- Environment Agency, Broads Authority and Natural England are proceeding with a project. Eutrophication- Mud pumping to remove enriched material from lakes. Recreation - Broads Authority via the Broads Plan. Flood defence works carried out in accordance with the Environmental Agency Broads Strategy.
Deben Estuary UK9009261 TM294435	978.93	(OW) avocet.	N/A	N/A	Sea level rise and coastal squeeze.	Addressed through Environment Agency LEAP, the estuary shoreline management plan and research into possible managed retreat in parts of the site.
Great Yarmouth North Denes UK9009271 TG488216	149.19	(B) little tern.	N/A	N/A	Little Tern colonies dependent upon the maintenance of high accreting beaches. Coast protection schemes have potential to disrupt or reduce sediment supply	Beach management plans required before protection works proceed. These require mitigation measures should an adverse impact occur in the future. Wardening jointly undertaken by the RSPB and EN, with agreement of Gt Yarmouth Borough Council.
Benacre to Easton Barents UK9009291 TM524830	516.83	(B) bittern, little tern, marsh harrier; (OW) bittern.	N/A	N/A	Sea level rise and lagoon erosion	New lagoons created further back from coast and erosion addressed through the Shoreline Management Plan.
The Swale UK9012011 TQ976663	6,514.71	(B) avocet, marsh harrier, Mediterranean gull; (OW) avocet, bar-tailed godwit, golden plover, hen harrier.	(OP) ringed plover; (OW) black-tailed godwit, grey plover, knot, pintail, redshank, shoveler.	Waterfowl: (OW) white-fronted goose, golden plover, bar-tailed godwit, pintail, shoveler, grey plover, knot, black-tailed godwit, redshank, avocet, cormorant, curlew, dark-bellied brent goose, shelduck, wigeon, gadwall, teal, oystercatcher, lapwing, dunlin, little grebe.	Rapid erosion, disturbance by water borne recreation	Research on mudflat recharge using dredging spoil is being investigated as a means of countering erosion. Water borne recreation- as part of estuary management plan. The effects of abstraction on availability of water will be addressed through the consent review process under the Habitats Regulations.

Regional Sea 2- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Thames Estuary and Marshes UK9012021 TQ802795	4,838.94	(OW) avocet, hen harrier.	(OP) ringed plover; (OW) ringed plover.	Waterfowl: (OW) redshank, black-tailed godwit, dunlin, lapwing, grey plover, shoveler, pintail, gadwall, shelduck, white-fronted goose, little grebe, ringed plover, avocet, whimbrel.	Coastal squeeze, erosion, water borne recreation and development pressure	Natural England in discussion with the port authority on role of port dredging in intertidal habitat loss. Water level management plan. Effects of development addressed through Habitats Regulations 1994
Greater Thames Estuary (Proposed SPA)		red-throated diver, black-throated diver	N/A	N/A		
Medway Estuary and Marshes UK9012031 TQ862703	4,684.36	(B) avocet, little tern; (OW) avocet.	(OP) ringed plover; (OW) black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, pintail, redshank, ringed plover, shelduck.	Waterfowl: (OW) little grebe, dark-bellied brent goose, shelduck, pintail, ringed plover, grey plover, dunlin, avocet, redshank, curlew, great crested grebe, cormorant, wigeon, teal, oystercatcher, lapwing, black-tailed godwit, whimbrel.	Rapid erosion, disturbance by water borne recreation.	Research on mudflat recharge using dredging spoil is being investigated as a means of countering erosion. Effects of abstraction on availability of water will be addressed through consent review process under the Habitats Regulations. Pressures from proposed transport/industrial developments are being addressed through planning system and under the provisions of the Habitats Regulations.
Thanet Coast and Sandwich Bay UK9012071 TR355617	1,870.16	N/A	(OW) turnstone.	N/A	Watersport disturbance, port access road, oil spills, eutrophication	Recreational issues will be tackled through the management scheme for the European marine site. Oil spill contingency plans to be kept updated. Eutrophication - review of consents under Habitat Regulations and site management statements.

Regional Sea 2- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Stodmarsh UK9012121 TR211610	481.33	(OW) bittern, hen harrier.	N/A	N/A	Much of Stodmarsh is a National Nature Reserve and therefore is relatively well managed. Privately owned parts are affected by disturbance. Water supply problems.	Disturbance to birds addressed through Site Management Statements. Abstraction licences will be reviewed under provisions of the Habitat Regulations. Private sites- production of site management statements. Landowners encouraged to put land into the Countryside Stewardship scheme.
Sandlings UK9020286 TM359479	3,391.8	(B) nightjar, woodlark.	N/A	N/A	Sanderlings SPA comprises 6 SSSIs. Sandlings forest is largest of the 6 SSSIs. Lack of management resulted in heathland SSSI being subjected to successional changes. Travellers caravans on sites a problem.	Maintenance of open forest areas by clear felling practice. Maintenance of earmarked areas for woodlark and Nightjar habitat. These objectives included in the East Anglia Forest District Strategic Plan. Restoration of more typical heathland habitat through habitat management work under the Countryside Stewardship Scheme and Tomorrows Heathland Heritage. Digging on trenches and earth barrier construction proving effective against travellers.

A3j.9.3 Regional Sea 3

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
The New Forest UK0012557 SU225075	29262.36	Primary: Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Depressions on peat substrates of the <i>Rhynchosporion</i> , Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests, Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains, Bog woodland, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) Qualifying: Transition mires and quaking bogs, Alkaline fens	Primary: Southern damselfly <i>Coenagrion mercurial</i> , Stag beetle <i>Lucanus cervus</i> Qualifying: Great crested newt <i>Triturus cristatus</i>	Drainage of wetland habitats for improved grazing and forestry, afforestation of heathland habitats with conifers and other non-native species, essential grazing by commoners' animals is vulnerable to current economic trends, increased recreational pressures.	Issues are being through the emerging cSAC Management Plan, the proposed National Park, and supplementary funding for restoration, e.g. LIFE funding. Preliminary actions are being taken out with a view to carrying out restoration over the next 20-50 years.
River Itchen UK0012599 SU467174	309.26	Primary: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation Qualifying: N/A	Primary: Southern damselfly <i>Coenagrion mercurial</i> , Bullhead <i>Cottus gobio</i> Qualifying: White-clawed (or Atlantic stream) crayfish, <i>Austropotamobius pallipes</i> , Brook lamprey <i>Lampetra planeri</i> , Atlantic salmon <i>Salmo salar</i> , Otter <i>Lutra lutra</i>	A decrease in flow velocities and increase in siltation attributable to abstraction and low flows has affected macrophyte cover (especially <i>Ranunculus</i>) since 1990 and aided the increase in filamentous algae and nutrient-tolerant macrophytes.	The EA is initiating a major study of macrophytes to develop a predictive model to aid decisions about water abstraction limits. Efforts are being made to increase the viability of the southern damselfly through population studies and a Species Action Plan.
Kingley Vale UK0012767 SU824110	208.05	Primary: <i>Taxus baccata</i> woods of the British Isles * Priority feature Qualifying: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	Primary: N/A Qualifying: N/A	Yew conservation, threat to characteristic chalk grassland from scrub invasion.	The maintenance of nurse scrub habitat and the regulation of numbers of resident deer are being addressed as part of yew conservation. Cutting and grazing regimes adequately counter the decline of chalk grassland.
Lewes Downs UK0012832 TQ441093	146.86	Primary: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	Encroachment of scrub on chalk grassland, leaching and spray-drift are potential threats where arable land meets the boundary	Encroachment by scrub is prevented by cutting and grazing animals

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Lydden and Temple Ewell Downs UK0012834 TR277454	61.7	Primary: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	Reduced grazing threatens the interest of this area (chalk grassland)	Grant-aid (via English Nature's Reserves Enhancement Scheme and Countryside Stewardship) and discussion with land managers are being used to encourage traditional management
Folkestone to Etchinghill Escarpment UK0012835 TR183388	181.94	Primary: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	Intensification of livestock grazing through grassland improvement	Grassland improvement is currently managed by entering into management agreements with the owner. English Nature and Countryside Stewardship agreements exist on the site.
Castle Hill UK0012836 TQ372066	114.68	Primary: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	The site is surrounded by arable land, so leaching and spray-drift are potential threats. Scrub encroachment is a threat to chalk grassland.	Grazing by sheep and cattle to conserve and enhance plant (and associated animal) species diversity on chalk grassland, both cutting and grazing prevent scrub encroachment. The site is a National Nature Reserve leased to English Nature from the local authority.

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Avon UK0013016 SU124339	498.24	Primary: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation Qualifying: N/A	Primary: Desmoulin's whorl snail <i>Vertigo moulinsiana</i> , Sea lamprey <i>Petromyzon marinus</i> , Brook lamprey <i>Lampetra planeri</i> , Atlantic salmon <i>Salmo salar</i> , Bullhead <i>Cottus gobio</i> Qualifying: N/A	Vulnerability in the system is derived from historical modifications for mills, water meadows and more recently land drainage, abstraction of water for public supply and agricultural uses, disposal of sewage effluents, management of the water courses for fishery, agricultural and other uses. Resultant threats include reduced flows, elevated nutrient levels and changes to sediment processes resulting from channel modifications.	Full restoration of the conservation status of the qualifying features needs to address land use activities on a catchment scale through Local Environment Action Plans, Catchment Abstraction Plans and Water Level Management Plans as well as through management agreements with landowners/occupiers. A LIFE UK Rivers project has been started (1999) to enhance understanding and trial remedial treatments. Reviews of abstraction licences and discharge consents under the Habitats Regulations will help to address some of the water quality and quantity issues. Several projects are being undertaken to address these issues, including modification of abstraction and discharges through the 1999 UK Water Company Price Review, and a Landcare Project to address diffuse pollution issues.
Dungeness UK0013059 TR075175	3223.56	Primary: Annual vegetation of drift lines, Perennial vegetation of stony banks Qualifying: N/A	Primary: Great crested newt <i>Triturus cristatus</i> Qualifying: N/A	The shingle vegetation is vulnerable to disturbance by vehicles and walkers, although the coastal shingle (drift-line) vegetation has much greater potential for recovery than the perennial vegetation of shingle banks that occurs further inland. Water abstraction may have damaged some of the shingle wetlands. Open, unshaded areas of wetland supporting the great crested newt have declined since the 1950s, being taken over by willow. There are possible air quality issues from a nearby airport.	Management of willow by hand has been undertaken and restoration of light grazing is being investigated. Damage to shingle wetlands will be addressed through the relevant review provisions of the Habitats Regulations.

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Isle of Wight Downs UK0016254 SZ373857	461.8	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) Qualifying: N/A	Primary: Early gentian <i>Gentianella anglica</i> Qualifying: N/A	Semi-natural dry grassland and dry heath are at risk of scrub encroachment due to loss of grazing. Recreational pressure results in damage from trampling affects on parts of the site. Vegetated sea cliffs are vulnerable to cliff stabilisation schemes.	Issues are being addressed through a number of mechanisms including coastal strategies, management plans and management agreements. All future developments will be assessed for adverse effects on integrity under the Habitats Regulations.
Solent and Isle of Wight Lagoons UK0017073 SZ608977	36.24	Primary: Coastal lagoons * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	Threats include water quality due to industrial waste disposal/landfill/discharges and diffuse pollution occurring off the site, the effects of sea-level rise, coastal defence, water level management/slucice maintenance.	Issues are being addressed through a number of mechanisms including the review of consents procedure under the Habitats Regulations, Biodiversity Action Plans, other coastal strategies, Water Level Management Plans and management agreements. All future developments will be assessed for any adverse effects on integrity under the Habitats Regulations.
Chesil and the Fleet * UK0017076 SY630795	1631.63 (OSPAR MPA = 1,238)	Primary: Coastal lagoons * Priority feature, Annual vegetation of drift lines, Perennial vegetation of stony banks, Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>) Qualifying: Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>)	Primary: N/A Qualifying: N/A	Shingle beach and its plant communities may be sensitive to changes in natural coastal processes, e.g. through sea defences. The main concern for the Fleet is water quality – blooms of blue green algae occur. The site is close to one of the world's busiest shipping lanes and consequently there is a risk of accidental oil pollution. Licence has been given for offshore oil exploration nearby. Recreational pressure on the Fleet is small and locally there is cultivation of shellfish	Algal blooms are being investigated by the Environment Agency. Offshore oil exploration is carried out under strict guidelines that take account of nature conservation interests. Recreation and shellfish cultivation not thought to be serious concerns provided they remain at their present scale.

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Dorset Heaths UK0019857 SY887835	5730.73	Primary: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Depressions on peat substrates of the <i>Rhynchosporion</i> Qualifying: Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>), Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * Priority feature, Alkaline fens, Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains	Primary: Southern damselfly <i>Coenagrion mercuriale</i> Qualifying: Great crested newt <i>Triturus cristatus</i>	Vulnerability in this area is derived from fragmentation through extensive losses to agriculture, forestry and urban development. Many heaths in or near urban areas suffer recreational pressure and a high incidence of wildfires, and are sometimes also disturbed by infrastructure works. The heaths are affected by several old mineral extraction permissions, some still active. A decline in traditional agriculture has led to a spread of scrub and woodland (conifer and Rhododendron).	Land-use changes have been almost halted through changes in national and local policy. Mineral extraction will require review under the Habitats Regulations to ensure no adverse effect on integrity. Agreement has been reached on drawing back the possible working of some permissions. In and around urban areas there are initiatives to manage and contain recreation uses and control the occurrence/spread of fires. Financial support schemes and management initiatives which aid the removal of scrub and encourage the re-establishment of traditional management (e.g. grazing) now cover much of the area. About 43% of the site is now held as NNRs, LNRs and non-statutory nature reserves. Heath fragmentation is being addressed through re-creation projects to expand and link heath fragments by removing areas of conifer plantation and converting some agricultural land back to heathland.
Isle of Portland to Studland Cliffs UK0019861 SY840802	1447.5	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) Qualifying: Annual vegetation of drift lines	Primary: Early gentian <i>Gentianella anglica</i> Qualifying: N/A	Vulnerability on this site is derived from, continued cliff erosion and in a few places, the zone of natural cliff-top vegetation is narrow and the interest of this strip will deteriorate as cliffs retreat into agricultural land. Part of the site is subject to an existing blockstone quarrying permission. Locally, recreational pressure is high.	The issues of coastal erosion and defence will be addressed through Shoreline Management Plans currently being developed by the district councils. The maintenance of establishment of suitable grazing regimes is being dealt with through site management statements. Management to alleviate any local problems is carried out by local authorities as part of their management of the Heritage Coast. The quarrying permission will be reviewed under the provisions of the Habitats Regulations.

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
St Albans Head to Durlston Head UK0019863 SZ006770	287.22	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) * Priority feature Qualifying: N/A	Primary: Early gentian <i>Gentianella anglica</i> Qualifying: Greater horseshoe bat <i>Rhinolophus ferrumequinum</i>	There is a threat of <i>Brachypodium</i> becoming dominant and also scrub encroachment. Climbers are also be responsible for trampling sensitive cliff-top vegetation.	The majority of this land is owned by a voluntary conservation organisation (who are in receipt of Government grant-aid) or by local Government and is being managed for nature conservation and amenity use. Extensive grazing by cattle is desirable as it would maintain the biodiversity of the grassland, reduce the threat of <i>Brachypodium</i> becoming dominant and address the localised problem of scrub encroachment. A management agreement is held over part of the site and English Nature also advises on the management of the nature conservation interests. The local authority carries out surveys on the orchid population. Trampling by climbers is being addressed through a Climbing Forum.

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Dorset Heaths (Purbeck and Wareham) and Studland Dunes UK0030038 SZ024839	2221.94	<p>Primary: Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) * Priority feature, Humid dune slacks, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Northern Atlantic wet heaths with <i>Erica tetralix</i>, Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> * Priority feature, European dry heaths, Depressions on peat substrates of the <i>Rhynchosporion</i>, Bog woodland * Priority feature</p> <p>Qualifying: Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * Priority, Alkaline fens, Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains</p>	<p>Primary: Southern damselfly <i>Coenagrion mercuriale</i> Qualifying: Great crested newt <i>Triturus cristatus</i></p>	<p>Vulnerability in this area is derived from fragmentation through extensive losses to agriculture, forestry and urban development. Many heaths in or near urban areas suffer recreational pressure and a high incidence of wildfires, and are sometimes also disturbed by infrastructure works. The heaths are affected by several old mineral extraction permissions, some still active. A decline in traditional agriculture has led to a spread of scrub and woodland (conifer and Rhododendron). The main threat to the dune habitats would be erosion of the dune system due to high visitor pressure.</p>	<p>Land-use changes have been almost halted through changes in national and local policy. Mineral extraction will require review under the Habitats Regulations to ensure no adverse effect on integrity. Agreement has been reached on drawing back the possible working of some permissions. In and around urban areas there are initiatives to manage and contain recreation uses and control the occurrence/spread of fires. Financial support schemes and management initiatives which aid the removal of scrub and encourage the re-establishment of traditional management (e.g. grazing) now cover much of the area. About 43% of the site is now held as NNRs, LNRs and non-statutory nature reserves. Heath fragmentation is being addressed through re-creation projects to expand and link heath fragments by removing areas of conifer plantation and converting some agricultural land back to heathland. Dune erosion is largely abated through management by English Nature and the National Trust. Studland Dunes is covered by an English Nature management plan in order to optimise the diversity of species present. Using this plan other threats to the habitats, such as scrub invasion, are being tackled in a systematic manner.</p>

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Solent Maritime * UK0030059 SU756003	11325.09 (OSPAR MPA = 9,339)	Primary: Estuaries, Spartina swards (Spartinion maritimae), Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Qualifying: Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by seawater at low tide, Coastal lagoons * Priority feature, Annual vegetation of drift lines, Perennial vegetation of stony banks, Salicornia and other annuals colonising mud and sand, Shifting dunes along the shoreline with Ammophila arenaria (‘white dunes’)	Primary: N/A Qualifying: Desmoulin’s whorl snail <i>Vertigo moulinsiana</i>	Vulnerability in this area is primarily derived from proposed flood defence and coast protection works, coastal squeeze of intertidal habitats due to coastal erosion/sea-level rise and sea-walls/ development in the hinterland, developments pressures including ports, marinas, jetties etc., potential accidental pollution from shipping, oil/chemical spills, heavy industrial activities, former waste disposal sites and waste-water discharge, introduction of non-native species e.g. from shipping activity.	Issues are being addressed through a number of mechanisms including the review of consents procedure under the Habitats Regulations, the Management Scheme for European Marine Sites, Biodiversity Action Plans, other coastal strategies, management plans and management agreements. All future developments will be assessed for adverse effects on integrity under the Habitats Regulations.
South Wight Maritime * UK0030061 SZ462771	19862.71 (OSPAR MPA = 19,587)	Primary: Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, Submerged or partially submerged sea caves Qualifying: N/A	Primary: N/A Qualifying: N/A	The following factors affect or potentially threaten the South Wight Maritime cSAC: existing and proposed coast protection work, coastal squeeze of cliff habitats due to erosion, development or intensive agriculture in the hinterland, sewage disposal, accidental pollution from shipping activity, development in the intertidal/subtidal, commercial and recreational activities such as dredging and dredged spoil disposal, fishing and boating, introduction of non-native species, e.g. from shipping activity, marine aggregate extraction (off-site).	These issues are being addressed through a number of mechanisms including the review of consents procedure under the Habitats Regulations, the Management Scheme for European Marine Sites, Biodiversity Action Plans, other coastal strategies, management plans and management agreements. All future developments will be assessed for adverse effects on integrity under the Habitats Regulations.
Emer Bog UK0030147 SU394214	37.5	Primary: Transition mires and quaking bogs. Qualifying: N/A	Primary: N/A Qualifying: N/A	The principal threat to this site is considered to be adjacent land-use which affects the hydrological processes acting on the mire. This also includes nutrient-enrichment and potential development.	English Nature will be exploring mechanisms that can be put in place to curtail damaging agricultural activities in the vicinity of the site. The mire is managed as a nature reserve and the site’s importance has been raised through the Local Plan process to ensure that impacts of development proposals are fully considered.

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Hastings Cliffs UK0030165 TQ866111	183.72	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts. Qualifying: N/A	Primary: N/A Qualifying: N/A	The nature of this soft eroding material results in extensive landslides, with vegetation changing from year to year. The effects on the rate of erosion by surrounding coastal protection measures and offshore activities are unknown but may have an impact. The SAC includes part of a country park where there are pressures to manage visitors. Habitats and footpaths erode rapidly, particularly during winter storms, as a result of the undulating nature of the cliffs with their soft constituents. Adjacent farming practices may also be having an effect on the vegetation.	Not indicated
Briddlesford Copses UK0030328 SZ548907	167.22	Primary: N/A Qualifying: N/A	Primary: Bechstein's bat <i>Myotis bechsteinii</i> Qualifying: N/A	Substantial areas of the site are open to the public. There is a presence of non-native trees.	The site is owned by the Forestry Commission who undertake timber extraction operations according to an English Nature-assented Forest Design Plan which aims to gradually remove non-native trees from the canopy. Broadleaved and mixed woodland are generally considered to be robust habitats and therefore will not be adversely affected by these activities. The majority of the site is owned and managed by the Peoples' Trust for Endangered Species and is subject to a Forestry Commission Woodland Grant Scheme.

Regional Sea 3- SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Dover to Kingsdown Cliffs UK0030330 TR372448	183.85	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts. Qualifying: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) (important orchid sites) * Priority feature	Primary: N/A Qualifying: N/A	This site is an undefended sea cliff subject to natural coastal erosion. The main pressure is on cliff-top grassland, which is being squeezed between the eroding cliff and arable land behind. However, erosion rates are such that the features of the site will be preserved, within the existing site boundary, for at least the next 25 years. There are no immediate pressures on the vegetated sea cliff habitat.	The cliff-top grassland requires grazing, but where this is not feasible mowing is the preferred management.

Regional Sea 3- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Chesil Beach and The Fleet UK9010091 SY633792	748.11	(B) little tern	(OW) dark-bellied brent goose	N/A	Shingle beach and its plant communities may be sensitive to changes in natural coastal processes, e.g. through sea defences. The main concern for the Fleet is water quality – blooms of blue green algae occur. The site is close to one of the world's busiest shipping lanes and consequently there is a risk of accidental oil pollution. Licence has been given for offshore oil exploration nearby. Recreational pressure on the Fleet is small and locally there is cultivation of shellfish	Algal blooms are being investigated by the Environment Agency. Offshore oil exploration is carried out under strict guidelines that take account of nature conservation interests. Recreation and shellfish cultivation not thought to be serious concerns provided they remain at their present scale.

Regional Sea 3- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Dorset Heathlands UK9010101 SY887834	8168.79	(B) dartford warbler, nightjar , woodlark (OW) hen harrier, merlin	N/A	N/A	Vulnerability in this area is derived from fragmentation through extensive losses to agriculture, forestry and urban development. Many heaths in or near urban areas suffer recreational pressure and a high incidence of wildfires, and are sometimes also disturbed by infrastructure works. The heaths are affected by several old mineral extraction permissions, some still active. A decline in traditional agriculture has led to a spread of scrub and woodland (conifer and Rhododendron).	Land-use changes have been almost halted through changes in national and local policy. Mineral extraction will require review under the Habitats Regulations. Agreement has been reached on drawing back the working of some permissions. In and around urban areas there are initiatives to manage and contain recreation uses and control the occurrence/spread of fires. Financial support schemes and management initiatives which aid the removal of scrub and encourage the re-establishment of traditional management (e.g. grazing) now cover much of the area. About 43% of the site is now held as NNRS, LNRs and non-statutory nature reserves. Heath fragmentation is being addressed by removing areas of conifer plantation and converting some agricultural land back to heathland.

Regional Sea 3- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Poole Harbour UK9010111 SY982869	2271.99	(B) common tern, mediterranean gull (OP) aquatic warbler, little egret; (OW) avocet , little egret	(OW) black-tailed godwit, shelduck	A wetland of international importance: (OW) redshank, curlew, dunlin, red-breasted merganser, goldeneye, pochard, shoveler, dark-bellied Brent goose, cormorant, black-tailed godwit, shelduck, avocet, little egret.	Vulnerability of this area is primarily from the growth of an urban conurbation along its north shore, together with associated infrastructure, and development of a commercial port, marinas and moorings. In recent years, further encroachment by development has been almost halted by changes in national and local policy. Dredging to provide navigation may impact on intertidal habitat. There is recent evidence that Manilla clam is becoming naturalised within the Harbour following small scale commercial introduction. Die back of <i>Spartina anglica</i> is also affecting the site. Several sewage treatment plants discharge into the harbour and Wytch Farm oilfield has facilities within the site. There are impacts from wildfowling and drainage.	Most of Poole Harbour falls under the authority of Poole Harbour Commissioners and management policies are in place. Recreation pressures are addressed by an Aquatic Management (Zoning) Plan. Dredging will be addressed through national policy requirements on sustainable coastal management. Potential problems from the Manilla clam will be examined by the steering group. Die back of <i>Spartina anglica</i> is monitored by the Institute of Terrestrial Ecology. The EA monitors water quality in the harbour. The Wytch Farm oilfield facilities are maintained and risks from oil spills are dealt with according to agreed method statements and oil spill contingency plans. Recent studies have addressed bait digging. Most of the wildfowling in the Harbour is under control of the Dorset Wildfowling Association and is regulated by a management plan. The impact of drainage on grazing marshes is being addressed through Water level Management Plans

Regional Sea 3- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Chichester and Langstone Harbours UK9011011 SU761014	5810.03	(B) little tern, sandwich tern; (OP) little egret; (OW) bar-tailed godwit, little egret	(OP) ringed plover; (OW) black-tailed godwit, dark-bellied Brent goose, dunlin, grey plover, redshank, ringed plover	A wetland of international importance: (OW) wigeon, bar-tailed godwit, dark-bellied Brent goose, ringed plover, grey plover, dunlin, black-tailed godwit, redshank, little grebe, Little egret, Shelduck, Curlew, Teal, Pintail, Shoveler, red-breasted merganser, oystercatcher, Lapwing, Knot, sanderling, cormorant, whimbrel.	Langstone Harbour is fringed by urban and industrial development, whereas Chichester is surrounded mainly by high grade farmland. The site is subjected to significant recreational pressures and effluent discharges and agricultural run-off can lead to localised eutrophication problems – elevated nutrient levels are maintained by inputs from coastal waters. Sea-level rise and 'coastal squeeze' are significant threats to the habitat diversity and structural integrity. Incremental loss of fringing habitats and transitional communities is a threat as hard coastal defences are maintained by riparian land-owners.	A strategy for managing sea defences, incorporating set-back, is currently being prepared by the Environment Agency. Impact on the site from water abstraction is being investigated by the EA. Both harbours are managed by statutory bodies whose remits include conservation of the natural environment. Conservation bodies have an advisory input to the management of the harbours, and play an active role in the management of numerous Local Authority and RSPB nature reserves around the site. Additional measures to reduce the effects of recreational activity are expected to be applied via the Management Scheme for the Solent Maritime candidate SAC.

Regional Sea 3- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
New Forest UK9011031 SU242030	28002.81	(B) dartford warbler, honey buzzard, nightjar, woodlark; (OW) hen harrier	N/A	N/A	The site is subject to recreational pressure shown to adversely affect populations of woodlark elsewhere though the population in the New Forest is currently at a high level. A recent decline in waders; redshank, lapwing, curlew and snipe may in part be due to the effects of walkers and particularly those with dogs, as well as low water levels affecting the wetland habitats. Most of the valley mires in the Forest have been damaged in the past by drainage which has caused drying out of the peat layers.	Good habitat management is also relevant for maintaining populations of woodlark and Dartford warbler and this is achieved through the grazing, cutting and burning of gorse and heather to provide a diverse age structure and prevent succession to woodland. Prevention of further erosion has already been tackled on some sites but a more extensive programme of infilling drainage ditches is currently being discussed with the landowners and commoners. The work to restore valley mires systems is expected to influence these bird populations in time. Steps are being taken to deal with recreational pressures. The Forestry Commission is carrying out an exercise to educate the dogwalking public during the nesting season. Further monitoring and research on the effects that recreational pressures have on ground-nesting birds is considered essential.

Regional Sea 3- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Portsmouth Harbour UK9011051 SU616036	1248.77	N/A	(OW) dark-bellied Brent goose	N/A	Portsmouth Harbour is vulnerable to: modification of physical processes through large-scale land-claim, capital and maintenance dredging, sea defences and resultant effects on the extent and distribution of intertidal habitats, sea-level rise and issues related to Coastal Squeeze, maintenance and development of both commercial and military ports, accidental pollution from shipping and heavy industrial activities, former military and waste disposal sites, re-distribution of contaminated sediments, high-levels of recreational pressure both on shore and offshore which can have disturbance effects during sensitive (over-wintering) periods.	The Portsmouth Harbour Plan (non-statutory) aims to address many management issues. Others will be dealt with through on-going casework, joint projects with outside organisations e.g. Intertidal Sediment Recharge, monitoring of saltmarsh erosion and Site Management Statements. Other more strategic issues will be addressed through the proposed Management Scheme covering European Marine Sites within the Solent complex of estuaries.

Regional Sea 3- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Solent and Southampton Water UK9011061 SZ335936	5505.86	(B) common tern, little tern, mediterranean gull, roseate tern, sandwich tern	(OW) black-tailed godwit, dark-bellied Brent goose branta, ringed plover, teal	A wetland of international importance: gadwall, teal, ringed plover, black-tailed godwit, little grebe, great crested grebe, cormorant, dark-bellied Brent goose, wigeon, redshank, pintail, shoveler, red-breasted merganser, grey plover, lapwing, dunlin, curlew, shelduck	A number of sensitivities have developed in the area due to previous flood and coastal defence works, land-claim and dredging operations that have modified physical processes and sediment transfer patterns which can have a knock-on effect on the extent and distribution of intertidal habitats; sea-level rise and issues related to coastal squeeze; potential for accidental pollution from shipping, heavy industrial activities and former waste disposal sites as well as ongoing impacts from wastewater discharge; high levels of pressure both on shore and at sea from recreational and commercial interests.	Issues are dealt with through site management statements and joint projects with outside organisations (e.g. intertidal sediment recharge) monitoring of saltmarsh erosion or through the relevant planning/ review provisions of the Habitat Regulations. Other more strategic issues are being addressed locally through such initiative as Shoreline Management Plans, Estuarine Management Plans and eventually through the Management Scheme which will cover the European Marine Sites including the Solent and Southampton Water SPA.
Avon Valley UK9011091 SZ144983	1385.08	(OW) Bewick's Swan	(OW) gadwall	N/A	Problems with retaining floodwater can lead to drying out of the site in summer, affecting breeding waders, flora and invertebrate fauna. The site is also vulnerable due to water abstraction.	The hydrological issue is being addressed through management agreements, site management statements, water level management plans and Environmentally Sensitive Area (ESA) agreements. Abstraction within the vicinity of the site will be reviewed under the provisions of the Habitat Regulations.

Regional Sea 3- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Pagham Harbour UK9012041 SZ874968	636.68	(B) little tern (OW) ruff	(OW) pintail	N/A	Historical land drainage and inadequate sewage treatment are problems which currently affect the site.	The majority of the site is a Local Nature Reserve managed by West Sussex County Council. Historical land drainage for agricultural purposes is being addressed through the Local Nature Reserve Management Plan and Management Agreements, while pollution from inadequate treatment of sewage discharges will be reviewed by the Environmental Agency.
Dungeness to Pett Level UK9012091 TQ932182	1474.04	(B) common tern, little tern, mediterranean gull, (OP) aquatic warbler, (OW) Bewick's swan	(OW) shoveler	N/A	This site is vulnerable to coastal erosion, particularly the areas of coastal shingle at Dungeness and Rye Harbour. Breeding bird populations are at serious risk of predation by species such as fox, badger and mink. Recreational and leisure activities are a problem in some areas. The site is vulnerable to changing agricultural practices, particularly ploughing of grassland for arable crops, or changes to turf production on adjacent land, which may influence the site's bird population. Most of the grassland within the SPA is heavily grazed and there is a continuing problem of lowering water levels.	There is a localised programme of pest control on part of the site. The site is reasonably well protected from visitor disturbance, although the possible disturbance from aircraft using a nearby airfield is being investigated. Recreational and leisure are zoned to try and control this activity. Much of the shingle is uncultivated and is either nature reserve or open land. Ploughing of grassland and changes to turf production could be controlled by management agreements. Grazing and lowering water levels being addressed through management agreements and water level management plans.

A3j.9.4 Regional Sea 4

Regional Sea 4 - SACs

Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Lyme Bay (possible SAC)	N/A	This site is currently in the process of being designated; information on the qualifying features, vulnerability and management will become available at a later stage of designation.			
Severn Estuary/ Môr Hafren (Candidate SAC) UK0013030 ST321748	73715.4	Primary: Estuaries, mudflats and sandflats not covered by seawater at low tide, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) Qualifying: Reefs and sandbanks which are slightly covered by sea water all the time.	Primary: river lamprey <i>Lampetra fluviatilis</i> , twaite shad <i>Alosa fallax</i> , sea lamprey <i>Petromyzon marinus</i> Qualifying: N/A		
Godrevy Head to St Agnes UK0012549 SW700496	128.07	Primary: Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> * Priority feature, European dry heaths Qualifying: N/A	Primary: early gentian <i>Gentianella anglica</i> Qualifying: N/A	Vegetation on the site could be vulnerable to trampling, scrub invasion and summer fires.	The National Trust is managing the site in accordance with the nature conservation objectives set out in the agreed site management statement, which includes actions to address these issues. Management for scrub invasion or invasive species may be required.
Penhale Dunes UK0012559 SW769572	621.34	Primary: Fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, humid dune slacks Qualifying: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>)	Primary: petalwort <i>Petalophyllum ralfsii</i> , shore dock <i>Rumex rupestris</i> , early gentian <i>Gentianella anglica</i> Qualifying: N/A	Possible vulnerabilities include: visitor pressure, grazing, fire and scrub encroachment.	Dunes are dependent upon natural dune processes being allowed to continue. The unspoilt character of the site is partly due to partial MoD occupation. The MoD has voluntarily implemented policies designed to reduce instability into the system. A site management statement has been drawn up between EN and MoD which forms the basis of an agreed management plan. The other main landowners on the site have recently entered a Countryside Stewardship scheme and an agrienvironment scheme. The site management statements for all the three landowners cover visitor pressure, grazing, fire control and scrub management.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Kenfig/ Cynffig * UK0012566 SS790813	1191.67 (OSPAR MPA = 269)	Primary: Fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), humid dune slacks, hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. Qualifying: Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>)	Primary: petalwort <i>Petalophyllum ralfsii</i> , fen orchid <i>Liparis loeselii</i> Qualifying: N/A	Natural successional changes within the dune systems are detrimental to the plant communities of the dune grassland and humid dune slacks as well as to <i>Liparis loeselii</i> and <i>Petalophyllum ralfsii</i> , which are species of early successional changes. At Merthyr Mawr NNR <i>Hippophae rhamnoides</i> is an introduced species requiring control.	Kenfig NNR has been grazed by sheep in recent years and this is currently under review. Selected dune slacks are mown to provide appropriate conditions for the maintenance of vegetation. At Merthyr Mawr, the main focus of ongoing management is the control of <i>Hippophae rhamnoides</i> . This will benefit dune grassland and <i>Petalophyllum ralfsii</i> . Merthyr Mawr is grazed by rabbits and it is intended to introduce grazing by domestic animals. Maintenance of the hydrological regime of both dune systems is essential, as the dune slacks and Kenfig Pool are believed to be fed in part by groundwater.
Braunton Burrows UK0012570 SS451348	1346.64	Primary: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), humid dune slacks Qualifying: Mudflats and sandflats not covered by seawater at low tide	Primary: petalwort <i>Petalophyllum ralfsii</i> Qualifying: N/A	In recent decades, coarse, rank vegetation and willow scrub have spread on the Burrows due to a lack of grazing, and land drainage and/or abstraction has caused water tables to fall.	In conjunction with the Environment Agency and land owners English Nature are, through the preparation of a Water Level Management Plan, exploring ways of raising the water level such as the installation of sluices in the perimeter ditch. An agreement is also being sought with the landowner and Ministry of Defence to introduce grazing to the majority of the Burrows.
Beer Quarry and Caves UK0012585 SY215892	31.1	Primary: N/A Qualifying: N/A	Primary: Bechstein's bat <i>Myotis bechsteinii</i> Qualifying: lesser horseshoe bat <i>Rhinolophus hipposideros</i> , greater horseshoe bat <i>Rhinolophus ferrumequinum</i>	To maintain the present and potential value of the quarry and cave system for bats, their integrity must be protected. The site is divided in two by a road, with a working quarry to the north and a disused quarry and cave system to the south. A small number of bats are thought to use the tunnels in the northern face of the quarry as winter roosts, but these do not appear to represent a major haunt. Parts of the cave system are open to the public.	The tunnels lie in the Beer Stone, below the chalk, and future quarrying operations (c. 20 years) will not extend so far as to destroy the tunnels. Therefore, there is potential for their future development for bats. Occasional quarrying of Beer Stone takes place only in the spring, after hibernation. Public disturbance is minimal as the caves are only open during the summer months. A site management statement has been agreed with the quarrying company

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
East Devon Pebblebed Heaths UK0012602 SY040868	1119.94	Primary: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths Qualifying: N/A	Primary: southern damselfly <i>Coenagrion mercuriale</i> Qualifying: N/A	Parts of the site are vulnerable to changes in agricultural management and quarrying occurring in the immediate vicinity. These may have an adverse impact on the water chemistry and on water levels and may result in changes to the vegetation Characteristics of the site. Water abstraction from local groundwater sources is another potential problem that could have adverse consequences for the hydrology of the site.	The majority of the site is under positive conservation management. Mineral permissions and water abstraction licences will be reviewed under the relevant review provisions of the Habitats Regulations.
Tregonning Hill UK0012604 SW600300	5.21	Primary: N/A Qualifying: N/A	Primary: N/A Qualifying: western rustwort <i>Marsupella profunda</i> * Priority feature	Western rustwort <i>Marsupella profunda</i> occurs within the site which consists of old china clay workings, pits and spoil-tips, surrounded mostly by western lowland heath.	Monitoring of the site and investigation into the specific ecological requirements of <i>Marsupella profunda</i> are desirable to ensure optimal conditions for its survival and increase.
River Wye/ Afon Gwy UK0012642 SO109369	2234.89	Primary: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation Qualifying: Transition mires and quaking bogs	Primary: white-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i> , sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , twaite shad <i>Alosa fallax</i> , Atlantic salmon <i>Salmo salar</i> , bullhead <i>Cottus gobio</i> , otter <i>Lutra lutra</i> Qualifying: allis shad <i>Alosa alosa</i>	Water quality impacts from changing agricultural land-use are having effects on the SAC through diffuse pollution such as nutrient run-off and increased siltation. Water quality is affected by synthetic pyrethroid sheep-dips and point-source discharges. Loss of riparian habitat is occurring as a result of agricultural land-use practices and other riverside development and the loss of alder tree-cover through disease. Fishing activities are implicated in the decline of salmon. There is increasing demand for abstraction. Demand for recreational activities is a source of potential concern.	EN and the CCW are seeking to address issues through improved existing and new agri-environment schemes and improvements in compliance with agricultural Codes of Practice. The impact of sewage treatment on the cSAC is being addressed through the Asset Management Plan process and review under the Habitats Regulations. Riparian and water quality issues will be identified and actions recommended within the joint EN/EA/CCW conservation strategy. Initiatives such as the Wye Salmon Action Plan will help to address fishing issues. The maintenance of water levels and flow will be addressed under the review of consents under the Habitats Regulations. Regularisation of the functions of the competent authorities should reduce the risk of damage to the cSAC as a result of recreational developments.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
South Hams UK0012650 SX942565	129.53	Primary: European dry heaths, semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) Qualifying: Vegetated sea cliffs of the Atlantic and Baltic coasts, caves not open to the public, <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature	Primary: greater horseshoe bat <i>Rhinolophus ferrumequinum</i> Qualifying: N/A	The cave systems, disused quarries and mine-shafts used by the bats are subject to differing levels of disturbance, mainly through public access, recreational and caving/climbing activities.	The quarry at Berry Head has been designated as a NNR by Torbay Coast and Countryside Trust and a management plan has been prepared. Much of the Buckfastleigh Caves site is managed as a nature reserve by DWT and VWT and the cave studies centre. In order to minimise disturbance and maintain the integrity of the caves and mine workings, management of these sites will continue through the preparation of site management statements, covering access arrangements/restrictions and monitoring. Work through the greater horseshoe bat project has increased the profile of the sites and species and a number of management agreements (CS and EN) have been developed to benefit the bats.
Culm Grasslands UK0012679 SS843214	768.69	Primary: <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i>	Primary: marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> Qualifying: N/A	The grassland is threatened by a decline in traditional fertiliser-free rough summer grazing which maintains its current form.	The grassland is a result of human activity, and to survive it must continue to be managed. The traditional methods upon which these meadows depend are rough summer grazing, selective burning and topping, and no application of fertilisers. Such management may no longer be economic; therefore, a Wildlife Enhancement Scheme (WES) is being used to promote the continuation of traditional management. The scheme has achieved a 95% uptake rate with owner-occupiers.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Gower Commons/ Tiroedd Comin Gwyr UK0012685 SS497900	1776.72	Primary: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>) Qualifying: N/A	Primary: southern damselfly <i>Coenagrion mercuriale</i> Qualifying: southern damselfly <i>Coenagrion mercuriale</i> , marsh fritillary butterfly, <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	Unauthorised burning occurs on all the commons. Off-road vehicles can also cause localised damage.	Burning is being addressed on Cefn Bryn Common via an agri-environment agreement. The cutting of fire-breaks and control of bracken and Rhododendron helps to minimise fire damage. The Gower Commons Initiative has objectives aimed at developing existing lowland heathland via management for countryside enhancement and nature conservation. The project will meet BAP targets by maintaining vegetation structure, preventing fragmentation or loss of habitat, as well as achieving restoration and recreation. Measures include cattle grids, firebreaks, control of bracken and scrub, enhancing public access, and promoting awareness and understanding. The five-year scheme is being administered by a partnership that includes the City & County of Swansea, CCW, Gower Commoners' Association, NT and Gower Society.
Wye Valley Woodlands/ Coetiroedd Dyffryn Gwy UK0012727 ST530957	916.24	Primary: <i>Asperulo-Fagetum</i> beech forests, <i>Tilio-Acerion</i> forests of slopes, scree and ravines * Priority feature, <i>Taxus baccata</i> woods of the British Isles * Priority feature Qualifying: N/A	Primary: N/A Qualifying: lesser horseshoe bat <i>Rhinolophus hipposideros</i>	Principal pressures are from lack of management (particularly traditional management, e.g. coppicing) and inappropriate management proposals which would alter the recognised woodland stand types.	A significant proportion of the cSAC is managed sympathetically by Forest Enterprise, the Woodland Trust and county Wildlife Trusts. Felling licence approval and Forestry Commission consultation with English Nature/Countryside Council for Wales are adequate in addressing the poor management. Positive management is being promoted through management plans (CCW), site Management Statements (EN) and management agreements, and the Woodland Grant Scheme (including specialised targeting) is being encouraged where possible and appropriate to return some woods to active management.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Avon Gorge Woodlands UK0012734 ST560741	152.35	Primary: <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature, Qualifying: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)	Primary: N/A Qualifying: N/A	There are no significant threats to the Annex I habitat on this site. The presence of non-native trees throughout the site needs to be assessed. In addition, scrub invasion on calcareous grasslands is a problem.	Part is managed as a National Nature Reserve and the management of the remainder is being addressed through a Site Management Statement which is being negotiated. Scrub and non-native trees are being tackled through the Avon Gorge and Downs Wildlife Project.
South Dartmoor Woods UK0012749 SX710701	2157.15	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: European dry heaths	Primary: N/A Qualifying: N/A	There are areas of heavy recreational pressure. Lichens are an important component of the woodlands and some long term decline has been taking place due to air pollution and/or climate change. The areas of dry heath are common land and for the most part are subject to heavy grazing and uncontrolled fires (arson).	Yarner Wood & Trendlebere Down and part of the Bovey Valley are managed as National Nature Reserves. The Dartmoor ESA scheme offers a mechanism to reduce grazing levels but the issue of grazing is legally complex. Measures to reduce the adverse effects of uncontrolled fires are being carried out by Dartmoor National Park Authority and the Dartmoor Commoners' Council in conjunction with English Nature and other statutory bodies. They include enhanced communication through a Fire Liaison Group and the agreement of burning plans on commons
Carrine Common UK0012795 SW798438	45.86	Primary: Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> * Priority feature Qualifying: European dry heaths	Primary: N/A Qualifying: N/A	Pressures on the site arise from damaging summer fires, attributable mainly to irresponsible visitors and motorists using the road that divides the site. Dumping and tipping have also occurred on the site.	The wet heathland requires limited management in the form of scrub control. Fires and tipping are difficult to control, as public access is not restricted. Nearly half the site is under a management agreement and fire-breaks have been constructed around the site.
The Lizard UK0012799 SW690174	3257.11	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Mediterranean temporary ponds * Priority feature, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, dry Atlantic coastal heaths with <i>Erica vagans</i> * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	Threats are limited. Uncontrolled fires pose a threat.	Over half the site is a National Nature Reserve and much of the remainder is managed by the National Trust. Greater public awareness, improved response times and fire-breaks minimise fire risk.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Crymlyn Bog/ Cors Crymlyn UK0012885 SS694947	299.45	Primary: Transition mires and quaking bogs, calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * Priority feature Qualifying: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: N/A Qualifying: N/A	In recent years scrub has encroached at the expense of fen vegetation due to lack of appropriate management. The flora and fauna of the site is susceptible to changes in water quality, influenced by surrounding industrial effluent sources such as oil, pulverised fuel ash and iron-rich mine adit discharge. There is a dominance and ongoing spread of relatively species-poor <i>Phragmites australis</i> reedswamp.	Seral succession is now being addressed by scrub-cutting and stump treatment as set out in the NNR management plan. Monitoring is in place to provide a check on ongoing discharges. <i>Phragmites australis</i> reedswamp will require further management at the site. Since the announcement in late 1997 of the closure of the BP Llandarcy Oil Refinery a number of studies have been completed to further assess the site's hydrological characteristics and the influence of historic hydrocarbon contamination. The water-balance of the site is critical to future management and the function of the site's internal waterway (the Glan y Wern Canal) which is being considered for restoration. A comprehensive hydrological study by the Environment Agency and CCW commenced in October 2002.
River Usk/ Afon Wysg UK0013007 SO301113	1007.71	Primary: N/A Qualifying: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Primary: sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , twaite shad <i>Alosa fallax</i> , Atlantic salmon <i>Salmo salar</i> , bullhead <i>Cottus gobio</i> , otter <i>Lutra lutra</i> Qualifying: allis shad <i>Alosa alosa</i>	There are some concerns over long term aquatic and riparian habitat degradation. There are few barriers to migration for the anadromous species. Water quality is good throughout the main river, except for localised enrichment from sewage discharges.	Aquatic and riparian habitat degradation is being addressed in the Usk Catchment Management Plan, the Conservation Strategy, the River SSSI Management Plan, and by the Countryside Council for Wales and Environment Agency encouraging owners and occupiers to carry out positive habitat management through agreements and agri-environment schemes. Investigation is proposed to analyse the potential impacts of barriers to anadromous species migration and possible remedies such as multi-species fish passes. Sewage discharges and water abstractions are being closely monitored by the Environment Agency.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Afon Tywi/ River Tywi UK0013010 SN687263	363.45	Primary: N/A Qualifying: N/A	Primary: twaite shad <i>Alosa fallax</i> , otter <i>Lutra lutra</i> Qualifying: sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , allis shad <i>Alosa alosa</i> , bullhead <i>Cottus gobio</i>	All features are directly or indirectly vulnerable to: water quality deterioration from diffuse pollution, particularly agricultural run-off and hence eutrophication and siltation; afforestation generating a pH shift; changes in flow condition and temperature, abstraction, barriers to anadromous fish migration, non-native species introduction; inappropriate fishing, gravel extraction, engineering works, invasive plant species, loss of alder tree-cover, recreation and amenity access, problems of cover for otters.	These issues are being addressed by a variety of statutory bodies that are in a position to overcome these threats through regulatory powers and partnerships with landowners, industry and other interested parties. CCW and the Environment Agency (EA) encourage owners and occupiers to carry out positive habitat management through agreements and agri-environment schemes. A SSSI Site Management Plan and a Conservation Strategy has been produced by CCW and a Site Issue Briefing has been jointly produced by EA and CCW. The EA is investigating the effects of abstractions and discharges under the review of consents process under the Habitats Regulations and the river is included in the Asset Management Planning Process.
Tintagel– Marsland–Clovelly Coast UK0013047 SS225234	2429.84	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: European dry heaths	Primary: N/A Qualifying: N/A	The sea cliffs support a variety of maritime vegetation that is dependent upon natural processes and climatic influence.	The sea cliffs require limited management, and are fairly inaccessible in many areas. Maintenance and enhancement of the coastal strip is being pursued in collaboration with the National Trust and other land managers, through the provision of advice and promotion of positive land management schemes such as the Wildlife Enhancement Scheme and Countryside Stewardship.
Plymouth Sound and Estuaries * UK0013111 SX472506	6402.03 (OSPAR MPA = 5,702)	Primary: Sandbanks which are slightly covered by sea water all the time, estuaries, large shallow inlets and bays, reefs, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) Qualifying: Mudflats and sandflats not covered by seawater at low tide	Primary: shore dock <i>Rumex rupestris</i> Qualifying: allis shad <i>Alosa alosa</i>	The complex ria system and wide rocky inlet of Plymouth Sound are popular with visitors, close to a large population, and accommodate military and commercial shipping. Potential threats therefore include: increased pressure for recreational moorings and associated facilities; port development and ongoing maintenance dredging.	A single scheme of management has been drafted to address these issues. Both the geology and geography of Plymouth Sound make it very sensitive to oil pollution. A review of the oil contingency strategy has been completed, along with appropriate training.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Fal and Helford * UK0013112 SW747261	6387.8 (OSPAR MPA = 6,189)	Primary: Sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, large shallow inlets and bays, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) Qualifying: Estuaries, Reefs	Primary: shore dock <i>Rumex rupestris</i> Qualifying: N/A	The ria systems of the Fal and Helford Rivers and adjacent Falmouth Bay attract visitors and accommodate many commercial and recreational activities. Potential threats include: additional usage of the area for deep water moorings; deep-water oil rig lay-up in Carrick Roads; increased pressure for recreational moorings and associated facilities; port development and oil pollution.	A single scheme of management will address these issues. The oil pollution plan has recently been successfully tested. Water quality issues arising from the effects of sewage discharges, for example, will be addressed through the review procedures under the Habitats Regulations.
Lundy * UK0013114 SS136465	3064.53 (OSPAR MPA = 3,055)	Primary: Reefs Qualifying: Sandbanks which are slightly covered by sea water all the time, submerged or partially submerged sea caves	Primary: N/A Qualifying: grey seal <i>Halichoerus grypus</i>	Many of Lundy's marine communities are stable, long-lived and slow-growing, and would be vulnerable to disturbance by potting or collection and to increased suspended sediment load.	Lundy is managed as a Marine Nature Reserve. A Management Plan, implemented through management and advisory groups and involving various measures, is helping to achieve protection of the site. Building on this work, the vulnerability of the marine site will be further identified through English Nature's work to develop and promote the necessary conservation measures for UK marine SACs.
Pembrokeshire Marine/ Sir Benfro Forol * UK0013116 SM503093	138069.45 (OSPAR MPA = 137,086)	Primary: Estuaries, large shallow inlets and bays, Reefs Qualifying: Sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, coastal lagoons * Priority feature, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), submerged or partially submerged sea caves	Primary: grey seal <i>Halichoerus grypus</i> , shore dock <i>Rumex rupestris</i> Qualifying: sea lamprey <i>Petromyzon marinus</i> , river lamprey <i>Lampetra fluviatilis</i> , allis shad <i>Alosa alosa</i> , twaite shad <i>Alosa fallax</i> , otter <i>Lutra lutra</i>	Pollution originating from the transport or exploration/production of oil and gas are of concern. Water quality issues such as those associated with dredge-spoil disposal. Marine communities are vulnerable to damage by certain fishing methods. Visitor pressures, including gathering of firewood and kindling, could affect intertidal features.	Water quality issues are kept under review through liaison with the EA, MAFF and Milford Haven Port Authority. Management of shipping following the Sea Empress oil-spill has improved and will be kept under review. Improved contingency planning better reflects environmental priorities and involves many statutory agencies. South Wales Sea Fisheries Committee bylaws control activities within Skomer MNR. Other environmental requirements of fisheries management are addressed through liaison with the SWSFC. Education and access issues should be addressed through the National Park and local authority.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Isles of Scilly Complex * UK0013694 SV883111	26850.95 (OSPAR MPA = 26,708)	Primary: Sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, reefs Qualifying: N/A	Primary: shore dock <i>Rumex rupestris</i> Qualifying: grey seal <i>Halichoerus grypus</i>	The vulnerability of the marine site will be further identified through English Nature's work to develop and promote the necessary conservation measures for UK marine SACs. English Nature propose to develop guidance on setting and reviewing conservation objectives; identify key human activities which may affect Annex I and Annex II interests; identify the necessary survey management and monitoring systems; and increase the awareness of those most closely involved in the use and management of marine SACs.	The Isles of Scilly voluntary Marine Park, under the management of the Marine Park Management Committee, has been established to conserve and protect the ecological, archaeological, historical and environmental importance of the area. A code of conduct for the area has been drawn up and is being promoted by the Environmental Trust and English Nature. Monitoring programmes continue, particularly on the extent and quality of <i>Zostera marina</i> beds.
Limestone Coast of South West Wales/ Arfordir Calchfaen de Orllewin Cymru * UK0014787 SR885969	1594.53 (OSPAR MPA = 199)	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature Qualifying: European dry heaths, semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), caves not open to the public, submerged or partially submerged sea caves	Primary: greater horseshoe bat <i>Rhinolophus ferrumequinum</i> , early gentian <i>Gentianella anglica</i> Qualifying: petalwort <i>Petalophyllum ralfsii</i>	Scrub encroachment is an issue at this site. The bats are vulnerable to disturbance from recreational users. Chemical/oil pollution from the sea, particularly in aerosol form, is a threat.	Maintenance or re-introduction of traditional grazing is crucial, preceded by burning or cutting if required. This is being addressed via agri-environment schemes and management agreements. Sand quarrying has been halted and restoration plans are in place. An Integrated Land Management Plan exists for parts of the Pembrokeshire section which are MoD-owned. This will help address traditional management issues together with recreational use. Close liaison with the British Mountaineering Council over the impact of rock climbing continues. Access to the caves is limited to low spring tides, so recreational access is limited. A new contingency plan for chemical/oil pollution incidents in the area is being prepared by CCW and its partners.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Pembrokeshire Bat Sites and Bosherton Lakes/ Safleoedd Ystlum Sir Benfro a Llynnoedd Bosherton UK0014793 SR966954	122.44	Primary: Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. Qualifying: N/A	Primary: greater horseshoe bat <i>Rhinolophus ferrumequinum</i> Qualifying: lesser horseshoe bat <i>Rhinolophus hipposideros</i> , otter <i>Lutra lutra</i>	Both bat species are vulnerable to physical deterioration of the buildings which contain the roosts, to human disturbance and to habitat loss and disturbance within their key feeding areas. The lakes are vulnerable to drought, to nutrient enrichment, and to siltation. The breeding otter population is vulnerable to water pollution, human disturbance, entanglement in fishing gear and habitat loss.	Issues relating to bat vulnerability are being addressed through existing or pending management agreements or management plans over nursery roosts, transitory roosts, associated hibernacula and adjacent feeding habitats. There is regular surveillance of the greater horseshoe's nursery roosts, and an annual census is undertaken at the lesser horseshoe sites. These populations use roosting sites throughout Pembrokeshire. Known roosts are under surveillance. The lakes are covered by a Nature Reserve Agreement with the owners, the National Trust, which is addressing any issues. Issues relating to the otter are being addressed through the Nature Reserve Agreement as above.
Wye Valley and Forest of Dean Bat Sites/ Safleoedd Ystlumod Dyffryn Gwy a Fforest y Ddena UK0014794 SO605044	142.7	Primary: N/A Qualifying: N/A	Primary: lesser horseshoe bat <i>Rhinolophus hipposideros</i> , greater horseshoe bat <i>Rhinolophus ferrumequinum</i> Qualifying: N/A	Within the roost the bats are vulnerable to disturbance at critical times, structural alteration and changes in the characteristic ventilation patterns.	Any proposed changes which are likely to have an impact on the bat populations within the breeding roosts will be discussed with the relevant owners and occupiers. Where appropriate to any populations, potentially damaging works will be addressed through appropriate planning regulation, management agreements and monitoring of individual roosts. Regular liaison takes place with site-owners. The human use of the mine systems (continued mineral working and recreational caving/research) is regulated by Forest Enterprise in consultation with English Nature where appropriate. Site Management Statements have been agreed with the owners of working mines to secure conservation of the populations alongside continued working. In addition, the preparation of Cave Conservation Plans will be promoted to maintain and enhance the underground environment for bats.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Chesil and the Fleet * UK0017076 SY630795	1631.63 (OSPAR MPA = 1,238)	Primary: Coastal lagoons * Priority feature, Annual vegetation of drift lines, perennial vegetation of stony banks, Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi) Qualifying: Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>)	Primary: N/A Qualifying: N/A	The shingle beach and its plant communities may be sensitive to changes in natural coastal processes, e.g. through sea defences. The main concern for the Fleet is water quality; blooms of blue green algae occur. The site is close to one of the world's busiest shipping lanes and consequently there is a risk of accidental oil pollution, to which the communities would be particularly sensitive. Recreational pressure on the Fleet is small and locally there is cultivation of shellfish.	The Fleet and much of Chesil Beach are privately-owned and managed as a nature reserve. Algal blooms are being investigated by the Environment Agency. Licence has been given for offshore oil exploration nearby; this is carried out under strict guidelines that take account of nature conservation interests. Recreation and shellfish cultivation activities are not thought to be serious concerns provided they remain at their present scale.
Isle of Portland to Studland Cliffs UK0019861 SY840802	1447.5	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) Qualifying: Annual vegetation of drift lines	Primary: early gentian <i>Gentianella anglica</i> Qualifying: N/A	Many of the vegetated cliffs are soft and eroding and their interest is dependent on the continuation of natural coastal processes. In a few places, the zone of natural cliff-top vegetation is narrow and the interest of this strip will deteriorate as cliffs retreat into agricultural land. The coastal grasslands are naturally dominated by the coarse grass <i>Brachypodium pinnatum</i> and here the <i>Gentianella anglica</i> interest is dependent on grazing by cattle or ponies. Part of the site is subject to an existing blockstone quarrying permission.	The issues of coastal erosion and defence will be addressed through Shoreline Management Plans currently being developed by the district councils. The maintenance of establishment of suitable grazing regimes is being dealt with through site management statements. Locally, recreational pressure is high. Management to alleviate any local problems is carried out by local authorities as part of their management of the Heritage Coast which covers much of this stretch of coast. The blockstone quarrying permission will be reviewed under the provisions of the Habitats Regulations.
Sidmouth to West Bay UK0019864 SY326912	897.3	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature Qualifying: Annual vegetation of drift lines	Primary: N/A Qualifying: N/A	There are no immediate threats to the features of European Importance on this site.	Management of the site is assisted by Countryside Stewardship and English Nature's Reserve Enhancement Scheme.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Carmarthen Bay Dunes/ Twyni Bae Caerfyrddin UK0020019 SN285074	1206.32	Primary: Embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Humid dune slacks Qualifying: N/A	Primary: narrow-mouthed whorl snail <i>Vertigo angustior</i> , petalwort <i>Petalophyllum ralfsii</i> , fen orchid <i>Liparis loeselii</i> Qualifying: N/A	Substantial areas of open dunes are threatened by <i>Hippophae</i> encroachment, while the damp slacks are similarly under pressure from <i>Salix repens</i> ; these threats are detrimental to species of early successional stages such as <i>Liparis loeselii</i> and <i>Petalophyllum ralfsii</i> .	Management has been undertaken to address these problems by CCW and the local authority (at Whiteford NNR and Pembrey LNR), but significant areas are still subject to change.
Carmarthen Bay and Estuaries/ Bae Caerfyrddin ac Aberoedd * UK0020020 SS357991	66101.16 (OSPAR MPA = 63,166)	Primary: Sandbanks which are slightly covered by sea water all the time, estuaries, mudflats and sandflats not covered by seawater at low tide, large shallow inlets and bays, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) Qualifying: N/A	Primary: twaite shad <i>Alosa fallax</i> Qualifying: sea lamprey <i>Petromyzon marinus</i> , river lamprey <i>Lampetra fluviatilis</i> , allis shad <i>Alosa alosa</i> , otter <i>Lutra lutra</i>	Developments in fishing practices and target species could threaten the integrity of both the benthic communities and the sea-duck population (for which the Bay is also proposed as an SPA). Most of the potential threats come from fisheries and related activities such as shellfish management and access issues related to mussel and cockle gathering. The Millennium Coastal Park and aggregate extraction may have an effect locally on the biology of the Bank, and in conjunction with other coastal defence works may affect sediment budgets and characteristics over a wider area.	Two groups exist which discuss fisheries and shellfish related issues: a group of statutory agencies and voluntary organisations, and the more recent cSAC relevant authorities group. CCW maintains close liaison in particular with the South Wales Sea Fisheries Committee. CCW is liaising with the relevant local authority over the Millennium Coastal Park near Llanelli. CCW is consulted over applications to dredge aggregate from Helwick Bank.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Exmoor Heaths UK0030040 SS864419	10705.87	Primary: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths Qualifying: Vegetated sea cliffs of the Atlantic and Baltic coasts, blanket bogs * Priority feature, Alkaline fens, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: N/A Qualifying: N/A	This habitat is dependent upon low intensity, traditional agricultural management by grazing and controlled burning. Illegal and uncontrolled burning is adversely affecting heathland structure in some areas, and localised winterfeeding of cattle and overgrazing has caused some losses to grassland, particularly on common land. Rhododendron has spread in some areas.	Traditional management is becoming less economic, except with agri-environment funds. An ESA scheme has been useful in promoting traditional grazing management, as have other management agreements and conservation body ownership. Grazing issues are being tackled by action using the environmental conditions attached to livestock subsidy schemes, as well as the ESA scheme. Incentive payments are currently seen as the only effective means of influencing burning practices. English Nature and Exmoor National Park Authority management agreements are being used to eliminate infestations from affected heathland.
North Somerset and Mendip Bats UK0030052 ST480544	561.19	Primary: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature Qualifying: Caves not open to the public	Primary: lesser horseshoe bat <i>Rhinolophus hipposideros</i> , greater horseshoe bat <i>Rhinolophus ferrumequinum</i> Qualifying: N/A	Problems are known to exist with recreational cavers in some of the caves used as hibernacula. Further breeding roosts are believed to occur in the Cheddar area and steps are being taken to identify these. The bat population will potentially be at risk until these are discovered. Low levels of grazing are resulting in scrub invasion and the development of secondary woodland. The woodland has been badly-managed in the past and requires a considerable amount of restoration.	English Nature is working with the owners of these caves in order to minimise disturbance at critical times of the year. Further breeding roosts are believed to occur in the Cheddar area and steps are being taken to identify these. The bat population will potentially be at risk until these are discovered. There are significant management problems associated with both the grassland and woodland elements of the SAC.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Camel UK0030056 SX061708	621.17	Primary: N/A Qualifying: European dry heaths, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles, alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: bullhead <i>Cottus gobio</i> , otter <i>Lutra lutra</i> Qualifying: Atlantic salmon <i>Salmo salar</i>	The otter and bullhead populations are dependent on high water quality and a natural river environment. The otter population also requires strong fish populations as well as areas of cover and holt sites for breeding and lying-up. The latter are provided by bank-side trees, areas of woodland, scrub and rank vegetation. Otters can also feed in adjacent wet meadows. Disturbance is an issue, particularly as the Camel Trail (a major walking/cycling attraction) is situated next to the site.	Maintenance and creation of these features is being pursued in collaboration with the Environment Agency (EA) through the Local EA Plan (LEAP), provision of advice to land managers and the promotion of positive land management schemes such as Countryside Stewardship and Woodland Grant Schemes. It will be important to ensure that the local authority committees that run the Camel Trail fully integrate its promotion and operation with conservation needs.
South Devon Shore Dock UK0030060 SX787362	341.01	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: shore dock <i>Rumex rupestris</i> Qualifying: N/A	The most likely threats to the integrity of the site are inadvertent damage resulting from recreational activities of holiday makers and/or by extreme coastal process events which are beyond human control and influence.	Much of the land is in National Trust ownership and managed by tenants who are aware of the importance of the <i>Rumex</i> plants.
Lower Bostraze and Leswidden UK0030064 SW384310	2.33	Primary: N/A Qualifying: N/A	Primary: western rustwort <i>Marsupella profunda</i> * Priority feature Qualifying: N/A	<i>Marsupella profunda</i> appears to be a pioneer species, in England colonising bare china clay substrates. It is lost through natural succession as taller plants, particularly heather and gorse, shade it out.	Successional change is being addressed at the site through site management agreed with the owner, which will be informed by research into management of the species under English Nature's species recovery programme.
Newlyn Downs UK0030065 SW835544	115.71	Primary: Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> * Priority feature, Qualifying: European dry heaths	Primary: N/A Qualifying: N/A	Threats are limited to heath loss and recreational pressure.	The site is under private but generally sympathetic ownership. Much of the heathland is being positively managed under Countryside Stewardship and an agri-environment scheme. Motorcycle scrambling is being restricted to a small area and annually monitored.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Blackstone Point UK0030091 SX535462	7.38	Primary: N/A Qualifying: N/A	Primary: shore dock <i>Rumex rupestris</i> Qualifying: N/A	N/A	This site is under protective management through a Countryside Stewardship Scheme.
Breney Common and Goss and Tregoss Moors UK0030098 SW951598	816.01	Primary: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, transition mires and quaking bogs Qualifying: N/A	Primary: marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> Qualifying: N/A	There are considerable practical difficulties associated with achieving nature conservation management on the areas of Common Land, the majority of which has not been actively managed for a considerable length of time.	A large part of Goss and Tregoss Moors is a National Nature Reserve managed by English Nature and a NNR management plan is in place. Part of Breney Common is a nature reserve managed by the Cornwall Wildlife Trust in accordance with a management plan agreed with English Nature. Management Agreements or Site Management Statements are in place or under negotiation for all active private land managers on both sites. Active engagement of the Common Rights holders has been initiated to progress the delivery of appropriate management aimed at securing favourable condition.
Cardiff Beech Woods UK0030109 ST118824	115.62	Primary: <i>Asperulo-Fagetum</i> beech forests Qualifying: <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature	Primary: N/A Qualifying: N/A	The woodlands contain important archaeological features and are easily accessible to the public resulting in significant visitor pressure in some places. The underlying geology of Carboniferous limestone has resulted in a number of quarries in the locality.	Issues such as visitor pressure are addressed through management plans. The Cardiff Beech Woods have been extensively managed for timber production in the past and the woodland resource is currently managed in some areas through the Woodland Grant Scheme. Quarrying and issues arising from the presence of active quarries are addressed through the planning system. The majority of the woodlands are owned or are in the guardianship of government agencies, with most of the remainder of the woodland covered by a Section 106 agreement.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Glaswelltiroedd Cefn Cribwr/ Cefn Cribwr Grasslands UK0030113 SS870830	58.35	Primary: <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) Qualifying: N/A	Primary: N/A Qualifying: marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	These grasslands are dependent on the maintenance of the hydrological regime and continuation of traditional agricultural management. This is ideally light summer grazing by cattle or horses, without the use of artificial fertilisers. Even short periods of inappropriate management can cause serious long-term damage. Maintenance of the hydrological regime is also essential as the grassland communities are strongly influenced by the quantity and base status of the groundwater.	Although appropriate summer grazing is the current practice over much of the area, this management is secure for the future over only a relatively small area (approximately 10%). In other areas there is a need to re-introduce grazing or adjust grazing levels. Management agreements will be used to secure appropriate management over the whole area.
Dawlish Warren UK0030130 SX984792	58.84	Primary: Humid dune slacks Qualifying: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature	Primary: petalwort <i>Petalophyllum ralfsii</i> Qualifying: N/A	Dawlish Warren is an extremely popular seaside resort and visitor pressure is considerable. Erosion affects the shifting dunes along the shoreline and consequently fencing is required to direct visitors. The humid dune slacks have suffered from a declining water-table in recent years. Much of the fixed dune grassland is a golf course and is subjected to wear, whilst modifications to tees, greens and fairways can have an impact on adjoining species-rich grassland, for example, by spray-drift of chemicals.	A Site Management Statement which aims to resolve the problems in this area is currently being agreed on. Actions are being taken to recharge the water-table in the dune slacks.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Dunraven Bay UK0030139 SS886727	6.47	Primary: N/A Qualifying: N/A	Primary: shore dock <i>Rumex rupestris</i> Qualifying: N/A	The <i>Rumex rupestris</i> colony has a naturally very restricted distribution within the site, being limited to a small area of groundwater seepage. In the very long term, the current site of the <i>R. rupestris</i> colony will be lost as a result of coastal erosion.	The <i>Rumex rupestris</i> colony is accessible with difficulty and this gives it natural protection from grazing and accidental damage by people. It is important that the hydrological regime is maintained but there are no known threats to it at present. Research will be undertaken to ascertain the source of the groundwater. The site lies within the Glamorgan Heritage Coast and is managed by agreement for the benefit of all the plant communities it supports. Nothing can be done to prevent coastal erosion, but the natural processes of erosion may be expected to simultaneously create replacement habitat for this plant in the immediate vicinity.
Exmoor and Quantock Oakwoods UK0030148 SS894440	1895.17	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: barbastelle <i>Barbastella barbastellus</i> Qualifying: Bechstein`s bat <i>Myotis bechsteinii</i> , otter <i>Lutra lutra</i>	Many woods are grazed by sheep and/or red deer and this can prevent regeneration and change the ground flora. Invasive non-native species are a problem in some woods, particularly Rhododendron and Japanese knotweed. Beech is also a problem, as it is replacing oak in places and does not support such a diverse or specialist wildlife on Exmoor. Dense monocultures of coppiced oak occur of little structural or species diversity.	Some grazing/browsing is essential to maintain conditions suitable for lower plant assemblages, which are a key feature of the woodlands. . Overgrazing may require action using environmental conditions of livestock subsidy schemes. Alien species are being eliminated by conservation bodies or management agreements. In coppice oak monocultures, minimum intervention is mostly desirable, though opportunities are being taken to diversify age and species composition to restore near-natural conditions where possible.
Gower Ash Woods/ Coedydd Ynn Gwyr UK0030157 SS574882	233.15	Primary: <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature, Qualifying: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: N/A Qualifying: N/A	Issues include the spread of conifer and beech.	Management of these generally steep-sided woodland blocks is predominantly by non-intervention and includes part of a National Nature Reserve, a Wildlife Trust Reserve and Local Nature Reserve. All areas are within the Gower Area of Outstanding Natural Beauty (AONB). Future management considerations would include selective removal of conifers as well as thinning of beech

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Mendip Limestone Grasslands UK0030203 ST401557	417.47	Primary: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) Qualifying: European dry heaths, Caves not open to the public, <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature	Primary: N/A Qualifying: greater horseshoe bat <i>Rhinolophus ferrumequinum</i>	These sites are all open-access and are heavily used for informal recreation. The balance of habitats is heavily dependent upon adequate grazing, which is not always available. The commoning system, on which the management of the Crook Peak part of the site depends, is breaking down and may cause serious problems in the future.	Not indicated.
Polruan to Polperro UK0030241 SX161512	213.39	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: European dry heaths	Primary: shore dock <i>Rumex rupestris</i> Qualifying: N/A	The sea cliffs support a variety of maritime vegetation that is dependent on natural processes and climatic influence. The area is fairly accessible.	The sea cliffs require limited management, and are fairly accessible in many areas. Maintenance and enhancement of the coastal strip is being pursued in collaboration with the National Trust and other land managers through the provision of advice and promotion of positive land management schemes such as the Wildlife Enhancement Scheme and Countryside Stewardship.
River Axe UK0030248 SY267961	25.78	Primary: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation Qualifying: N/A	Primary: N/A Qualifying: sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , bullhead <i>Cottus gobio</i>	The main threat on this site is the potential eutrophication from surrounding land-use.	A programme of surveys has been undertaken investigating the sources of potential problems. On completion, management advice will be provided to the perpetrators to minimise impacts.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
St Austell Clay Pits UK0030282 SX022549	0.61	Primary: N/A Qualifying: N/A	Primary: western rustwort <i>Marsupella profunda</i> * Priority feature Qualifying: N/A	The only known UK locality for <i>Marsupella profunda</i> is within china clay workings in Cornwall. This liverwort is a colonist at early stages in the succession on exposed china clay waste and decaying granite rocks. Because <i>M. profunda</i> appears to be a 'mobile' colonist which utilises newly-exposed china clay waste and decaying granitic material, habitats are then lost to natural vegetation succession.	The continued survival of rustwort depends on the management of existing sites and inclusion of new sites. New sites are continually being created by china clay extraction in the St Austell area and are being artificially created in former clay-mining areas in west Cornwall. Management includes control of scrub (willow and gorse), heathers and grasses, trials with herbicide control of heathers, etc., and small-scale translocation experiments. This management is being achieved through close liaison with the landowners, IMERYS and Goonvean Ltd. IMERYS are actively involved in the management of their sites. Management will be further addressed by the agreement of management plans with the clay companies.
West Dorset Alder Woods UK0030299 SY538968	329.29	Primary: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature Qualifying: <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), old acidophilous oak woods with <i>Quercus robur</i> on sandy plains	Primary: marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> Qualifying: great crested newt <i>Triturus cristatus</i>	The vulnerability of the habitat is linked principally to the surrounding land-use and the management of the water environment in the catchment, particularly where sites are small and isolated. The alder woods are mainly unmanaged stands of former coppice and cutting would now only be appropriate in larger, more robust sites. Deer browsing and game management are a concern.	Agri-environment schemes, forestry management and planting grants and management agreements are being examined with a view to addressing these land-use concerns. Deer browsing and game management need to be monitored. <i>Euphydryas aurinia</i> requires extensive grazing and this is being addressed through agri-environment schemes and management plans. There is restoration potential at one site where conifer plantations are being removed.

Regional Sea 4 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Crowdy Marsh UK0030329 SX150834	92.65	Primary: Transition mires and quaking bogs Qualifying: N/A	Primary: N/A Qualifying: N/A	Historically there have been considerable practical difficulties associated with achieving positive nature conservation management both on the Common and adjacent privately-owned land, resulting in both areas not being appropriately managed for a considerable length of time.	In order to progress the delivery of appropriate management aimed at securing favourable condition, a Countryside Stewardship agreement has recently been negotiated on all of the Common Land within and adjacent to the site boundary. It is intended that a further management agreement will be negotiated with the private land manager and their grazier in due course.
Crookhill Brick Pit UK0030349 SY643797	4.71	Primary: N/A Qualifying: N/A	Primary: great crested newt <i>Triturus cristatus</i> Qualifying: N/A	There is a long-term risk of deterioration of the water bodies due to lack of maintenance and a short-term risk of the introduction of invasive non-native plant species and fish. Lighting and rats from a waste transfer station are an issue.	Management of potential hazards (lighting, rats) from the adjacent waste transfer station can be influenced by the site management committee. Risks from introduced species and water quality issues are reduced by the proposed designation of the land as a Local Nature Reserve.

Regional Sea 4 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Walmore Common UK9007051 SO745150	52.85	(OW) Bewick's swan	N/A	N/A	The environment requires maintenance to continue attracting the Bewick's swan to feed and roost here.	Bewick's swans are attracted for feeding and roosting by the grassland, which is maintained by grazing and the natural winter flooding which is in turn determined by rainfall, run-off and river levels. A water level management plan will ensure appropriate conditions are retained for wintering bird interest. The marshy grassland and ditches will be maintained and enhanced by maintaining high water levels from spring to autumn through the implementation of a water level management plan.

Regional Sea 4 - SPAs						
Name, code & location1	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Somerset Levels and Moors UK9010031 ST394417	6388.49	(OW) Bewick's swan, golden plover	(OW) shoveler, teal, wigeon	Waterfowl: (OW) snipe, lapwing, pintail, gadwall, shoveler, teal, wigeon, golden Plover, Bewick's swan, whimbrel	Peat extraction occurs over part of the site though this is not currently thought to pose a risk. Agricultural activities involve improvement, with conversion of grassland to arable land. Increased applications of inorganic fertilisers and cutting of silage are major threats to vulnerable peat soils and the nature conservation value of the site.	Peat extraction in future will be subject to controls under the Habitats Regulations. The majority of land is farmed and under private ownership. Less intensive agricultural practices are encouraged through the ESA scheme, WES and Section 15 agreements. Water Level Management is critical and is being addressed through the Water Level Management Plans process and the development of Raised Water Level Areas and an Environmentally Sensitive Area.
Exe Estuary UK9010081 SX980841	2345.71	(OW) avocet, Slavonian grebe	N/A	Waterfowl: (OW) black-tailed godwit, dunlin, lapwing, grey plover, oystercatcher, red-breasted merganser, wigeon, dark-bellied Brent goose, cormorant, avocet, Slavonian grebe, whimbrel	The area is subject to a variety of recreational uses which has potential for disturbance to waterfowl. Dredging takes place in the approach channel which could have an adverse effect on the Dawlish Warren Sandspit and sediment movement patterns.	The Exe Estuary Management Plan addresses the recreational, disturbance and potential oil spill issues whilst dredging operations and mussel bed proposals are subject to the provisions of the Habitats Regulations which require assessment of any plans or projects which may affect the site. A Regulatory Order is proposed which would make further mariculture projects licenceable and English Nature would then be fully consulted. Substantial areas are managed as nature reserves by the RSPB, local wildlife Trust and local authorities

Regional Sea 4 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Chesil Beach and The Fleet UK9010091 SY633792	748.11	(B) little tern	(OW) dark-bellied Brent goose	N/A	Much of the site is inaccessible to casual visitors though part of the site known as Ferry Bridge is subject to visitor recreational pressure. A MoD firing range is also located within the site. Portland is the site of a new commercial port and is subject to increasing recreational pressures. Routine or accidental discharges arising from activities within the harbour could affect water quality in the Fleet and there may be recreational 'spill over'. Intensive agriculture and run-off is a potential source of nutrients. There are small domestic sewage discharges into the Fleet. There is a shellfish farm which cultivates oysters and cleanses mussels and other species. This does not present serious concerns provided it remains at its present scale. Introduction of non-native species is a potential concern.	The Fleet and much of Chesil bank are privately owned and managed as a nature reserve. Part of Chesil is Crown Common land. The Harbour Authority is represented on the SAC Management group and the scheme of management for the marine SAC will address any issues. The Environment Agency carries out water quality sampling throughout the year with a view to identifying and controlling problem discharges. Contingency plans exist for dealing with oil spills.
East Devon Heaths UK9010121 SY040867	1119.94	(B) Dartford warbler, nightjar	N/A	N/A	Parts of the site are under threat because of changes in agricultural management, water abstraction and quarrying occurring in the immediate vicinity which may have an adverse impact on the water chemistry or result in major changes to the vegetation and/or affect the ability of the site to provide food supplies on which the birds depend.	The majority of the site is under positive conservation management. The effects of detrimental activities will largely be mitigated by the review of mineral permissions and water abstraction licenses under the relevant provisions of the Habitat Regulations.

Regional Sea 4 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Tamar Estuaries Complex UK9010141 SX441621	1955	(OP) little egret; (OW) avocet, little egret	N/A	N/A	The complex ria system of the Tamar is close to a large conurbation, accommodates military and commercial shipping and is popular area for a variety of recreational activities.	The single scheme of management being developed under the EC Life Programme will address all issues such as: increased pressure for moorings and associated facilities; port development; coastal squeeze; dredging; bait collection; and risk of accidental oil pollution. Current management is underway to address concerns over bait digging and loss of intertidal habitat to land claim.
Castlemartin Coast UK9014061 SR885100	1122.32	(B) chough; (OW) chough	N/A	N/A	Vulnerability is derived from a reduction of open landscape suitable for the chough, recreation pressures and impacts from rock climbing.	Traditional grazing by livestock and rabbits helps to maintain the short open conditions necessary for the chough. On the army range, winter grazing is dependent on the transhumance of sheep from Preseli cSAC and the seasonal nature of the firing programme. Soil disturbance from military training can be beneficial for the chough, enabling access to invertebrates. An Integrated Land Management Plan for the range is being produced by CCW, MoD, NT, NPA and the WT. There is close liaison with the British Mountaineering Council over impacts of rock climbing. Grazing management on the adjacent Stackpole NNR is a key element of the joint CCW/NT management plan and management agreements encourage grazing of the dunes at Broomhill Burrows.

Regional Sea 4 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Bae Caerfyrddin/ Carmarthen Bay UK9014091 SS280971	33411.27	N/A	(OW) common scoter	N/A	Major oil pollution incidents in the vicinity of the site have impacted the scoter population in the past. Developments / changes in fishing practices, targeting new species and/or increases in fisheries effort could threaten the integrity of both the sea-duck population and the benthic communities on which the population depends for food. Changes to the sediment structures or sediment transport regime.	Continuing improvements in shipping management, especially at the major oil-port of Milford Haven, management of the wider environment of the Carmarthen Bay & Estuaries and nearby Pembrokeshire Marine cSACs, together with Countryside Council for Wales's (CCW) close involvement in the formulation of marine pollution contingency plans should help to further reduce the likelihood and impact of pollution incidents at sea. CCW is consulted over applications to dredge aggregates and encourages extensive monitoring and further research to determine impacts of aggregate extraction.

Regional Sea 4 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Burry Inlet UK9015011 SS494967	6627.99	N/A	(OW) oystercatcher, pintail	Waterfowl: (OW) curlew, black-tailed godwit, dunlin, knot, shoveler, shelduck, oystercatcher, pintail, whimbrel	The site has a number of vulnerabilities derived primarily from recreational issues, possible mariculture impacts, eutrophication and grazing levels.	A liaison group setup to resolve conservation, public and commercial interests was replaced by a Relevant Authorities Management Group which will progress a management scheme. CCW consults with the South Wales Sea Fisheries Committee over shellfish activities and the EA over eutrophication issues through the management group. The RSPB and CCW has monitored and is reviewing saltmarsh grazing levels on the south side of the estuary. There is liaison with the relevant authority with regard to the Millennium Coastal Park Project. There has been a hydro-electric barrage scheme proposed across the mouth of the Burry Inlet. CCW is currently holding a watching brief over progress on this proposal.
Severn Estuary UK9015022 ST267479	24662.98	(OW) Bewick's swan	(OP) ringed plover; (OW) curlew, dunlin, pintail, redshank, shelduck	Waterfowl: (OW) gadwall, shelduck, pintail, dunlin, curlew, redshank, Bewick's swan, wigeon, lapwing, teal, mallard, shoveler, pochard, tufted duck, grey plover, white-fronted goose, whimbrel	The estuary is vulnerable to large scale interference, including land-claim, aggregate extraction/dredging, physical developments such as barrage construction flood defences, pollution (industrial, oil spillage), eutrophication and tourism based activities and disturbance.	These issues are being addressed through existing control measures and as part of the Severn Estuary Strategy. Since June 1995 the Severn Estuary Strategy has been working towards the sustainable management of the site, through the involvement of local authorities, interested parties and local people. This integrated approach is being further developed in conjunction with the SAC management scheme for the nature conservation interest of the estuary.

Regional Sea 4 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Isles of Scilly UK9020288 SV884161	401.64	(B) storm petrel	(B) lesser black-backed gull	Seabird: (B) great black-backed gull, shag, lesser black-backed gull, storm petrel	The most exposed areas are largely self-sustaining through the operation of natural processes but significant areas are becoming scrubbed over. There is pressure from tourists, particularly during the breeding season.	Management measures are being developed to implement an enhanced programme of scrub cutting, possibly supplemented in the longer term through the reintroduction of stock grazing. The management of the high numbers of visitors to the most vulnerable bird breeding sites is controlled by the Isles of Scilly Environment Trust. The trust manages the majority of the land within the site and also carries out a rat control programme to reduce their impact on the ground-nesting seabirds.
Marazion Marsh UK9020289 SW517319	54.58	(OP) aquatic warbler; (OW) bittern	N/A	N/A	The growth of scrub and water level maintenance are key to maintaining interest in this site for breeding and passage waterbirds. The area also suffers from eutrophication issues.	The site is managed as a nature reserve by the RSPB. The maintenance of the reedbed depends on the periodic cutting of reeds and control of potentially invasive scrub and willow carr. An assessment of water level requirements to maintain the reedbed and associated areas of open water has been carried out. Plans for the installation of water level controls are currently being developed. Eutrophication through diffuse pollution, probably from agricultural sources, is an outstanding issue yet to be resolved.

A3j.9.5 Regional Sea 6

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Dee Estuary / Aber Dyfrdwy (SCI) UK0030131 SJ191819	15805.07	Primary: Mudflats and sandflats not covered by seawater at low tide, <i>Salicornis</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) Qualifying: estuaries, annual vegetation of drift lines, vegetated sea cliffs of the Atlantic and Baltic coasts, embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, humid dune slacks	Primary: N/A Qualifying: sea lamprey <i>Petromyzon marinus</i> , river lamprey <i>Lampetra fluviatilis</i> , petalwort <i>Petalophyllum ralfsii</i>	Distinctive flora is sensitive to any increase in grazing pressure. Intertidal and subtidal habitats of the estuary are broadly subject to natural successional change, although shellfisheries and dredging are a current concern. Threats to the estuary's conservation come from its industrialised shorelines on the Welsh side and the impact of adjacent historic industrial use, including land contamination from chemical and steel manufacture and localised water quality problems. Contemporary issues relate to dock development and navigational dredging, coastal defence works and their impact on coastal process, regulation of shellfisheries, and recreational use of dunes and saltmarshes.	The majority of the site is in the ownership and sympathetic management of public bodies and voluntary conservation organisations. Unlike most western estuaries, sizeable areas of saltmarsh in the Dee remain ungrazed and therefore plant species that are susceptible to grazing are widespread. Remediation works are being undertaken to address land contamination issues.
Preseli UK0012598 SN110320	2705.9	Primary: N/A Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, depressions on peat substrates of the <i>Rhynchosporion</i> , alkaline fens.	Primary: Southern damselfly <i>Coenagrion mercuriale</i> , marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> , slender green feather-moss <i>Drepanocladus</i> (<i>Hamatocaulis</i>) <i>vernicosus</i> Qualifying: N/A	<i>Coenagrion mercuriale</i> requires well-grazed open wet heath and mire vegetation with small runnels or streams. <i>Drepanocladus vernicosus</i> requires boggy slopes flushed with spring water where the vegetation is quite low-growing. Both species are vulnerable to inappropriate levels or the cessation of grazing. Acidification of this upland site is a threat.	The continuance of the current moderate to high summer grazing regime is essential, but difficult to influence because of the common land status of the site and the large number of registered rights. The current winter transhumance to the Castlemartin section of the Limestone Coast of South West Wales cSAC is a vital part of this upland pastoral regime. Atmospheric monitoring occurs at a nearby NNR. Monitoring of water chemistry and <i>Coenagrion mercuriale</i> population size is essential. These issues will be addressed in a management plan, which is in preparation.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Eden UK0012643 NY462237	2463.23	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation, alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature Qualifying: N/A	Primary: White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i> , sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , Atlantic salmon <i>Salmo salar</i> , bullhead <i>Cottus gobio</i> , otter <i>Lutra lutra</i> Qualifying: N/A	The maintenance of breeding and nursery areas for the species on this site depends on the habitat quality of streams and their margins. Many of the streams within the site suffer from overgrazing of riverbanks and nutrient run-off. The water-crowfoot communities as well as the species are sensitive to water quality, particularly eutrophication. Practices associated with sheep-dipping pose a potential threat at this site. Much of the alluvial forest cover is fragmented and/or in poor condition.	Grazing and eutrophication are being addressed by a number of measures, including a conservation strategy with actions to address river quality issues, and a partnership approach to funding habitat improvements. Actions have been identified for getting improvements in water quality and they will be carried forward in the periodic reviews of water company expenditure and reviews of consents under the Habitats Regulations. Sheep-dipping practices are currently under investigation. It is hoped that forest cover can be addressed through management agreements or Woodland Grant Schemes with individual owners.
Glynllifon UK0012661 SH456550	189.27	Primary: N/A Qualifying: N/A	Primary: Lesser horseshoe bat <i>Rhinolophus hipposideros</i> Qualifying: N/A	The site includes the roost and adjacent feeding areas utilised by bats. A recent road improvement scheme, which has interfered with a key flightpath out of the estate and which has failed to incorporate adequate mitigation for the bats, illustrates the pressure on this site.	The building in which the roost is located is currently for sale, and the management of the estate grounds, including the woodlands, is being revised. A management agreement exists with the current owners of the roost building but this does not extend to the feeding areas currently excluded from the SSSI and SAC. There is some scope for improving management of the site as a whole for the bats, through management agreement, agri-environment schemes and other partnership initiatives.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Afon Teifi/ River Teifi UK0012670 SN515508	715.58	Primary: Water courses of plain to montane levels with the <i>Ranunculon fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>	Primary: Brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , Atlantic salmon <i>Salmo salar</i> , bullhead <i>Cottus gobio</i> , Otter <i>Lutra lutra</i> , floating water-plantain <i>Luronium natans</i> Qualifying: Sea lamprey <i>Petromyzon marinus</i>	The species and habitats present on this site are dependent on water quality, flow rate and appropriate management of riparian habitat. In recent decades the number of otters on the site has been increasing. Migratory fish are vulnerable to migration obstacles (e.g. pollution, in-stream artificial structures), overfishing and damage to habitats outside the site.	Existing abstractions and discharges are being reviewed by the EA. Future proposals for abstractions and discharges will require careful scrutiny. Management agreements are being used to secure appropriate management of riparian habitat. CCW are working closely with the authorities responsible for fisheries, wildlife, environmental protection and local planning.
Rhos Llawr-cwrt UK0012680 SN411497	46.13	Primary: N/A Qualifying: N/A	Primary: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> Qualifying: Slender green feather-moss <i>Drepanocladus</i> (<i>Hamatocaulis</i>) <i>vernicosus</i>	The marsh fritillary butterfly population is dependent upon a mosaic of marshy grassland, wet heath, fen, and mire communities.	Traditional low-intensity management with cattle or pony grazing, minimal use of agrochemicals, and a high water table, low soil nutrient status and moderate pH are required to maintain the habitat. This management is appropriate for <i>Drepanocladus vernicosus</i> provided that localised undergrazing does not occur in key areas. This site is a NNR and is being managed by CCW to maintain its features.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Cardigan Bay/ Bae Ceredigion * UK0012712 SN214641	95860.36 (OSPAR MPA = 95,342)	Primary: N/A Qualifying: sandbanks which are slightly covered by sea water all the time, reefs, submerged or partially submerged sea caves	Primary: bottlenose dolphin <i>Tursiops truncatus</i> Qualifying: sea lamprey <i>Petromyzon marinus</i> , river lamprey <i>Lampetra fluviatilis</i> , grey seal <i>Halichoerus grypus</i>	Bottlenose dolphins, porpoise and seals are vulnerable to disturbance from seismic survey for oil and gas, and ecotourism and sea-based recreational activities. There are concerns about the potential for an increase in marine mammal entanglement in fishing nets and marine debris, the reduction or prey species and damage caused to seabed habitats by mobile fishing gear. Dolphins, porpoises and seals are vulnerable to military testing or ordnance that occurs within the site. There are many small harbour-dredging projects in the bay and there is potential for the disposal of spoil from these projects to affect seabed habitats and marine mammals. Environmental contaminants, particularly mercury and PCBs, are a concern.	CCW is liaising with Ceredigion County Council and other interested parties to try and ensure sustainable tourism by improving codes of conduct and improving awareness. Environmental contaminants are being addressed by studies on potential dolphin and porpoise prey species. The site's relevant authorities are considering these issues in the development of a management plan. An INTERREG project is addressing the problem of marine litter in the southern Irish Sea. CCW and the Defence Evaluation and Research Agency are jointly developing a means to detect the presence of marine mammals in areas of risk prior to ordnance tests. Dredging impacts are being addressed through liaison between CCW, local councils and the MAFF.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
<p>Corsydd Môn/ Anglesey Fens</p> <p>UK0012884</p> <p>SH470820</p>	467.19	<p>Primary: Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * Priority feature, Alkaline fens</p> <p>Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i>, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)</p>	<p>Primary: Geyer's whorl snail <i>Vertigo geyeri</i></p> <p>Qualifying: Southern damselfly <i>Coenagrion mercurial</i>, marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i>, <i>Hypodryas</i>) <i>aurinia</i></p>	<p>Past drainage and maintenance of lowered water levels in parts of the site continue to damage some of the fen communities. The abandonment of traditional grazing and reed and peat-cutting practices in some areas is leading to successional change in vegetation. Pollution of water supplies, especially by agricultural run-off of nitrate and phosphate, threatens the site with eutrophication.</p>	<p>Management agreements and acquisitions are being pursued to try to resolve this, and a water level management plan is in preparation by the EA. Management agreements or direct management by conservation agencies (CCW & North Wales Wildlife Trust) are seeking to reinstate grazing with cattle or ponies, scrub and reed cutting and in some instances possibly peat-cutting to slow down successional change. Means to address eutrophication are currently being explored. Airborne nitrate inputs may be a long-term threat. The NNR sections of this site are subject to management plans.</p>
<p>Solway Mosses North</p> <p>UK0012907</p> <p>NY203597</p>	652.6	<p>Primary: Active raised bogs * Priority feature, degraded raised bogs still capable of natural regeneration</p> <p>Qualifying: N/A</p>	<p>Primary: N/A</p> <p>Qualifying: N/A</p>	<p>Peat cutting, drainage and afforestation have posed threats to the site.</p>	<p>Management issues including those arising from drainage systems and afforestation are being highlighted in site management statements and addressed through management agreements, acquisition and through implementation of a NNR management plan in part of the area. A LIFE-funded programme of large-scale timber extraction has been completed to restore vegetation and raise water levels. The effects on the SAC of continued peat extraction will be addressed under the provisions for reviews of consent in the Habitats Regulations.</p>

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Rhinog UK0012945 SH649297	3144.53	Primary: European dry heaths, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , northern Atlantic wet heaths with <i>Erica tetralix</i> , Alpine and Boreal heaths, blanket bogs * Priority feature, depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: floating water-plantain <i>Luronium natans</i>	The area is popular for walking; however recreational pressures are largely confined to public rights of way and car parks. The high rainfall and extensive acidic geology/pedology renders this area, especially its watercourses and lakes, vulnerable to acidification. The lichen-rich and bryophyte-rich oceanic heathland is vulnerable to burning and over-grazing.	Current general policy is to continue the traditionally low levels of sheep/feral goat grazing and to discourage burning. In the woodland areas, the vegetation requires careful management by manipulation of grazing to achieve appropriate light and humidity levels for the exceptionally rich lichen and bryophyte assemblages while ensuring adequate regeneration of the woodland. These issues are being addressed through the use of agrienvironment schemes (Tir Cymen/Tir Gofal) and S15 management agreements. The NNR section of the site is managed in accordance with a CCW management plan.
Eryri/ Snowdonia UK0012946 SH695658	19737.6	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , siliceous alpine and boreal grasslands, hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), calcareous rocky slopes with chasmophytic vegetation, siliceous rocky slopes with chasmophytic vegetation Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Alpine and Boreal heaths, Alpine and subalpine calcareous grasslands, species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe) * Priority feature, blanket bogs * Priority feature, depressions on peat substrates of the <i>Rhynchosporion</i> , petrifying springs with tufa formation (<i>Cratoneurion</i>) * Priority feature, alkaline fens, Alpine pioneer formations of the <i>Caricion bicoloris-atrofuscae</i> * Priority feature, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: Slender green feather-moss <i>Drepanocladus (Hamatocaulis) vernicosus</i> , floating water-plantain <i>Luronium natans</i> Qualifying: N/A	In many areas ecological overgrazing takes place, ericaceous species are being suppressed, grass species are dominating and montane communities such as moss heath are being damaged and reduced. Snowdonia has long been used for rock-climbing and fell walking and is subject to intense recreational pressures particularly on paths and summit areas. However, these rarely impinge upon the special features of the area. The high rainfall and extensive acidic geology/pedology renders this area vulnerable to acidification.	Resolution of grazing problems is complex due to the breakdown of traditional shepherding, other changes in livestock management, and the economics of upland farming. This is being actively tackled by the CCW through the negotiation of management agreements. Remedial work by Snowdonia National Park Authority, National Trust and CCW is tackling recreational pressures. Sections of the site (Cwm Crafnant, Cwm Idwal and Yr Wyddfa) are managed as NNRs and are covered by CCW management plans.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Solway Firth * UK0013025 NY144648	43636.72 (OSPAR MPA = 42,328)	Primary: Sandbanks which are slightly covered by sea water all the time, estuaries, mudflats and sandflats not covered by seawater at low tide, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) Qualifying: reefs, perennial vegetation of stony banks, fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature	Primary: Sea lamprey <i>Petromyzon marinus</i> , river lamprey <i>Lampetra fluviatilis</i> Qualifying: N/A	Flood defence and coastal erosion work, fishing and shellfisheries (including a cockle fishery which is currently closed to allow stocks to recover), saltmarsh/ merse grazing, oil and gas exploration (outwith the site), and industrial development are pressures on the site.	A management strategy to consider and co-ordinate activities is being produced by the Solway Firth Partnership. This will set out the means by which it is proposed to secure the sustainable use of the estuary.
Morecambe Bay * UK0013027 SD371697	61506.22 (OSPAR MPA = 55,136)	Primary: Estuaries, mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays, perennial vegetation of stony banks, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, humid dune slacks Qualifying: Sandbanks which are slightly covered by sea water all the time, coastal lagoons * Priority feature, reefs, embryonic shifting dunes, Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) * Priority feature, dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>)	Primary: Great crested newt <i>Triturus cristatus</i> Qualifying: N/A	There are a wide range of pressures on Morecambe Bay but the site is relatively robust and many of these pressures have only slight or local effects on its interests. Coastal processes operating within the Bay have been affected historically by human activities including coastal protection and flood defence works. The saltmarsh is traditionally grazed and is generally in favourable condition for its bird interest.	Opportunities to reverse coastal squeeze are being explored. Most of the saltmarsh is traditionally grazed and is utilised by breeding, wintering and migrating birds for feeding, roosting and nesting purposes. Positive management is being secured through NGO reserve management plans, English Nature's Site Management Statements and Coastal Wildlife Enhancement Scheme, the European Marine Site Management Schemes for the Duddon Estuary and Morecambe Bay, and the Duddon Estuary and Morecambe Bay Partnerships. These aim for sustainable use of the site, taking account of other potential threats including commercial fisheries, aggregate extraction, gas exploration, recreation and other activities.
Drigg Coast * UK0013031 SD071960	1397.44 (OSPAR MPA = 707)	Primary: Estuaries, Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) * Priority feature, dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) Qualifying: Mudflats and sandflats not covered by seawater at low tide, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, Humid dune slacks	Primary: N/A Qualifying: N/A	The estuary and sand dunes systems are still relatively 'natural' and there is no threat at present of any development that may affect estuarine processes. The vulnerability of the marine site will be further identified through English Nature's work to develop and promote the necessary conservation measures for UK marine SACs.	Much of the sand dune area is under Countryside Stewardship Agreements or as a Cumbrian Wildlife Trust Reserve. English Nature has developed guidance on setting and reviewing conservation objectives, identified key human activities which may affect Annex I and Annex II interests, identified the necessary survey management and monitoring systems, and increased the awareness of those most closely involved in the use and management of marine SACs. English Nature's advice under Regulation 33 has been issued and a brief management scheme statement drafted.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Luce Bay and Sands * UK0013039 NX223434	48759.28 (OSPAR MPA = 47,920)	Primary: Large shallow inlets and bays, Embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) * Priority feature Qualifying: Sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, Reefs	Primary: N/A Qualifying: Great crested newt <i>Triturus cristatus</i>	Physical processes dominate this site, consequently the habitats within it are subject to natural changes in the physical environment. Fishing, particularly shellfishing has potential for impacting on subtidal and intertidal habitats, if the level of activity increases. Some coastal defences occur within the site which have a localised influence on sediment movement. Extraction of sand and gravel takes place outside the site, but any expansion of these operations which might affect the site's interests will be subject to planning procedures and the provisions of the Habitats Regulations.	The majority of this site is owned by the MoD, and a Memorandum of Understanding covers management issues. The localised spread of bracken, <i>Pteridium aquilinum</i> , willow, <i>Salix</i> spp. and pine, <i>Pinus</i> spp. (the latter from adjacent plantation forestry) is being controlled by a programme of active management. There are plans to develop a management plan for the whole site.
St David's / Ty Ddewi UK0013045 SM728285	935.47	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths Qualifying: N/A	Primary: Floating water-plantain <i>Luronium natans</i> Qualifying: N/A	The vegetation is slowly changing due to the cessation in some areas of traditional coastal slope grazing. Scrub and bracken have spread at the expense of maritime communities and the lack of grazing increases the risk of damage from accidental summer fires. Agricultural improvement is also a threat. Rabbit Viral Haemorrhagic Disease is a recent problem. The site is subject to recreational pressures, particularly from tourists along the coastal path, but these are not yet causing significant deleterious change to the vegetation. On Ramsey, visitor numbers are strictly limited.	Threats are being addressed by management agreements over parts of the site, by the ESA scheme and by the re-introduction of traditional grazing by the National Trust. On Ramsey Island, grazing by sheep and rabbits continues in accordance with the management plan.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Glannau Ynys Gybi/ Holy Island Coast UK0013046 SH208817	464.27	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i>	Primary: N/A Qualifying: N/A	Pressure for recreational development remains a threat and visitor pressure requires constant management to counter soil erosion and the disturbance of wildlife. There is a mineral extraction permit on land held by the local authority which is not currently exercised, and pressure for further telecommunications development. Spread of exotic plants (e.g. <i>Disphyma crassifolium</i>) from nearby colonies may cause future problems with cliff communities, and this is being carefully monitored.	Vegetation succession on areas remote from the cliff top requires regular intervention by grazing, cutting or burning to mimic traditional management. Much of the area is managed by RSPB in accordance with a management plan or by private landowners under CCW management agreement or ESA agreements.
Sefton Coast UK0013076 SD281099	4563.97	Primary: Embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), humid dune slacks Qualifying: Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) * Priority feature	Primary: Petalwort <i>Petalophyllum ralfsii</i> Qualifying: Great crested newt <i>Triturus cristatus</i>	The extensive sand dunes and intertidal areas attract large numbers of summer tourists. Concerns have been raised regarding water abstraction on the coast. The coniferous plantations are also a source of debate, with a balance needed between restoration of dune habitats and public enjoyment of the woodlands.	Sefton Coast is primarily owned and managed by Sefton Council, with other major landowners including EN (Ainsdale Sand Dunes and Cabin Hill NNRs), the NT, MoD, and a number of golf clubs. Recreation impact is addressed in Sefton Metropolitan Borough Council's Beach Management Plan. Co-ordinated management of the coast is achieved through the long-standing Sefton Coast Management Scheme (now the Sefton Coast Partnership). Abstraction is being addressed through detailed modelling of the dune aquifer by the EA. Work on plantations is being carried out on Ainsdale Sand Dunes NNR, which holds a significant proportion of woodlands.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Pembrokeshire Marine/ Sir Benfro Forol * UK0013116 SM503093	138069.45 (OSPAR MPA = 137, 086)	Primary: Estuaries, large shallow inlets and bays, Reefs Qualifying: Sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, coastal lagoons * Priority feature, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), submerged or partially submerged sea caves	Primary: Grey seal <i>Halichoerus grypus</i> , shore dock <i>Rumex rupestris</i> Qualifying: Sea lamprey <i>Petromyzon marinus</i> , river lamprey <i>Lampetra fluviatilis</i> , allis shad <i>Alosa alosa</i> , twaite shad <i>Alosa fallax</i> , otter <i>Lutra lutra</i>	Pollution originating from the transport or exploration/production of oil and gas are of concern. Marine communities are vulnerable to damage by certain fishing methods. Visitor pressures, including gathering of firewood and kindling, could affect intertidal features.	Water quality issues such (e.g. with dredge-spoil disposal) are kept under review through liaison with the EA, MAFF and Milford Haven Port Authority. Management of shipping using Milford Haven following the Sea Empress oil-spill in 1996 has improved and will be kept under review by the Port Authority. Improved contingency planning involves many statutory agencies and is reflected in a revised national contingency plan published in January 2000. South Wales Sea Fisheries Committee bylaws control activities within Skomer Marine Nature Reserve. Other environmental requirements of management of fisheries are addressed through liaison with the SWSFC. Education and access issues should be addressed through the National Park and local authority.
Pen Llyn a'r Sarnau/ Lleyn Peninsula and the Sarnau * UK0013117 SH401130	146023.48 (OSPAR MPA = 144,109)	Primary: Sandbanks which are slightly covered by sea water all the time, estuaries, coastal lagoons * Priority feature, large shallow inlets and bays, Reefs Qualifying: Mudflats and sandflats not covered by seawater at low tide, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), submerged or partially submerged sea caves	Primary: N/A Qualifying: Bottlenose dolphin <i>Tursiops truncatus</i> , otter <i>Lutra lutra</i> , grey seal <i>Halichoerus grypus</i>	Construction, e.g. of slipways, coastal defence and marinas/harbours could cause disturbance to the estuarine, intertidal mudflat and sandflat, and reef habitats and disrupt physical processes essential for maintenance of these habitats. Certain reef communities are vulnerable to disturbance from specific fishing methods, in particular heavy bottom-fishing gear. There is the possibility of future drilling for oil and gas in Cardigan Bay and the Irish Sea as well as the possibility of offshore wind power developments. Many of the marine wildlife communities in the cSAC are sensitive to oil pollution.	There is a management plan and action plan addressing issues relating to the reefs and estuaries. CCW is consulted over developments and will need to work with the relevant authorities to assess the implications of all developments. CCW liaises with the Sea Fisheries Committees to identify ways of minimising impact on habitats. The impacts bottom-fishing gear on the subtidal sandbank and shallow inlet and bay habitats will need to be assessed. CCW is advising DECC on potential impacts from offshore development and is working with oil companies and other statutory organisations.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Loch Lomond Woods UK0013573 NN338040	1454.33	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: N/A	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	Threats include the suppression of woodland regeneration through uncontrolled grazing, spread of non-native shrubs and visitor pressures.	Management proposals in Woodland Grant Schemes and the SNH Management Plan for Loch Lomond NNR, along with management agreements proposed in conjunction with ESA farm plan proposals and by Forest Enterprise, will control a range of grazing herbivores, enabling the regeneration of trees and the expansion of the woodland habitat. Management programmes to help control non-native shrubs, mainly <i>Rhododendron</i> , are in place, and management to control the spread of non-native trees is proposed. Underplanted conifers are being felled gradually by Forest Enterprise. Bylaws and Ranger Services assist with visitor management.
Lendalfoot Hills Complex UK0013592 NX162924	1309.71	Primary: Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe) * Priority feature, alkaline fens Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Calaminarian grasslands of the <i>Violetalia calaminariae</i> , transition mires and quaking bogs	Primary: N/A Qualifying: N/A	The complex mosaic of interest features fall within agricultural holdings and their maintenance is dependent on differing grazing and management regimes.	Approximately 50% of the site is covered by management agreements which permit SNH to monitor the condition of the habitat and recommend adjustments if necessary to the level and intensity of grazing and the application of artificial fertilisers. Consideration is being given to similar management agreements for the remainder of the site.
Morecambe Bay Pavements UK0014777 SD440869	2609.69	Primary: Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., <i>Juniperus communis</i> formations on heaths or calcareous grasslands, semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), limestone pavements * Priority feature, <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature, <i>Taxus baccata</i> woods of the British Isles * Priority feature Qualifying: European dry heaths, calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * Priority feature, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: Narrow-mouthed whorl snail <i>Vertigo angustior</i> Qualifying: N/A	The under-grazing of grasslands and decline of traditional cattle grazing is leading to the loss of sward diversity and scrub encroachment problems. Localised overgrazing (sheep-dominated) has impoverished the pavement flora on one of the component sites. A decline of traditional coppice management has reduced the interest of some of the woodland sites. The planting of non-native conifer crops on some of the sites has led to localised declines in condition.	Large parts of the site are nature reserves and are sensitively managed. A major restoration project funded by LIFE Nature is in progress to remove non-native conifer plantations and further other aspects of site restoration. The problems are being addressed primarily through a series of management agreements. These include EN Wildlife Enhancement Schemes, ESA Agreements, and Woodlands Grant Schemes.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Limestone Coast of South West Wales/ Arfordir Calchfaen de Orllewin Cymru UK0014787 SR885969	1594.53	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature Qualifying: European dry heaths, semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), caves not open to the public, submerged or partially submerged sea caves	Primary: Greater horseshoe bat <i>Rhinolophus ferrumequinum</i> , early gentian <i>Gentianella anglica</i> Qualifying: Petalwort <i>Petalophyllum ralfsii</i>	The bats are vulnerable to disturbance from recreational users, although access to the caves is limited to low spring tides. Chemical/oil pollution from the sea, particularly in aerosol form is a threat.	Maintenance or re-introduction of traditional grazing is crucial for management, preceded by burning or cutting if required. This is being addressed via agri-environment schemes and management agreements. Sand quarrying has been halted. Integrated Land Management Plan exists for parts of the Pembrokeshire section which are MoD-owned. This will help address traditional management issues together with recreational use. Close liaison with the British Mountaineering Council over the impact of rock climbing continues. A new contingency plan for chemical/oil spills in the area is being prepared by CCW and its partners.
Great Orme's Head/ Pen y Gogarth UK0014788 SH765833	302.63	Primary: European dry heaths, semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) Qualifying: Vegetated sea cliffs of the Atlantic and Baltic coasts	Primary: N/A Qualifying: N/A	The plateau top of the Great Orme and its slopes are subject to high levels of grazing, which produces short cropped turf. Invasion by native and non-native shrub species is occurring where access for sheep grazing is difficult.	Problems are being addressed by a management plan agreed upon by CCW and the local authority. Recreational pressure on the Great Orme is substantial, as it is immediately adjacent to Llandudno, a major tourist centre. The site is managed as a Country Park and LNR by the local authority in close consultation with CCW. A joint management plan has been agreed upon and is being implemented, which should ensure maintenance of the special features.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Coedydd Derw a Saffleoedd Ystumod Meirion/ Meirionnydd Oakwoods and Bat Sites UK0014789 SH660386	2813.7	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles, alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature Qualifying: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature, bog woodland * Priority feature	Primary: Lesser horseshoe bat <i>Rhinolophus hipposideros</i> Qualifying: N/A	Mosses and liverworts threatened by gorge-walking and extreme canoeing. Grazing is required to maintain the habitat. Feral goats damage saplings. Acidification may occur due to acidic soils. Heathland threatened by grazing/burning/afforestation. Bats are vulnerable to in their summer and winter roosts and affected by reduced insect prey due to pesticide use.	Management of the key features of these woodlands requires light grazing of the field layer vegetation. Management includes light grazing balanced against the natural tree regeneration. Within the NNRs, fencing can be used to control grazing. A Code of Conduct/restrictions is being drawn up for visitors. CCW has management plans for NNR areas. Other areas have S15 management agreements – grazing control is now in place. CCW annually monitors/controls goat herds. Burning/grazing issues are being addressed. Bat roosts are protected through the planning system. Many roosts in mine adits have been grilled.
Cors Fochno UK0014791 SN631913	652.71	Primary: Active raised bogs * Priority feature, degraded raised bogs still capable of natural regeneration Qualifying: Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	Past drainage works, agricultural conversion, fire and cutting have affected the quality of the mire. The area is susceptible to flooding, though protected by works. The maintenance of peripheral drains is the main threat to successful rehabilitation.	Vulnerability has been reduced by land acquisition and designation such that a broad 'buffer zone' of modified mire is now under conservation management. CCW is addressing drain maintenance. Monitoring of the hydrology and the mire vegetation indicates a positive response to ditch-blocking works. Further remedial actions are being addressed, as set out in the management plan.
Pembrokeshire Bat Sites and Bosherston Lakes/ Saffleoedd Ystum Sir Benfro a Llynnoedd Bosherston UK0014793 SR966954	122.44	Primary: Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. Qualifying: N/A	Primary: Greater horseshoe bat <i>Rhinolophus ferrumequinum</i> Qualifying: Lesser horseshoe bat <i>Rhinolophus hipposideros</i> , Otter <i>Lutra lutra</i>	Bat species are vulnerable to deterioration of the buildings which contain the roosts, to human disturbance, and to habitat loss and disturbance within key feeding areas. The lakes are vulnerable to drought, to nutrient enrichment, and to siltation. The breeding otter population is vulnerable to water pollution, human disturbance, entanglement in fishing gear and habitat loss.	Issues are being addressed through existing or pending management agreements or management plans over nursery roosts, transitory roosts, associated hibernacula and adjacent feeding habitats. There is regular surveillance of the greater horseshoe's nursery roosts, and an annual census of sites. The lakes and otter habitat are covered by a Nature Reserve Agreement with the NT.

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Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Garron Plateau UK0016606 D240190	4650.07	Primary: Blanket bogs, alkaline fens Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , natural dystrophic lakes and ponds, northern Atlantic wet heaths with <i>Erica tetralix</i> , transition mires and quaking bogs	Primary: Marsh saxifrage <i>Saxifraga hirculus</i> Qualifying: N/A	The area is dependent on low-level grazing. Heavy grazing and moor gripping have damaged <i>Sphagnum</i> cover in some areas. Other threats include water supply facilities and peat-cutting.	A management plan covering the largest ownership block is in place. The uptake of management agreements and agri-environment schemes to reduce grazing pressure will be encouraged. The effect of grazing pressure will be monitored. <i>Saxifraga hirculus</i> will be actively encouraged. Damaging practices will be addressed by management agreements. An existing Conservation Plan for Garron Plateau is under review.
Murlough * UK0016612 J445313	11902.03 (estimated OSPAR MPA = 10,474)	Primary: Fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) * Priority feature Qualifying: Sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>)	Primary: Marsh fritillary butterfly <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i> Qualifying: Common seal <i>Phoca vitulina</i>	Scrub and bracken have spread in recent years. Erosion and fire risk have increased from military training and visitor pressure. Changes in the supply of sand to the site may be detrimental, though there is no immediate threat.	Scrub growth has been addressed by the introduction of grazing by livestock and scrub clearance. Erosion/fire pressures are addressed in management plans for a NNR. Long-term natural sand loss from the southern end of the site is being monitored. An existing Conservation Plan for this pSAC is now under review.
Eastern Mournes UK0016615 J328270	7507.03	Primary: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths Qualifying: Alpine and Boreal heaths, siliceous alpine and boreal grasslands, blanket bogs * Priority feature, siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), siliceous rocky slopes with chasmophytic vegetation	Primary: N/A Qualifying: N/A	Heavy grazing has degraded heath habitat and montane acid grassland. Tourist pressure has exacerbated the loss.	Problems are being addressed through a management plan over the largest ownership block. Management agreements and agri-environment schemes will be encouraged on other parts of the site. The effect of grazing/burning on heath will be monitored. Path maintenance and creation is continually being carried out. An existing Conservation Plan for Eastern Mournes is under review.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Strangford Lough * UK0016618 J559577	15398.54 (estimated OSPAR MPA = 10,009)	Primary: Mudflats and sandflats not covered by seawater at low tide, coastal lagoons * Priority feature, large shallow inlets and bays, reefs Qualifying: Annual vegetation of drift lines, Perennial vegetation of stony banks, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)	Primary: N/A Qualifying: Common seal <i>Phoca vitulina</i>	Commercial fishing and mariculture pose a potential threat. Bottom-dredging has had an impact on <i>Modiolus</i> communities. Seaweed harvesting, shellfish collection and bait-digging could pose a threat in the future. Pollution loadings present significant threats. The colonisation and spread of aggressive non-native <i>Spartina</i> or <i>Sargassum muticum</i> are current problems.	All issues are addressed in a Marine Nature Reserve management plan or in Nature Reserve management plans. An existing Conservation Plan for Strangford Lough is now under review.
Dykeneuk Moss UK0019763 NS347471	61.64	Primary: Active raised bogs * Priority feature Qualifying: Degraded raised bog still capable of natural regeneration	Primary: N/A Qualifying: N/A	Ditches, grazing and the spread of trees and shrubs are the current issues.	Approximately 40% of the site is covered by a management agreement which makes provision for the maintenance of fences, the damming of drains and the removal of trees or scrub from the main mire expanse. Consideration is being given to a management agreement to stop both grazing and active drainage.
Flow of Dergoals UK0019801 NX246577	170.18	Primary: Blanket bogs * Priority feature Qualifying: depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	Not indicated.	Forest Enterprise, SNH and the owners of the site have discussed Forest Design Plans for the site which may result in the early removal of trees, with no restocking in the vicinity of the SAC.
Kilhern Moss UK0019814 NX201630	123.83	Primary: Blanket bogs * Priority feature Qualifying: depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	This peatland site is in good condition with an actively growing bog surface.	It is subject to few potential threats as both livestock grazing and muirburn are controlled through an ESA agreement.
Mochrum Lochs UK0019818 NX298537	123.83	Primary: Blanket bogs * Priority feature Qualifying: depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	The blanket bog shows good recovery after moor-gripping and muirburn were stopped under a management agreement.	This site is covered by a Management Agreement which controls livestock grazing, drainage and muirburn.
Duddon Mosses UK0019833 SD223853	313.07	Primary: Active raised bogs * Priority feature, degraded raised bogs still capable of natural regeneration Qualifying: N/A	Primary: N/A Qualifying: N/A	Past drainage for peat extraction has lowered the water table and allowed scrub to spread across the mosses.	The majority of landowners have management agreements with EN. A programme of scrub removal and ditch-blocking is being undertaken, with positive results.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Roudsea Wood and Mosses UK0019834 SD347807	470.45	Primary: Active raised bogs * Priority feature, degraded raised bogs still capable of natural regeneration, <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature, <i>Taxus baccata</i> woods of the British Isles * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	In the latter part of the 20th century, coppicing ceased and drainage of the bog led to scrub spread.	Most of the site is now managed as a NNR. Woodland management is carried out and much scrub has been cleared and ditches blocked. Management of the southern bog, recently added to the NNR, has been addressed in the management plan.
Mòine Mhór * UK0019839 NR812934	1150.41 (OSPAR MPA = 288)	Primary: Active raised bogs * Priority feature, degraded raised bogs still capable of natural regeneration Qualifying: Mudflats and sandflats not covered by seawater at low tide, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: N/A Qualifying: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> , otter <i>Lutra lutra</i>	Moine Mhór NNR covers 502 ha of mainly degraded or active raised bogs.	The NNR Management Plan includes actions to aid recovery. Consideration is being given to management of the remainder of the site particularly for the marsh fritillary butterfly.
Y Twyni o Abermenai i Aberffraw/ Abermenai to Aberffraw Dunes UK0020021 SH413642	1871.03	Primary: Embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), humid dune slacks Qualifying: Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation	Primary: Petalwort <i>Petalophyllum ralfsii</i> , shore dock <i>Rumex rupestris</i> Qualifying: N/A	Dune stabilisation is leading to the loss of early successional phases. The hydrological integrity of the site is compromised by water-table reduction due to the conifer crop. The spread of <i>Hippophae rhamnoides</i> and pine seedlings from the forest threaten the dunes. Abandonment of traditional grazing on Aberffraw common land could occur due to traffic hazards on unfenced roads. Shading and scrub may discourage the shore dock.	Pine is controlled by cutting and spraying. There is no ready solution without removal of part of the forest and redesign of the forest is now under discussion. The installation of cattle grids is under discussion with the owners. Tree removal and pony grazing is resulting in an increase in the shore dock population.
Glannau Môn: Cors heli / Anglesey Coast: Saltmarsh * UK0020025 SH380655	1058 (OSPAR MPA = 903)	Primary: <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) Qualifying: Estuaries, mudflats and sandflats not covered by seawater at low tide	Primary: N/A Qualifying: N/A	Modification to the Cefni estuary in the early 19 th century continues to cause accretion of sediment, permitting invasion by <i>Spartina anglica</i> on the seaward edges of the saltmarsh.	<i>Spartina</i> is reduced by herbicide treatment but successional development of saltmarsh is inevitable. Some development of <i>Spartina anglica</i> on the Braint estuary is also likely. This site forms part of Newborough Warren NNR.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Derwent and Bassenthwaite Lake UK0030032 NY262207	1832.96	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> Qualifying: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Primary: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> , sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , Atlantic salmon <i>Salmo salar</i> , otter <i>Lutra lutra</i> , floating water-plantain <i>Luronium natans</i> Qualifying: N/A	There are problems with sewage, acidification (from rainfall) and pollution with synthetic pyrethroid sheep dips. Many of the surrounding hills are overgrazed and soil erosion can cause high sediment loads in the streams/rivers entering the lakes. Sediment and nutrients from such sources have affected plant communities. Flow regimes and sedimentation patterns provide suitable spawning grounds for fish but are affected by flood defence works and abstraction. Much of the land is heavily drained for agriculture or forestry which results in increased run-off. Phosphorous stripping is being undertaken on part of the site.	Issues are recognised in the joint English Nature/Environment Agency Conservation Strategy for the river system, and all licensed activities which may be contributing to problems will be addressed through the review process under the Habitats Regulations.
Clints Quarry UK0030035 NY161357	12.03	Primary: N/A Qualifying: N/A	Primary: Great crested newt <i>Triturus cristatus</i> Qualifying: N/A	The great crested newt population at Clints Quarry has developed since quarrying ceased in the 1980s. Water levels in the ponds are largely dependent on rainfall which has been low in recent years.	Not indicated.
Glan-traeth UK0030042 SH417666	14.1	Primary: N/A Qualifying: N/A	Primary: Great crested newt <i>Triturus cristatus</i> Qualifying: N/A	The permanence of shallow ponds important as newt breeding sites may be threatened by reduced water levels resulting from forest plantation.	Pond management or creation onsite would be considered if breeding habitat is adversely affected and monitoring of newt numbers shows that the population is affected.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Afon Gwyrfaï a Llyn Cwellyn UK0030046 SH547561	114.29	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation Qualifying: N/A	Primary: Atlantic salmon <i>Salmo salar</i> , floating water-plantain <i>Luronium natans</i> Qualifying: Otter <i>Lutra lutra</i>	The present abstraction regime is compatible with the site's nature conservation status. Llyn Cwellyn has acidified by 0.7 pH units since the late 1800s, due to emissions of oxides of sulphur and nitrogen and subsequent acidic deposition. The Afon Gwyrfaï is likely to be vulnerable to cumulative impacts of small-scale changes along its length which may affect water quality and habitat structure.	The management of the extensive block of coniferous plantation on the shores of Llyn Cwellyn is important. A management plan has been agreed upon between the CCW and Forest Enterprise. Negotiations are in progress to redesign the plantation to remove trees from around tributary streams, and hence reduce any further risk of acidification.
Morfa Harlech a Morfa Dyffryn UK0030049 SH567328	1062.57	Primary: Embryonic shifting dunes, shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), humid dune slacks Qualifying: N/A	Primary: Petalwort <i>Petalophyllum ralfsii</i> Qualifying: N/A	The beaches adjacent to both dune systems are subject to heavy recreational pressure. Morfa Dyffryn is especially vulnerable as it is mobile and has a limited external sand supply.	Access points through the dunes are managed to minimise dune destabilisation. Parts of both dunes have been managed as NNRs since the late 1950s (Morfa Harlech) and early 1960s (Morfa Dyffryn).
River Ehen UK0030057 NY031144	24.39	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: Atlantic salmon <i>Salmo salar</i>	Mussels are likely to be affected by the apparent decline in salmonid populations and by eutrophication from sewage works and agricultural run-off. Sheep-dipping poses a potential threat at this site, and is currently under investigation.	Water quality issues will be addressed through the review process under the Habitats Regulations and at a catchment level by local Environment Action Plans. Further research is required to determine the extent of any problems arising from pearl fishing. Possible concerns over the flows within the river will be addressed through reviews of abstraction licences.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Afonydd Cleddau/ Cleddau Rivers UK0030074 SM938249	750.73	Primary: N/A Qualifying: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, active raised bogs * Priority feature, alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , bullhead <i>Cottus gobio</i> , Otter <i>Lutra lutra</i> Qualifying: sea lamprey <i>Petromyzon marinus</i>	The habitat and species are vulnerable to pollution from agricultural sources and physical changes such as canalisation, abstraction, riverbank clearance, gravel extraction, alterations to grazing, and man-made obstructions. Over-exploitation of fisheries and non-native species of animal or plant could be a threat. Otters are vulnerable to human disturbance, habitat loss, crossing highways, and injury from discarded fishing equipment.	Issues are being addressed by the EA Wales in its Local Environment Agency Plan (LEAP). The LEAP actions will be implemented by liaison with partners and users of the watercourse. The Cleddau Rivers are Designated Salmon Fisheries and a Salmon Action Plan exists which addresses the salmon fisheries issues. Agri-environment schemes are addressing habitat loss, and conservation groups/agencies regularly provide advice regarding otter habitat management. The Pembrokeshire Rivers Trust is undertaking habitat improvements within the Cleddau rivers catchment, in partnership with EA Wales, CCW and landowners.
Afon Eden – Cors Goch Trawsfynydd UK0030075 SH720271	284.29	Primary: N/A Qualifying: Active raised bogs * Priority feature	Primary: freshwater pearl mussel, Floating water-plantain <i>Luronium natans</i> Qualifying: Atlantic salmon <i>Salmo salar</i> , otter <i>Lutra lutra</i>	The pearl mussel and salmonids are vulnerable to water pollution e.g. sheep-dip, nitrate input, sediment input, and inappropriate river management. The high rainfall and acidic geology/pedology renders this area vulnerable to acidification.	Any inputs to the river which affect water chemistry need to be controlled. The mire features require appropriate grazing and control/cessation of burning, currently being addressed through agri-environment scheme agreements (Tir Cymen/Tir Gofal).
Alyn Valley Woods/ Coedwigoedd Dyffryn Alun UK0030078 SJ196630	168.3	Primary: <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature Qualifying: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: N/A Qualifying: N/A	The area has been worked for minerals and limestone, though currently none of the quarries within the site is being worked. The area is subject to recreational pressure.	Negotiations are being undertaken with mineral operators and regulatory authorities to secure appropriate conservation measures for these workings. Part of the area is being managed as a Country Park. Visitor management, footpath maintenance and woodland management are undertaken through the Ranger Service and under a FC Woodland Grant Scheme.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Burrow Head UK0030102 NX453356	244.22	Primary: N/A Qualifying: N/A	Primary: great crested newt <i>Triturus cristatus</i> Qualifying: N/A	Agricultural chemicals and erosion through grazing generate pressures at the site.	A management scheme is being developed for the whole site to ensure that sufficient foraging areas, shrub cover and hibernation sites are retained in the vicinity of breeding ponds. Some ponds may be partially fenced to reduce erosion and grazing pressures. Guidelines on the control of agricultural chemicals will be used to prevent pollution by herbicides and pesticides. In the longer-term, as ponds within the cluster progress through the wetland transition, creation of new breeding ponds may be important to maintain newt population.
Cadair Idris UK0030104 SH704132	3785.05	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), calcareous rocky slopes with chasmophytic vegetation, siliceous rocky slopes with chasmophytic vegetation Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Blanket bogs * Priority feature, alkaline fens, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: N/A Qualifying: Marsh fritillary butterfly <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i> , slender green feather-moss <i>Drepanocladus (Hamatocaulis) vernicosus</i>	The site has heavy visitor pressure causing localised damage to vegetation. The moorland has been grazed and burnt heavily in some areas leading to an increase in grassland. The high rainfall renders the site vulnerable to acidification.	Erosion is addressed by the Snowdonia Upland Path Partnership (CCW/SNPA/NT). CCW is discussing management agreements with owners on the site in order to reduce the grazing and to restrict heather burning. The NNR section of the site is managed according to a CCW management plan, but suffers from the fact that CCW does not own the grazing rights.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Calf Hill and Cragg Woods UK0030106 SD543614	34.43	Primary: Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: N/A Qualifying: N/A	There is no immediate need for woodland management in order to safeguard the interest of the site.	In the long-term it would be desirable to repair some of the walls/fences at in order to control sheep grazing. Some grazing is desirable but it would be beneficial to be able to exclude sheep for certain times of the year. Since the canopy of the oak woodland is fairly dense, it would be desirable over the long-term to instigate small-scale selective fellings/silvicultural thinning, whilst felling a small stand of planted larch/pine (<0.5 ha) and replacing it with oak/birch. The Abbeystead's woodland management proposals for the woodland complex as a whole already recognise problems.
Carsegowan Moss UK0030111 NX429589	49.49	Primary: Active raised bogs * Priority feature Qualifying: Degraded raised bog still capable of natural regeneration	Primary: N/A Qualifying: N/A	Previous problems include over-grazing, and poor muirburn and drainage.	The SWT has addressed previous problems with drainage, muirburn and peat-cutting through a programme of drain-blocking and tree removal with the result that the adverse impacts have been reversed to a large extent.
Bae Cemlyn/ Cemlyn Bay UK0030114 SH331934	43.43	Primary: Coastal lagoons * Priority feature Qualifying: Perennial vegetation of stony banks	Primary: N/A Qualifying: N/A	Pressures exist from public access.	The site is owned by the NT and managed by North Wales WT for its breeding tern colony and is a designated SPA. Lagoon conditions are controlled by a sluice which determines salinity levels. Public access to the shingle ridge is controlled during the breeding season.
Coed Cwm Einion UK0030117 SN690947	21.01	Primary: <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	The woodland has been modified through the planting of non-native conifer and beech trees, and in other areas natural regeneration is restricted though over-grazing and the presence of dense bracken.	The conservation value of Coed Cwm Einion depends on natural woodland processes. The Forestry Commission has worked with CCW to produce a Forest Design Plan. The plan gives priority to conservation objectives and prescribes the gradual removal of non-native species. Negotiations with other owners try to exclude livestock and encourage natural regeneration.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Coedydd Aber UK0030118 SH664713	346.2	Primary: Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: N/A Qualifying: N/A	The woodland habitat is relatively robust.	There is scope for site enhancement through removal of conifers and other invasive species. Part of the site, within the existing NNR, has recently been entered into a Tir Gofal agreement. The involvement of Forest Enterprise is necessary to ensure improved conservation management and to ensure the current integrity of the NNR is maintained.
Corsydd Eifionydd UK0030121 SH460478	144.32	Primary: Transition mires and quaking bogs Qualifying: N/A	Primary: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> , slender green feather-moss <i>Drepanocladus</i> (<i>Hamatocaulis</i>) <i>vernicosus</i> Qualifying: N/A	The site is under one principal threat - scrub encroachment due to a lack of grazing, which is a reflection of the inaccessible, boggy nature of the terrain. Drainage and pollution are additional threats.	Not indicated.
Coedwigoedd Penrhyn Creuddyn/ Creuddyn Peninsula Woods UK0030124 SH797790	118.86	Primary: <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature Qualifying: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Taxus baccata</i> woods of the British Isles * Priority feature	Primary: N/A Qualifying: N/A	The majority of these woodlands are ungrazed and exhibit good woodland structure and natural regeneration. Small sections are grazed by livestock, chiefly cattle and ponies but also some sheep. Some areas are used for timber production and game shooting which may impact on woodland structure and ground flora. Recreational pressure associated with public access can also lead to damage.	Issues are being addressed through management agreements. About 20% of the woodland is managed as nature reserves by voluntary conservation bodies.
Deeside and Buckley Newt Sites UK0030132 SJ291678	207.52	Primary: N/A Qualifying: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: great crested newt <i>Triturus cristatus</i> Qualifying: N/A	Both terrestrial and aquatic habitats are vulnerable to destruction and inappropriate management. Some of the site has been and continues to be subject to mineral extraction and land restoration which threatens habitat. Woodland habitats are subject to recreational pressure. The lack of variation in age-structure limits structural and biological diversity.	Management plans and conservation strategies are now being implemented to ensure appropriate management for key component sites. Woodlands are managed as a Country Park. Visitor management, footpath maintenance and woodland management are undertaken through the Countryside Service and under a Forestry Commission Woodland Grant Scheme. Management seeks to increase diversity (e.g. by selective thinning and removal of non-native species).

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Coedwigoedd Dyffryn Elwy/ Elwy Valley Woods UK0030146 SJ020691	83.01	Primary: <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature Qualifying: N/A	Primary: N/A Qualifying: N/A	For the most part woodlands exhibit good structure and natural tree regeneration with some impacts from deer grazing. Some sections are threatened by domestic livestock grazing (including pigs, sheep and cattle). There is little public access but some shooting/game-rearing. Non-native species (beech and hornbeam in particular) restrict regeneration and ground flora.	Regeneration of non-native species will be discouraged. Parts of woods are silviculturally managed, under the terms of a Woodland Grant Scheme though these may be damaging if intensified. This threat is addressed through consultation with owners and the Forestry Commission and by management agreements with the owners.
Galloway Oakwoods UK0030153 NX383711	355.1	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: N/A	Primary: N/A Qualifying: N/A	The component woodlands are subject to varying degrees of recreational pressure. Exotic species threaten the natural regeneration of the woodlands.	Current management involves removal of exotic species, underplanting and encouragement of regeneration, carried out by private owners/occupiers, Forest Enterprise, RSPB and SWT; the latter two organisations manage parts of the site as nature reserves. Recreation is being addressed through footpath provision and other measures including interpretation.
Halkyn Mountain/ Mynydd Helygain UK0030163 SJ196715	610.36	Primary: Calaminarian grasslands of the <i>Violetalia calaminariae</i> Qualifying: European dry heaths, semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Primary: Great crested newt <i>Triturus cristatus</i> Qualifying: N/A	Halkyn Mountain has previously been subject to mining for metals such as lead and zinc and quarrying for chert and limestone – limestone quarrying still operates. The Calaminarian grassland interest associated with mining is vulnerable from reclamation schemes. A decline in common grazing rights threaten traditional grazing which has maintained diverse vegetation, leading to scrub/bracken growth. Burning and cutting may also damage habitat. The great crested newt requires terrestrial and aquatic habitats for the various stages in their life cycle.	Negotiations are underway to improve or create new habitat for this species.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Hollymount UK0030169 J464438	49.95	Primary: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature Qualifying: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: N/A Qualifying: N/A	Increased drainage is the biggest threat to these woods which would encourage dry woodland types. Invasive species threaten the habitat.	Forest Service, Department of Agriculture and Rural Development, manage the woodlands, with local Nature Reserve staff having a responsibility for compliance monitoring. Management issues will be addressed via an agreed conservation plan with Forest Service and Environment and Heritage Service. Conservation Objectives are being prepared.
Lecale Fens UK0030180 J451387	40.87	Primary: Alkaline fens Qualifying: N/A	Primary: N/A Qualifying: N/A	The alkaline fen communities depend upon low nutrient levels. Eutrophication from agricultural run-off poses the main threat to the fen interest. Changes in hydrology, land reclamation, illegal dumping and natural succession also pose potential threats to the site.	Conservation Objectives are being prepared. Monitoring of vegetation will be carried out and management agreements offered to maintain or enhance current management practices.
Llyn Dinam UK0030186 SH310774	36.69	Primary: Natural eutrophic lakes with Magnopotamion or <i>Hydrocharition</i> -type vegetation Qualifying: N/A	Primary: N/A Qualifying: N/A	Minor threats occur due to occasional waste disposal from adjacent domestic properties.	The site is 75% controlled by the RSPB and a further part falls under an ESA scheme. Ownership of 25% of the lake is not known. Enhancement of the reedbed for foraging bittern took place in 1998.
Corsydd Llyn/ Lleyn Fens UK0030187 SH313366	283.68	Primary: Alkaline fens Qualifying: Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davalliana</i> * Priority feature	Primary: Desmoulin's whorl snail <i>Vertigo moulinsiana</i> Qualifying: Geyer's whorl snail <i>Vertigo geyeri</i>	There are agricultural pressures (e.g. ditch maintenance, fertiliser application, neglect). The water quality of the site is vulnerable to deterioration due to agricultural activities (e.g. slurry). Scrub encroachment is an ongoing management problem.	CCW owns and manages part of the site (Cors Geirch NNR) and can control pressures, subject to resource availability. There are management agreements in place over other parts of the site which address agricultural and water quality issues. One-third of the site has no agreement or protective ownership.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Y Fenai a Bae Conwy/ Menai Strait and Conwy Bay * UK0030202 SH629728	26482.67 (OSPAR MPA = 26,450)	Primary: Sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, reefs Qualifying: Large shallow inlets and bays, submerged or partially submerged sea caves	Primary: N/A Qualifying: N/A	Construction, e.g. of slipways, coastal defence and marinas/harbours may cause damage and there are pressures for more moorings etc. Bottom-trawling may affect the subtidal sandbank and shallow inlet and bay habitats. Sediment redistribution from dredging may affect subtidal algal communities. Many of the marine wildlife communities in the cSAC are sensitive to oil pollution.	CCW is consulted by the local planning authorities and other statutory bodies over developments. The potential impacts of heavy bottom-fishing gear will need to be assessed. CCW will be working with the fishing industry and the local fisheries regulator (the North Western & North Wales Sea Fisheries committee) to assess the potential impacts of the mussel fishery. Appropriate assessment of the significance of future proposed activities is required. CCW is working with oil companies and other statutory organisations to try and prevent pollution incidents.
Migneint–Arenig– Dduallt UK0030205 SH816440	19968.23	Primary: European dry heaths, blanket bogs * Priority feature Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , natural dystrophic lakes and ponds, northern Atlantic wet heaths with <i>Erica tetralix</i> , old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: N/A Qualifying: N/A	The main threats are from inappropriate grazing/burning/drainage and consequent degradation of blanket bog and heath. Afforestation has also been a problem in the past. Vegetation and lake features are vulnerable to acidification due to atmospheric pollution, compounded by high rainfall and acidic geology/pedology. Artificial liming of the catchment is an additional threat. In the past this site has been affected by quarrying, resulting in habitat destruction.	Problems are being addressed through of agri-environment agreements (Tir Cymen/Tir Gofal) and S15 management agreements. A joint RSPB/Forest Enterprise/CCW black grouse project has also helped restore blanket bog and heath in some areas.
Mull of Galloway UK0030220 NX129313	136.39	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	In general, the impacts of grazing have not been deleterious to the site.	Recent fencing and dyke provision along some stretches of the site should result in a reduction in grazing pressure on some areas, and a subsequent increase in heathland species.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
North Pembrokeshire Woodlands/ Coedydd Gogledd Sir Benfro UK0030227 SN046345	315.68	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: <i>Barbastelle Barbastella barbastellus</i> Qualifying: N/A	Large areas of woodland were felled after WWI and there has been a decline in traditional broad-leaved woodland management (e.g. coppicing). The site has been fragmented by coniferous afforestation. The lack of variation in age structure limits the structural and biological diversity.	Current management seeks to redress diversity through, for example, selective thinning or coppicing. Many of the woods are owned or managed by conservation organisations (Pembrokeshire Coast National Park Authority, CCW, Wildlife Trust West Wales). Financial assistance for management is provided by the Forestry Commission, through the Woodland Grant Scheme. Several areas are in private ownership, but under management agreements with CCW.
North West Pembrokeshire Commons/ Comins Gogledd Orllewin Sir Benfro UK0030229 SM776273	248.89	Primary: European dry heaths, transition mires and quaking bogs Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Primary: Floating water-plantain <i>Luronium natans</i> Qualifying: N/A	Neglect allows species such as <i>Ulex gallii</i> and <i>Molinia caerulea</i> to dominate and produce a species-poor sward of uniform structure. Combinations of cutting, grazing and burning reduce the dominance of sub-shrubs and create a species-rich <i>Eu-Molinion</i> sward of varied structure.	Current conservation management aims to increase the proportion of shorter vegetation. Many of the commons are owned or managed by conservation organisations (Pembrokeshire Coast National Park Authority, National Trust, Wildlife Trust West Wales). Management is supported in part by the Heritage Lottery Fund through the Tomorrow's Heathland Heritage Project.
Rhos Talglas UK0030245 SN552634	53.55	Primary: N/A Qualifying: <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Primary: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> Qualifying: N/A	Traditional low-intensity management with cattle or pony grazing, no or minimal use of agrochemicals, a high water-table and low soil nutrient status and moderate pH are required to maintain the <i>Molinia</i> meadows. The site has been notified as a SSSI.	The marsh fritillary population is dependent upon maintenance of the habitat. Management agreements are either in place or under negotiation to secure appropriate management.
River Bladnoch UK0030249 NX347604	300.02	Primary: N/A Qualifying: N/A	Primary: Atlantic salmon <i>Salmo salar</i> Qualifying: N/A	Salmon numbers have declined in recent years. There are concerns about water quality in river headwaters. Salmon are dependent on unpolluted water, clean spawning gravels, unimpeded river channel and bank vegetation which supplies insects to young fish. Some parts of the river are affected by bank erosion.	SNH will work with foresters and those carrying out works in the river to ensure that guidelines are followed with an emphasis on spawning areas. Sources of pollution will be carefully monitored. Funding of enhancements that remove channel obstacles will continue. Management advice which encourages the retention of some vegetation and bank stabilisation is being prepared.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid UK0030252 SJ423503	1308.93	Primary: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation Qualifying: N/A	Primary: Atlantic salmon <i>Salmo salar</i> , floating water-plantain <i>Luronium natans</i> Qualifying: Sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , river lamprey <i>Lampetra fluviatilis</i> , bullhead <i>Cottus gobio</i> , otter <i>Lutra lutra</i>	Riverine threats include: inappropriate flow regulation; excessive abstraction; threats to water quality from direct and diffuse pollution; eutrophication and siltation. Degradation of riparian habitats due to engineering, agricultural practices and invasive plant species may also have an adverse effect. The salmon population is threatened by excessive exploitation by high sea, estuarine and recreational fisheries. Introduction of non-indigenous species could also threaten both fish and plant species.	Issues are being addressed by a variety of statutory bodies that are in a position to overcome these threats through regulatory powers and partnerships with landowners, industry and other interested parties.
River Kent UK0030256 SD508953	109.12	Primary: N/A Qualifying: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Primary: White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i> Qualifying: Freshwater pearl mussel <i>Margaritifera margaritifera</i> , bullhead <i>Cottus gobio</i>	The maintenance of breeding and nursery areas for the species on this site depends on the habitat quality of streams and their margins. White-clawed crayfish are affected by incidents of pyrethroid sheep-dip pollution of watercourses.	Habitat improvement schemes are to be implemented. The impact of point-discharges on water quality will be reviewed and action proposed where necessary. The dwindling population of freshwater pearl mussels needs to be investigated. A management plan will be developed for the part of the catchment supporting this species.
Clogwyni Pen Llyn/ Seacliffs of Llyn UK0030271 SH216257	1048.4	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	The site is physically relatively robust although activities in recent years have demonstrated the vulnerability of habitats on both hard and soft cliffs to human pressure. Inappropriate agricultural management, including undergrazing, overgrazing and physical disturbance of habitat, continues to be a problem.	Issues are addressed on some parts of the site through Management Agreements.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Subberthwaite, Blawith and Torver Low Commons UK0030285 SD269896	1865.17	Primary: Transition mires and quaking bogs Qualifying: Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	The mires are at or near favourable condition and would be threatened by intensification of land-use on the surrounding commons or by interference with the site hydrology. Heathland may be inhibited from recovery by the livestock management regime but at current livestock levels this is not believed to be affecting the mire interest.	There is a good liaison with a commoners association over part of the site. Lowland heath is not listed as a SAC feature on the site because of its degraded, unfavourable condition.
Tarbert Woods UK0030286 NR759602	1595.97	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: N/A	Primary: N/A Qualifying: N/A	Spread of bracken and <i>Rhododendron</i> threaten the habitat and deer browsing reduces effective regeneration.	Control of colonisation by <i>Rhododendron</i> is being conducted through several management agreements. Forest Enterprise rangers undertake regular deer-culling to minimise the impact of browsing on regeneration. Impacts are also being reduced by the elimination of domestic grazing. Bracken has become dominant in parts of the woodland, though this is being controlled by agreements.
Turmennan UK0030291 J485503	14.83	Primary: Transition mires and quaking bogs Qualifying: N/A	Primary: N/A Qualifying: N/A	Eutrophication and natural succession, especially reed encroachment, pose the main potential threats. Nutrient enrichment has been identified as a major cause for concern.	Most of the site and some of the adjacent area is in public ownership. Site management issues will be addressed by Department of Environment wardening staff. Action is being taken to identify the source of nutrient enrichment. Conservation Objectives are being prepared.
Witherslack Mosses UK0030302 SD457826	486.53	Primary: Active raised bogs * Priority feature, degraded raised bogs still capable of natural regeneration Qualifying: N/A	Primary: N/A Qualifying: N/A	Past drainage for peat extraction and forestry has lowered the water table and allowed scrub to spread across the mosses.	A programme of restoration works is in place on two of the mosses, and a management plan has been completed for major works on the third.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Yerbeston Tops UK0030305 SN057099	18.81	Primary: N/A Qualifying: <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Primary: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> Qualifying: N/A	A significant proportion of the site is in an unfavourable condition for marsh fritillary butterfly. The decline in habitat suitability has coincided with the abandonment of grazing on part of the site and a change of grazing from beef cattle to dairy cattle on the remainder.	The site is undergoing recovery management, with financial assistance from CCW. This involves the cutting and removal of rank vegetation and scrub and the delivery of a beef cattle and pony grazing regime.
Yewbarrow Woods UK0030306 SD347872	112.89	Primary: <i>Taxus baccata</i> woods of the British Isles * Priority feature Qualifying: <i>Juniperus communis</i> formations on heaths or calcareous grasslands, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: N/A Qualifying: N/A	Lack of regeneration at Yewbarrow is a problem resulting from browsing by deer.	Woodland grants have been given in recent years to encourage regeneration of native trees, together with funding for stockproof fencing. Estimates of areas covered by yew, juniper and heath will be checked the next time the site is surveyed.
South Solway Mosses UK0030310 NY203597	1962.36	Primary: Active raised bogs * Priority feature Qualifying: Degraded raised bogs still capable of natural regeneration	Primary: N/A Qualifying: N/A	The site has been modified by extensive drainage associated with agricultural reclamation and/or peat extraction. Parts of the site have suffered from uncontrolled fires. Part of the peat body at Wedholme Flow has been subject to peat extraction, though this has now ceased.	Management problems are being addressed through Site Management Statements, management agreements, acquisition, and through implementation of a NNR Management Plan in part of the area, including a major programme of installation of drains to raise water levels. This is proving effective in re-establishing mire conditions.
Raeburn Flow UK0030314 NY295717	63.96	Primary: Active raised bogs * Priority feature Qualifying: Degraded raised bogs still capable of natural regeneration	Primary: N/A Qualifying: N/A	Historical peat-cutting and drainage has resulted in some drying of the peat surface, and subsequently growth of pine and birch has occurred. Continued peat formation depends upon the active growth of <i>Sphagnum</i> , for which a high water table is vital.	Positive habitat works have been agreed with the owner/occupiers and are well underway. Under this agreement, trees are being removed from the peatland to reduce water-loss and prevent shading of the bog plant communities, and ditches are being blocked to reactivate the <i>Sphagnum</i> cover. Consideration is being given to the reintroduction of limited grazing to inhibit scrub growth.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Aughnadarragh Lough UK0030318 J442593	12.8	Primary: N/A Qualifying: N/A	Primary: Marsh fritillary butterfly <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i> Qualifying: N/A	Marsh fritillary butterfly populations are prone to natural cycles and fluctuations; however, the site is known to have been regularly used for breeding over a number of years. The main threats to the site are a trend towards rank growth and scrub encroachment as a result of lack of management.	EHS is seeking the co-operation of landowners to ensure that active management of the site is initiated. The Conservation Objectives for the site have been prepared.
Ballykilbeg UK0030319 J447406	37.59	Primary: N/A Qualifying: N/A	Primary: Marsh fritillary butterfly <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i> Qualifying: N/A	Marsh fritillary butterfly populations are prone to natural cycles and fluctuations; however, the site is known to have been regularly used for breeding over a number of years. Overgrazing will reduce the abundance of the larval food-plant <i>Succisa pratensis</i> ; undergrazing will produce a trend towards rank growth and scrub encroachment.	Maintaining a suitable grazing regime is very important to the success of marsh fritillary colonies. EHS is seeking the co-operation of landowners to ensure that favourable management of the site is maintained. The Conservation Objectives for the site have been prepared.
Glen Shira UK0030346 NN138158	65.34	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: N/A	Primary: N/A Qualifying: N/A	There are currently no known threats to the site.	One part of the site is under the Woodland Grant Scheme and the rest in the ownership of Forest Enterprise, managed as a Caledonian Forest Reserve. Should potentially damaging factors, such as high grazing pressure by deer, become an issue in the longer term, they will be identified by regular monitoring of oak woods and will be addressed by appropriate management.

Regional Sea 6 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Owenkillew River	213.46	Primary: Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Bog woodland * Priority feature	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: Atlantic salmon <i>Salmo salar</i> , Otter <i>Lutra lutra</i>	Threats include water quality deterioration from point-source pollution and diffuse runoff from farms and conifer plantation. Such poor water quality may influence freshwater pearl mussel recruitment and availability of host salmonids, which may also be influenced by increased sediment from plantation forest and degraded peatlands.	Implementation of the Water Framework Directive will require action to improve water quality. Negotiations with other relevant government organisations have been initiated to address these issues. The upland catchment is within a heather moorland ESA.
Upper Ballinderry River	58.8	Primary: Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: Otter <i>Lutra lutra</i>	Threats include water quality deterioration from point-source pollution and diffuse runoff from farms and conifer plantation. Such poor water quality may influence freshwater pearl mussel recruitment and availability of host salmonids, which may also be influenced by increased sediment from plantation forest and degraded peatlands. Water extraction for fish farms, and siltation loading from sand washing are also problems at the site	Implementation of the Water Framework Directive will require action to improve water quality. Negotiations with other relevant government organisations have been initiated to address these issues.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Copeland Islands (potential SPA) UK9020291	201.52					

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Mersey Narrows and North Wirral Foreshore (potential SPA) UK9020287	2089.41	N/A	(OW) redshank, turnstone	(OW) dunlin, knot, grey plover, oysertcatcher, cormorant,s redshank, turnstone		
Liverpool Bay (potential SPA) UK9020294	197504.24					
Inner Clyde Estuary UK9003061 NS356758	1826.02	N/A	(OW) redshank	N/A	The land adjoining the SPA comprises about 50% agricultural land, 20% designated recreational areas, 20% abutting road and railway embankments and 10% industrial land. Industrial activity is not as intensive as it was formerly, with the major installations now comprising a large container terminal at Greenock and a petroleum storage area at Bowling. The channel of the Clyde is maintained at 10m depth (high tide) by dredging although at current levels this is not thought to conflict with the nature conservation interest of the site. Three sewage works adjoin the site.	Contingency plans are in place in case of oil spills. Longer-term improvements in water quality may influence the overall productivity of the site in future years. A strategy for monitoring future changes is under consideration.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Kintyre Goose Roosts UK9003071 NR717307	412.37	(OW) Greenland white-fronted goose	N/A	N/A	There are no known significant threats to the interest on the site at present.	A recent draft research report has indicated that further monitoring of the site is required in order to determine the significance of disturbance that may occur through forestry activities (all 5 lochs are adjacent to forest plantations) and wildfowling. SNH will address any significant threats brought to light by such monitoring through management agreements with private owners and occupiers and through liaison and agreement with other competent authorities.
Ailsa Craig UK9003091 NX019100	99.94	N/A	(B) gannet, lesser black-backed gull	Seabird: (B) guillemot, kittiwake, herring gull, lesser black-backed gull, gannet	There is no significant threat to the interest at present. Grazing pressure by rabbits may be causing erosion. There are potentially some visitor pressures.	The site is subject to a Management Agreement to reduce and control the brown rat. SNH are in discussion with the owners regarding Management undertakings to protect features of the site. It is proposed that numbers of visitors to the island are maintained at the present level with seasonal restrictions to protect the colonies of breeding birds. It is proposed that grazing is monitored and if found to be a problem, addressed through the Management Statement.
Loch of Inch and Torrs Warren UK9003121 NX154534	2111.04	(OW) Greenland white-fronted goose, hen harrier	N/A	N/A	The Loch of Inch is used as a roost. Torrs Warren is used as a roost and a feeding area. There is very occasional disturbance of the foreshore roost at Torrs Warren but there is no evidence at present that this is having an adverse effect on the interest.	Not indicated.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Black Cart UK9003221 NS474678	56.3	(OW) whooper swan	N/A	N/A	The river and adjacent areas have previously supported intensive agriculture and heavy industry and maintenance of water quality is an important issue. The site is easily accessible to walkers, anglers and wildfowlers which generate some disturbance, but at current levels birds readily return to favoured feeding areas once the disturbance has passed. Glasgow Airport abuts the southern boundary of the SPA and a concern over bird-strike exists.	Water quality is maintained by monitoring changes in operations on the site through SSSI procedure and in the wider area through the existing regulatory role of SEPA. A management plan is being drawn up for the land area north of the river that aims to initiate management to benefit the swans. Access is limited to some degree by the availability of parking near the site and developments that may influence access are monitored through the planning process. The presence of whooper swans is noted in the pilots' flight information as a potential safety risk during the winter months. SNH has open dialogue with the CAA and BAA over bird related air safety issues, and monitoring is conducted by the BAA bird management team on site.
Knapdale Lochs UK9003301 NR755684	112.39	(B) black-throated diver	N/A	N/A	Disturbance by fishermen and mammalian predation may have an influence on the reproductive success of black-throated divers. Also, one of the lochs (Loch Clachaig) suffers from a serious draw down of the water level because it is used to feed the Crinan canal.	Negotiations are in progress with local angling clubs, owners of the sites and British Waterways to minimise the affect of disturbance and the reduction of water levels on the divers.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Arran Moors UK9003341 NR975332	10736.51	(B) hen harrier	N/A	N/A	Breeding raptors are potentially vulnerable to disturbance from agricultural practices, game management and recreational activities (including walking and bird watching) on the site. Potential threats to the moorland include degradation, loss of heather and peat erosion through inappropriate muirburn, overgrazing, public/vehicular access, the spread of bracken and even the cessation of farming.	Issues will be addressed through the Arran Moors Moorland Management Scheme, which is currently being developed by SNH. This scheme will include prescriptions for bracken control, heather restoration, reductions in stocking levels and sensitive muirburn. Ongoing monitoring of the raptor populations, conducted by the South Strathclyde Raptor Study Group on the site is being continued and will aid in developing and informing best management practice.
Glen App and Galloway Moors UK9003351 NX119718	8942.38	(B) hen harrier	N/A	N/A	Much of the heather habitat has become fragmented, with acidic grasslands becoming a more common feature due to overgrazing. Limited muirburn is still practised to reclaim moorland for livestock grazing.	Many tenant farmers have now entered the Environmentally Sensitive Area agri-environment scheme which may result in more beneficial grazing patterns, and some owners have expressed an interest in improving heather moorland for game species. SNH is currently in the process of developing a Moorland Management Scheme for owners and occupiers which will include prescriptions for heather restoration, sensitive muirburn and the reduction of stocking levels

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Upper Solway Flats and Marshes UK9005012 NY086577	43636.73	(OW) bar-tailed godwit, barnacle goose, golden plover, whooper swan	(OP) ringed plover; (OW) curlew, dunlin, knot, oystercatcher, pink-footed goose, pintail, redshank	Waterowl: (OW) redshank, barnacle goose, golden plover, bar-tailed godwit, pink-footed goose, pintail, oystercatcher, knot, whooper swan, curlew, lapwing, great crested grebe, cormorant, shelduck, mallard, scaup, goldeneye, ringed plover, grey plover, dunlin.	There has been relatively little land claim compared with most other estuaries in the UK but some established and new flood defence and coastal erosion works may exacerbate erosion elsewhere within the site. Roosts and feeding areas are vulnerable to disturbance.	A management strategy for the site has been produced by the Solway Firth Partnership. The cockle fishery has been closed for a number of years due to overexploitation and the other commercial, traditional and shell fisheries are regulated by Government to ensure that they are carried out in a sustainable way and that their impact on bird feeding areas are not significant. The management strategy addresses the planning of recreational and development activities to avoid disturbance to roosts and feeding areas.
Duddon Estuary UK9005031 SD180765	6806.3	(B) sandwich tern	(OP) ringed plover, sanderling; (OW) knot, pintail, redshank	Waterfowl: (OW) curlew, dunlin, sanderling, oystercatcher, red-breasted merganser, shelduck, redshank, knot, pintail	The vulnerability of habitats is linked to changes in the physical environment. The intertidal zone is being threatened by coastal squeeze as a result of land claim and coastal defence works as well as sea level rise and storm surges. Many of the saltmarshes are grazed by agricultural stock, sometimes at a high level. Waterfowl wintering on estuaries are vulnerable to loss of feeding areas through disturbance, land claim and development. There are various developments for housing, amenity and industry adjacent to the site, however to date there has been no significant effect on the nature conservation interest of the estuary.	Most issues are being addressed through the Shoreline Management Plan and more locally, Site Management Statements/Positive Management Schemes. The Duddon Estuary partnership is addressing some of the threats arising from recreational pressure and bait digging. Feasibility studies are being carried out for a bridge across the estuary, any such proposals will be subject to assessment under the Habitats Regulations.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Morecambe Bay UK9005081 SD375700	37404.6	(B) little tern, sandwich tern; (OW) bar-tailed godwit, golden plover	(B) herring gull, lesser black-backed gull; (OP) ringed plover, sanderling; (OW) curlew, dunlin, grey plover, knot, oystercatcher, pink-footed goose, pintail, redshank, shelduck, turnstone	Seabird: (B) herring gull, lesser black-backed gull, little tern, sandwich tern; Waterfowl: (OW) great crested grebe, bar-tailed godwit, pink-footed goose, shelduck, pintail, oystercatcher, grey plover, knot, dunlin, curlew, golden plover, turnstone, black-tailed godwit, cormorant, wigeon, teal, mallard, eider, goldeneye, red-breasted merganser, ringed plover, lapwing, sanderling, redshank, whimbrel	The site is subject to a wide range of pressures such as land-claim for agriculture, overgrazing, dredging, overfishing, industrial uses and unspecified pollution. The breeding tern interest is very vulnerable and the colony has recently moved to the adjacent Duddon Estuary.	Overall the site is relatively robust and many pressures have only slight to local effects and are being addressed through Management Plans. Positive management is being secured through management plans for non-governmental organisation reserves, English Nature Site Management Statements, European Marine Site Management Scheme, and the Morecambe Bay Partnership.
Leighton Moss UK9005091 SD483749	128.61	(B) bittern, marsh harrier; (OW) bittern	N/A	N/A	Leighton Moss is vulnerable to changes in water quality and water levels. The decline of booming bitterns on the site reflects a national trend. Agricultural run-off from land immediately adjacent to the reserve has been identified as a potential hazard to water quality. The Moss is also susceptible to saline intrusion upstream of its tidal sluice from Morecambe Bay which is potentially one of the most damaging threats to the reserve.	Since the establishment of a reserve at Leighton Moss the RSPB has raised water levels and actively managed the site in order to maintain and enhance its <i>Phragmites</i> dominated fen and open water to provide optimum conditions for its reedbed birds. Bittern decline has been halted through detailed research and improved management of the site. This management, which also benefits other birds te, has involved further refinement of reedbed management and the manipulation of the reed/open water interface with increased water level control. Initiatives to reduce/remove agricultural run-off is being initiated by the EA. It is proposed that the lowest point of the sea wall next to the tidal sluice be raised when strengthening the Quaker Stang sea defences, taking into account predicted sea level rise due to global warming..

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Ribble and Alt Estuaries UK9005103 sd348237	12412.31	(B) common tern, ruff; (OW) bar-tailed godwit, Bewick's Swan, golden plover, whooper swan	(B) lesser black-backed gull; (OP) ringed plover, sanderling; (OW) black-tailed godwit, dunlin, grey plover, knot, oystercatcher, pink-footed goose, pintail, redshank, sanderling, shelduck, teal, wigeon	Seabird: (B) black-headed gull, lesser black-backed, common tern; Waterfowl: (OW) grey plover, whooper swan, golden plover, bar-tailed godwit, pink-footed goose, shelduck, wigeon, teal, Bewick's Swan, Oystercatcher, curlew, knot, sanderling, dunlin, black-tailed godwit, redshank, cormorant, common scoter, lapwing, pintail	The dunes, intertidal flats and saltmarsh are relatively robust. The site is, in places, subject to pressure from recreation, built development (including coastal defence), wildfowling and industry, including sand-winning. Wildfowling is not considered to have a significant impact in terms of direct take. Military activities only take place at Altcar Rifle Range. Occasional landing of pleasure craft may be requested during large events. There is little evidence of sea-level rise so far. The Ribble Estuary is evolving as sediment patterns are changing and saltmarsh continues to accrete. The intertidal habitats are vulnerable to accidental pollution from the nearby Mersey Estuary and the Irish Sea oil and gas fields. The Ribble has failed to meet the requirements of the Bathing Waters Directive.	Disturbance from wildfowling is managed through refuge areas and strict regulation on shooting. Beach activities are managed by the Beach Management Plan. Sand-winning was addressed during a Public Inquiry resulting in environmental monitoring. Much of the site attracts land management via the implementation of agreed plans for three NNRs, two LNRs and other initiatives developed by the Sefton Coast Partnership. Other pressures will be addressed following procedures under the Habitat Regulations. Wider land management issues are being developed via the neighbouring Ribble and Mersey Estuary Strategies. Grazing pressure on the saltmarsh will be addressed through a management agreement. Erosion is being investigated through the Sefton Shoreline Management Plan. Oil spill contingency plans are being updated to deal with pollution events. Government Office North West and the EA are investigating sources of pollution that may have caused poor coastal bathing water quality.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Martin Mere UK9005111 SD420145	119.89	(OW) Bewick's swan, whooper swan	(OW) pink-footed goose, pintail	Waterfowl: (OW) pochard, mallard, teal, wigeon, pintail, pink-footed goose, whooper swan, Bewick's swan	The refuge is vulnerable to water levels being adversely affected water abstraction for agriculture. Similarly the refuge is vulnerable to changes in farming practice. Eutrophication has come about through a combination of the water supply from surrounding arable farmland and inadequate sewage treatment and large deposits of guano. Poor water quality conditions create the possible risk of water borne diseases which could affect waterfowl, although no such outbreaks have been recorded.	Abstraction is monitored/controlled by the EA in consultation with EN. The refuge is vulnerable to changes in farming practice. Grazing management is dependent upon cattle from surrounding farms. Water levels are controlled to maintain optimum levels throughout the winter, and then lowered progressively in summer to expose marginal mud and the underlying damp pastures to maintain a mosaic of shallow pools. Ditches are cut and dredged and all areas of pasture are managed under a Countryside Stewardship Scheme. Water quality is addressed by WWT with the creation of reedbed water filtration systems and a series of settlement lagoons helps to reduce suspended solids of effluent water arising from waterfowl areas. Regular herbicide control of trifid burr marigold is necessary to prevent this plant from invading lake margins to the detriment of bird populations.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Mersey Estuary UK9005131 SJ451800	5023.35	(OW) golden plover	(OP) redshank, ringed plover; (OW) dunlin, pintail, redshank, shelduck, teal	Waterfowl: (OW) curlew, black-tailed godwit, lapwing, grey plover, wigeon, great crested grebe, redshank, dunlin, pintail, teal, shelduck, golden plover	Wintering bird numbers and associated intertidal flats are robust to day-to-day change. The estuary is subject to multiple uses; it is heavily industrialised, has a substantial urban conurbation, and has multiple transport requirements and increasing recreational activities. The site is vulnerable to physical loss through land-claim and development, physical damage caused by navigation capital and maintenance dredging, agricultural requirements, non-physical loss, toxic and non-toxic contamination and biological disturbance by wildfowling.	The Special Protection Area status, requirements for Environmental Impact Assessment and the estuary management plan should safeguard the site.
Bowland Fells UK9005151 SD631547	16002.31	(B) hen harrier, merlin	(B) lesser black-backed gull	N/A	The expansive blanket bog and heather dominated moorland provides suitable habitat for a diverse range of upland breeding birds. Over grazing and poor grazing management and raptor persecution are issues associated with this site.	Favourable nature conservation status of the site depends on appropriate levels of sheep grazing, sympathetic moorland burning practice, sensitive water catchment land management practices and ongoing species protection. Since designation, many problems of over-grazing have been controlled through management agreements or the Countryside Stewardship Scheme. To date c. 20% of the SPA is under Section 15 management and Countryside Stewardship to stimulate heather regeneration. Burning plans and stocking levels have been agreed for all other areas of the SPA through Site Management Statements, whilst problems of raptor persecution continues to be addressed by the RSPB in conjunction with North West Water, English Nature and Lancashire Constabulary.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
The Dee Estuary UK9013011 SJ211800	13084.85	(B) common tern, little tern; (OP) sandwich tern; (OW) bar-tailed godwit	(OP) redshank; (OW) black-tailed godwit, curlew, dunlin, grey plover, knot, oystercatcher, pintail, redshank, shelduck, teal	Waterfowl: (OW) black-tailed godwit, shelduck, teal, pintail, oystercatcher, grey plover, bar-tailed godwit, dunlin, sanderling, curlew, redshank, cormorant, wigeon, mallard, lapwing, knot.	Parts of the shoreline have been heavily industrialised and/or urbanised. This has led to a legacy of waste tips around the estuary and discharges into it. Wildfowling occurs but at lower levels than in the recent past. Cockle beds have suffered from over-exploitation. There have been some small scale developments (e.g. port infrastructure at Mostyn).	Remediation of tips is under way and discharges are being improved. The estuary would benefit from improvements in water quality. Investment by water companies is being undertaken and existing consents are being reviewed. An estuary-wide study of wildfowling activities has been prepared which will be followed by a more detailed management plan. New bylaws and a code of practice have been introduced to control cockle bed exploitation. Sizeable parts of the estuary are in conservation management or subject to management agreements. The Dee Estuary Strategy contributes to its management through a well established and effective management framework and its voluntary user groups which represent estuarine interests.
Traeth Lafan/ Lavan Sands, Conway Bay UK9013031 SC654286	2642.98	N/A	(OW) oystercatcher	N/A	There have been concerns that the sporadic cockle suction-dredging may deplete oystercatchers' food source.	CCW have developed a protocol with the North Wales Sea Fisheries Committee (NWSFC) to allow an assessment of applications for licences to harvest cockles. NWSFC will now only invite applications for licences if cockle stocks are considered to be relatively high. CCW is commissioning research to quantify cockle stocks in relation to their depletion by foraging oystercatchers.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Ynys Feurig, Cemlyn Bay and The Skerries UK9013061 SH331935	85.66	(B) arctic tern, common tern, roseate tern, sandwich tern	N/A	N/A	Roaseate terns spend much of their lifespan away from the breeding colonies and are therefore vulnerable to pressures beyond the control of site managers; including factors affecting food supply, winter survival etc. Recreational pressure at Cemlyn arises from the promotion of the coastal footpath which passes close to the colonies. Other colonies suffer occasional disturbance from inadvertent public access. Ground predators (stoat and fox) are a problem. Peregrine falcons and rogue gulls have caused mortality and desertion of colonies on some occasions. Theft of eggs by collectors continues to be a threat.	The coastal footpath requires 24 hour wardening to guide the public. Ground predators (stoat and fox) require regular control at Cemlyn Bay and Ynys Feurig. Close cooperation, research and monitoring of the Irish Sea roseate tern population is maintained through the INTERREG Programme.
Glannau Ynys Gybi/ Holy Island Coast UK9013101 SH208817	608.04	(B) chough, (OW) chough	N/A	N/A	There are heavy recreational pressures which require careful management. The heathland habitat (away from the cliff top) is dependent upon periodic fires.	Part of the site is an RSPB reserve. There is a policy of restricting parking spaces and a voluntary ban on climbing in key areas during the nesting season. Chough breeding numbers have increased in the reserve partly due to control of disturbance. Winter survival of chough appears to be low and the regional chough population is stubbornly static despite good fledging success. This is being addressed through research programmes but may be dependent on wider regional land management factors. Heath is maintained using fires and traditional pastoral practices.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Glannau Aberdaron and Ynys Enlli/ Aberdaron Coast and Bardsey Island UK9013121 SH152271	505.03	(B) chough, (OW) chough	(B) Manx shearwater	N/A	Heavy levels of sheep grazing physically damage burrows of Manx shearwater. Invasion of bracken into coastal grassland is reducing feeding areas. Parts of the area experience heavy recreational pressure from walkers and their dogs which disturb feeding chough, although this is not thought to be significant at present.	Management plans to reduce livestock numbers are being considered. Bracken control is being considered.
Migneint–Arenig–Dduallt UK9013131 SH786437	19968.23	(B) hen harrier, merlin	N/A	N/A	Inappropriate grazing/burning/drainage management has damaged the feeding/breeding habitat of hen harrier and merlin, and damaged the feeding habitat of peregrine falcon. Afforestation of blanket bog has reduced breeding/feeding habitat in the past. Feeding/breeding habitats are vulnerable to acidification due to atmospheric pollution compounded by high rainfall and acidic geology/pedology. Quarrying has resulted in the destruction of habitats used by breeding birds. Recreational pressure from walkers is fairly low and diffused across the site but the SPA features could be affected if usage were to increase close to breeding sites. Persecution has been a problem in the recent past, with birds being shot at the nest.	Inappropriate grazing/burning/drainage is being addressed in some areas through S15 Management Agreements and Tir Cymen/Tir Gofal agreements. Afforestation is being partly addressed by a joint RSPB/Forestry Commission/CCW habitat restoration project. It is hoped that the threat of persecution will be reduced by greater vigilance and by raising public awareness.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Grassholm UK9014041 SM598093	10.73	N/A	(B) gannet	N/A	The gannet population on this island is vulnerable to pollution at sea, either directly by contact or indirectly via food sources. Certain changes in fishing methods if introduced into this area will also affect the birds' food source and cause direct mortality	Not indicated.
Skokholm and Skomer UK9014051 SM728093	427.71	(B) chough, short-eared owl, storm petrel	(B) lesser black-backed gull, Manx shearwater, puffin	Seabird: bar-tailed Godwit (B) razorbill, guillemot, kittiwake, puffin, lesser black-backed gull, Manx shearwater, storm petrel	The bird populations on these islands are vulnerable to pollution at sea, either directly by contact or indirectly via food sources. Certain changes in fishing methods will also affect the birds' food source and cause direct mortality. Skomer Island is subject to intensive seasonal recreational pressures. There is avian predation (especially by great black-backed gulls), particularly of the burrow-nesting storm petrels, puffins and Manx shearwaters. Colonisation of the islands by mammalian predators such as mink and rats are of special concern.	Management of the islands visitors by the Dyfed Wildlife Trust has prevented any significant disturbance, and the Marine Nature Reserve minimises disturbance from the sea around Skomer through a code of conduct and by having a wardening presence. Management plans are in place to control threats if they increase or arise.
Castlemartin Coast UK9014061 SR885100	1122.32	(B) chough; (OW) chough	N/A	N/A	Traditional grazing by livestock and rabbits helps to maintain the short open conditions necessary for the chough. On the army range, winter grazing is dependent on the transhumance of sheep from Preseli cSAC and the seasonal nature of the current firing programme. Some soil disturbance from the military training can be beneficial for the chough, enabling better access to soil invertebrates.	An Integrated Land Management Plan for the range is being produced by partnership organisations including CCW, MoD, NT, National Park Authority and the Wildlife Trust, which covers all aspects of land management, including recreation. There is also close liaison with the British Mountaineering Council over impacts of rock climbing. Grazing management on the adjacent Stackpole NNR is a key element of the joint CCW/NT management plan and management agreements encourage grazing of the dunes at Broomhill Burrows.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Ramsey and St David's Peninsula Coast UK9014062 SM728285	845.63	(B) chough; (OW) chough	N/A	N/A	The site is subject to recreational pressure, particularly from tourists walking the coast path. The impact of this disturbance is minimized by most of the nest sites being on inaccessible high cliffs, and by the numbers of visitors to Ramsey being strictly limited.	The well being of chough and peregrine depends upon the adequate provision of feeding/breeding habitat and absence of disturbance from humans. CCW and partner organisations are implementing a Chough Conservation Strategy for Pembrokeshire. The NT and other landowners, with management agreements and the ESA scheme, have re-introduced traditional grazing of coastal slopes. On Ramsey the RSPB's management benefits both species. Here, reduction in rabbit grazing due to Rabbit Viral Haemorrhagic Disease is a recent problem and any decline in the quality and extent of feeding grounds due to lack of grazing will have to be compensated for by habitat management (e.g. grazing by sheep).
Larne Lough UK9020042 J450987	395.94	(B) common tern, roseate tern, sandwich tern	(OW) light-bellied Brent goose	N/A	Breeding terns are affected by factors such as disturbance, predation from gulls or reduction in suitable breeding habitat due to competition or change in vegetation. It is not known to what extent these factors have affected the tern populations in Larne Lough but a possible reason for the recent decrease in Roseate terns is thought to be due to the species geographically regrouping further south and therefore leaving the northern breeding sites.	Swan Island, where the main tern colony is located, is managed as a NNR by the RSPB. Roseate terns have also recently bred on a small man-made island locally known as the 'Blue-Circle' Island. An existing Conservation Plan for Larne Lough is now under review. This review will update existing management prescriptions and refine existing conservation objectives.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Belfast Lough (potential SPA) UK9020101 J356782	432.14	(OW) bar-tailed godwit	(OW) redshank, turnstone	Waterfowl: (OW) goldeneye, redshank, turnstone, great crested grebe, cormorant, shelduck, mallard, bar-tailed godwit, eider, curlew, red-breasted merganser, oystercatcher, ringed plover, lapwing, knot, dunlin, black-tailed godwit, scaup	The loss of wildlife habitat around Inner Belfast Lough as a result of land-claim for industry and port development, and the continued use of Belfast Harbour Estate pools and adjacent areas for dumping (involving domestic refuse disposal and hardcore-tipping) could significantly affect the integrity and functioning of the site. Eutrophication of the lough from sewage disposal has been an issue in the past. The effect of recent improvements in sewage treatment on bird populations is not known.	An agreement was reached between Belfast Harbour Commissioners and various conservation groups to safeguard 81 hectares of intertidal mudflats, lagoons and land for wildlife conservation purposes and to undertake appropriate management. RSPB have taken the lead management role for much of the area. Much of this area had previously been earmarked for development and includes key high-tide wader roosts. Under this agreement significant funds were secured from ERDF which has led to many nature conservation initiatives for the general Belfast Harbour Estate including the SPA. These initiatives have included education and interpretation facilities at one of the lagoons within the Lough, creation of tidal inlets, the creation of an area for breeding wetland birds and the capping and contouring of the nearby landfill site to include areas for nature conservation. An existing Conservation Plan for Belfast Lough is now under review. This review will update existing management prescriptions and refine existing conservation objectives.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Strangford Lough UK9020111 J560578	15580.79	(B) arctic tern, common tern, sandwich tern; (OW) bar-tailed godwit, golden plover	(OW) knot, light-bellied Brent goose, redshank, shelduck	Waterfowl: (OW) mallard, bar-tailed godwit, light-bellied Brent goose, shelduck, knot, redshank, little grebe, great crested grebe, cormorant, greylag goose, wigeon, golden plover, teal, turnstone, pintail, shoveler, goldeneye, red-breasted merganser, coot, oystercatcher, ringed plover, grey plover, lapwing, dunlin, curlew, gadwall.	Breeding terns could be affected by factors such as disturbance, predation, and reduction in suitable breeding sites within the site. The populations could also be affected by changes in food availability, winter mortality and shifts in breeding populations outside of the site. Brent goose populations could be affected by the availability of <i>Zostera</i> and algae in the site compared to other sites on the east Irish coast. All wildfowl and wader species could be affected by changes in sediment, nutrient enrichment, inter-specific competition and excessive disturbance.	Vulnerability factors have the subject of a continuing research programme on Strangford Lough in recent years. All of the above issues are addressed in a Marine Nature Reserve management plan or in Nature Reserve management plans. An existing Conservation Plan for Strangford Lough is now under review. This review will up-date existing management prescriptions and refine existing conservation objectives.
Killough Bay UK9020221 J543366	104.23	N/A	(OW) light-bellied Brent goose	N/A	No current or known future activities represent significant actual or potential impacts to the site.	Existing Conservation Objectives for Killough Bay will be kept under review, ensuring appropriate management prescriptions and refining site objectives.
Outer Ards UK9020271 J627693	1410.41	(B) arctic tern; (OW) golden plover	(OW) light-bellied Brent goose, ringed plover, turnstone	N/A	A number of activities have the potential to adversely impact on the site but all currently occur at a small scale. These include past land-claim of adjoining lands, dredging associated with a number of small harbours, localised housing developments on adjoining land and recreational and tourism disturbance.	Existing Conservation Objectives for Outer Ards will be kept under review, ensuring appropriate management prescriptions and refining site objectives.
Carlingford Lough		(B) common tern, sandwich tern	(OW) light-bellied Brent goose	N/A	Breeding terns may be affected by disturbance, predation, and a reduction in limited suitable breeding sites within the site, and changes in food availability, winter mortality and shifts in breeding populations outside of the site.	An existing Conservation Plan for Carlingford Lough is now under review

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal UK9020282 SH320245	373.55	(B) chough; (OW) chough	N/A	N/A	The choughs depend on the proximity of several sea cliff nesting sites to maritime heath, grassland and farmland feeding sites. The cliff nesting sites are vulnerable to disturbance from climbers.	The integrity of such feeding sites and their diverse invertebrate and plant assemblages depend on medium grazing pressures twinned with low intensity traditional farming methods that do not involve the use of agrochemicals. Problems associated with climbers seem to have been successfully overcome by means of a voluntary climbing ban between February and July, mediated by British Mountaineering Council.
Craig yr Aderyn (Bird's Rock) UK9020283 SH644068	89.26	(B) chough; (OW) chough	N/A	N/A	The chough and cormorant are vulnerable to disturbance as the crags are a well known climbing site.	Climbing/disturbance pressure is being addressed by imposing restrictions on when the activity can take place. The grazing pressure is regulated by a Tir Cymen management agreement to produce favourable chough feeding habitat
Dyfi Estuary / Aber Dyfi UK9020284 SN647954	2048.11	(OW) Greenland white-fronted goose	N/A	N/A	Disturbance by leisure activities including wildfowling, and also low-flying aircraft, may be significant to feeding and roosting geese. The interactions between the Canada goose and the Greenland white-fronted goose and the impacts on habitat are unknown.	CCW and the RSPB lease the sporting rights over the majority of the site. The sporting rights are let to local wildfowling clubs within the NNR where there is a voluntary ban on shooting the geese. There are also sanctuary areas where no shooting takes place within the eastern half of the estuary. The SPA is warded by CCW and the RSPB and disturbance from leisure activities is monitored. Appropriate grazing of the saltmarsh and grassland is important to maintain feeding areas. There is an increasing resident flock of Canada geese on the estuary of approximately 2,000 birds.

Regional Sea 6 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Ynys Seiriol / Puffin Island UK9020285 SH651821	31.21	N/A	(B) cormorant	N/A	Brown rats may have impinged on the breeding bird population. Growth of scrub and brambles may restrict nesting sites.	The site is protected from disturbance by its isolation and the policy of the landowner. Eradication of brown rats in 1998 appears to have been successful but requires monitoring. The reintroduction of grazing animals should restrict scrub growth.
Antrim Hills UK9020301 D150253	27093.12	(B) hen harrier, merlin	N/A	N/A	Potentially the site could be damaged by peat-cutting, heavy grazing, excessive burning and inappropriate management of forestry plantations. A proportion of hen harriers in this area prefer mature Sitka spruce for nest sites.	Threats will be addressed by consultation over management with the Forest Service, offering MOSS management agreements to the agricultural landowners within existing ASSIs and encouraging uptake of the ESA and CMS schemes where appropriate. Conservation Objectives have been prepared for all SPAs and are being activated.

A3j.9.6 Regional Sea 7

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Sound of Barra (possible SAC) UK0012705 NF751026	5279	This site is currently in the process of being designated; information on the qualifying features, vulnerability and management will become available at a later stage of designation.			

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Rum UK0012594 NM369982	10836.62	<p>Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>, Natural dystrophic lakes and ponds, Northern Atlantic wet heaths with <i>Erica tetralix</i>, European dry heaths, Calaminarian grasslands of the <i>Violetalia calaminariae</i>, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)</p> <p>Qualifying: Vegetated sea cliffs of the Atlantic and Baltic coasts, Alpine and Boreal heaths, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Blanket bogs, Depressions on peat substrates of the Rhynchosporion, Alkaline fens, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), Calcareous rocky slopes with chasmophytic vegetation, Siliceous rocky slopes with chasmophytic vegetation</p>	<p>Primary: Otter <i>Lutra lutra</i> Qualifying: N/A</p>	The site is a long-established National Nature Reserve owned and managed by Scottish Natural Heritage. It is subject to an extensive programme of research, monitoring and conservation management.	The recently revised ten-year Management Plan, under which this work is carried out, includes the continuation of herbivore management and woodland restoration and aims to maintain and enhance the features of interest.
Taynish and Knapdale Woods UK0012682 NR785887	966.11	<p>Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i></p>	<p>Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i>, <i>Hypodryas</i>) <i>aurinia</i> Qualifying: Otter <i>Lutra lutra</i></p>	At Tynish, management programmes are in place to encourage typical native woodland species whilst controlling those which are non-native. Certain open areas are being maintained by light livestock grazing as habitat for marsh fritillary.	In the Knapdale part of the cSAC, Forest Enterprise will fell all mature Sitka spruce and encourage regeneration and expansion of the native oak woodland through management of deer populations and control of non-native species. The Taynish section of the site is a National Nature Reserve.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
South Uist Machair UK0012713 NF790374	3436.83	Primary: Machairs, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i> , Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation Qualifying: Coastal lagoons, Annual vegetation of drift lines, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes'), Humid dune slacks	Primary: Slender naiad <i>Najas flexilis</i> Qualifying: Otter <i>Lutra lutra</i>	This machair site is dependent upon the maintenance of traditional, extensive arable and grazing regimes.	Management to secure the nature conservation interests is achieved through a combination of an Environmentally Sensitive Area scheme.
Loch Etive Woods UK0012750 NN040360	2639.83	Primary: <i>Tilio-Acerion</i> forests of slopes, screes and ravines, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	This woodland complex is owned by both private owners and Forest Enterprise (FE).	The management of FE land is considered compatible with the conservation objectives of the site, with FE carrying out restoration work where necessary including removal into Woodland Grant Scheme (WGS) and bracken being controlled to allow natural regeneration. This will enable expansion woodland to secure their long-term future. Rhododendron and overgrazing by deer ground and the WGS schemes assist to combat the threats on private ground.
Strath UK0012785 NG611290	1386.59	Primary: Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i> , Alpine and subalpine calcareous grasslands, Calcareous rocky slopes with chasmophytic vegetation, Limestone pavements Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , Petrifying springs with tufa formation (<i>Cratoneurion</i>), Alkaline fens, <i>Tilio-Acerion</i> forests of slopes, screes and ravines	Primary: N/A Qualifying: N/A	Overall grazing levels and incidence of muirburn are not a threat to the qualifying habitats.	SNH are seeking to reduce grazing in certain areas and at certain times of the year by encouraging the John Muir Trust, the site owner, to develop an incentive scheme to promote appropriate management.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Inchnadamph UK0012787 NC269192	1282.9	Primary: Sub-Arctic <i>Salix</i> spp. Scrub, Alpine and subalpine calcareous grasslands, Petrifying springs with tufa formation (<i>Cratoneurion</i>), Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>), Calcareous rocky slopes with chasmophytic vegetation, Limestone pavements Qualifying: European dry heaths, Alkaline fens	Primary: N/A Qualifying: N/A	The ecological requirements of the interest features on this site are varied. Consideration is being given to assessing optimum grazing levels that would then be established through appropriate management measures.	The site is a National Nature Reserve.
Trotternish Ridge UK0012863 NG469608	3170.15	Primary: Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>), Calcareous rocky slopes with chasmophytic vegetation Qualifying: European dry heaths, Siliceous alpine and boreal grasslands, Alpine and subalpine calcareous grasslands, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Alpine pioneer formations of the Caricion <i>bicoloris-atrofuscae</i> .	Primary: N/A Qualifying: N/A	N/A	Recommendations for site management which were produced as part of the EC LIFE project are being considered, with a view to ensuring that the most appropriate regimes are put in place.
Beinn Iadain and Beinn na h'Uamha UK0012864 NM679531	524.86	Primary: Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), Calcareous rocky slopes with chasmophytic vegetation. Qualifying: Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Alpine pioneer formations of the Caricion <i>bicoloris-atrofuscae</i> , Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)	Primary: N/A Qualifying: N/A	These two hill-tops form part of a Scottish Wildlife Trust nature reserve.	Under an agreed management plan, through an EU Objective 1 programme, sheep grazing is being reduced on the site. Monitoring will establish the effect of this reduction in grazing and whether consideration should be given to any further adjustments.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Beinn Dearg UK0012897 NH279820	13849.14	<p>Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>, Alpine and Boreal heaths, Siliceous alpine and boreal grasslands, Alpine and subalpine calcareous grasslands, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Alpine pioneer formations of the <i>Caricion bicoloris-atrofuscae</i>, Calcareous rocky slopes with chasmophytic vegetation, Siliceous rocky slopes with chasmophytic vegetation</p> <p>Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i>, European dry heaths, Sub-Arctic <i>Salix</i> spp. scrub, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), Blanket bogs, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), Caledonian forest</p>	<p>Primary: N/A Qualifying: N/A</p>	<p>This extensive upland site is primarily managed as deer forest although part of the site is grazed by sheep. Current browsing levels appear to be compatible with maintaining the heathland and grassland habitat interests, although grazing and trampling pressure on areas of blanket bog needs to be fully assessed.</p>	<p>A fenced enclosure is proving to be successful in reducing browsing pressures on the Caledonian pinewood. The site is popular for recreation although visitors generally follow defined routes.</p>

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Ben Nevis UK0012956 NN198705	9317.18	Primary: Siliceous alpine and boreal grasslands, Alpine and subalpine calcareous grasslands, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), Calcareous rocky slopes with chasmophytic vegetation, Siliceous rocky slopes with chasmophytic vegetation Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Alpine and Boreal heaths, Sub-Arctic <i>Salix</i> spp. scrub, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Blanket bogs, Alpine pioneer formations of the <i>Caricion bicoloris-atrofuscae</i> , Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>), Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles, Caledonian forest	Primary: N/A Qualifying: N/A	This extensive range of hills is grazed by sheep and red deer.	Management of grazing levels will be required to encourage restoration of the woodland interests on the lower ground. The site includes Scotland's highest mountain and is very popular with hillwalkers and climbers. Localised erosion caused by walkers is addressed by visitor management and footpath repair. Downhill skiing developments and associated activities in and adjacent to the site are monitored by a Hill Monitoring Group and a management plan is in operation for the skiing development area.
Ardmeanach UK0012958 NM433312	374.79	Primary: Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels. Qualifying: Vegetated sea cliffs of the Atlantic and Baltic coasts.	Primary: N/A Qualifying: N/A	The species-rich <i>Nardus</i> grassland at Ardmeanach thrives on soils with a turnover generated by natural erosion of cliffs and a balanced grazing regime. Neither of these is likely to change in the foreseeable future. The hydrophilous tall herb communities occur primarily on inaccessible cliff ledges.	Part of the site is owned by the National Trust for Scotland.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Glen Coe UK0012959 NN151543	2966.07	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Species-rich Nardus grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladanii</i>), Calcareous rocky slopes with chasmophytic vegetation, Siliceous rocky slopes with chasmophytic vegetation. Qualifying: European dry heaths, Alpine and Boreal heaths, Sub-Arctic <i>Salix</i> spp. Scrub, Siliceous alpine and boreal grasslands, Alpine and subalpine calcareous grasslands, Alkaline fens, Alpine pioneer formations of the <i>Caricion bicoloris-atrofuscae</i>	Primary: N/A Qualifying: N/A	The relationship between the key interests and the original grazing regime was studied as part of a project carried out under the EC LIFE Programme.	The National Trust for Scotland, the main landowner, is preparing a revised management plan and a new monitoring plan in line with with the study's recommendations for optimum grazing. Recreational damage (hill walking) is a localised problem that is being addressed by footpath repair and management.
Lismore Lochs UK0012977 NM828396	108	Primary: Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. Qualifying: N/A	Primary: N/A Qualifying: N/A	Changes in the nutrient level of the lochs due to alteration of agricultural practices or other developments could impact upon the special interest of the site.	SNH will work with adjacent land managers to ensure that management practices are not damaging to the site. A monitoring programme is under development.
River Moidart UK0012994 NM730717	15.69	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: N/A	N/A	Research is being undertaken to improve our understanding of appropriate river management for freshwater pearl mussels. Consideration is being given to a river conservation strategy to ensure integrated catchment management.
River Kerry UK0012996 NG824718	10.08	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: N/A	N/A	Research is being undertaken to improve understanding of appropriate river management for freshwater pearl mussels. Consideration is being given to a river conservation strategy to ensure integrated catchment management.
Oldshoremore and Sandwood UK0013055 NC193591	443.73	Primary: Fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature. Machairs. Qualifying: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes').	Primary: N/A Qualifying: N/A	A decline in traditional crofting practices has resulted in increased grazing by livestock and excessive rabbit grazing. The site is also subject to some recreational pressure.	Restoration has been carried out on part of the site and consideration is being given to extending this to other areas.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Ardgour Pinewoods UK0013091 NM960721	1648.61	Primary: Caledonian forest * Priority feature Qualifying: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) * Priority feature	Primary: N/A Qualifying: N/A	The site is subject to browsing by red deer that are managed for sport in the area. A series of fenced enclosures have been erected to exclude the deer and allow regeneration of the woodland.	Work is underway on part of the site owned by Forest Enterprise to remove non-native conifers. Consideration is being given to similar work on the remainder of the site under the Woodland Grant Scheme.
Foinaven UK0013141 NC336495	14845.6	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Alpine and Boreal heaths, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), Siliceous rocky slopes with chasmophytic vegetation. Qualifying: Siliceous alpine and boreal grasslands, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe) * Priority feature, Blanket bogs * Priority feature, Depressions on peat substrates of the Rhynchosporion, Calcareous rocky slopes with chasmophytic vegetation	Primary: N/A Qualifying: Freshwater pearl mussel <i>Margaritifera margaritifera</i> , Otter <i>Lutra lutra</i>	Many of the habitats are subject to some grazing by deer and sheep while some are also subject to hillwalking. At present levels, neither of these activities poses a threat. Both otter and freshwater pearl mussel are dependent on maintenance of high-quality river habitat which is influenced by management of the river itself and by activities outside the site boundary.	Regular contact with the land managers will ensure that there is awareness of the potential impact of management activities on the features of interest. Consideration is being given to the monitoring requirements for the long-term management of the site.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Loch Maree Complex UK0013597 NG972625	15735.02	<p>Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>, European dry heaths, Alpine and Boreal heaths, Siliceous alpine and boreal grasslands, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), Siliceous rocky slopes with chasmophytic vegetation, Old sessile oak woods with Ilex and Blechnum in the British Isles, Caledonian forest * Priority feature.</p> <p>Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i>, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Blanket bogs * Priority feature, Depressions on peat substrates of the Rhynchosporion, Calcareous rocky slopes with chasmophytic vegetation, Bog woodland * Priority feature, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) * Priority feature</p>	<p>Primary: Otter <i>Lutra lutra</i> Qualifying: N/A</p>	Deer management and the maintenance of the woodlands and heather is being addressed.	The majority of the site is owned by Scottish Natural Heritage, the National Trust for Scotland and Forest Enterprise. Enclosures have been created to encourage natural regeneration; the spread of Rhododendron is being controlled.
Coll Machair UK0014728 NM141538	851.02	<p>Primary: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, Machairs.</p> <p>Qualifying: Humid dune slacks, Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i></p>	<p>Primary: Slender naiad <i>Najas flexilis</i></p>	The dune and machair vegetation is dependent upon traditional, extensive grazing regimes. Increased stocking density or the application of agri-chemicals could be damaging. The high rabbit population has had a detrimental impact on the vegetation, but this is being addressed through a control programme which is reducing numbers. The standing water interest is potentially susceptible to nutrient enrichment or agrichemical input; however the surrounding land is not intensively farmed, being mainly rough grazing, so the risk is low, though adjacent land management will be kept under review.	Management which is compatible with the nature conservation interests has been secured over most of the site through management agreements, entry into the Environmentally Sensitive Area scheme and by RSPB nature reserve management.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Rhidorroch Woods UK0014729 NH242941	740.67	Primary: Caledonian forest * Priority feature Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i>	Primary: N/A Qualifying: N/A	Several fencing projects to allow natural regeneration of the woods have been undertaken under the Woodland Grant Scheme. Wet heath vegetation also benefits from grazing protection within the enclosures. Consideration is being given to the further reduction of grazing pressure outside the fenced areas.	N/A
Tiree Machair UK0014744 NL972475	785.4	Primary: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, Machairs, natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation Qualifying: Embryonic shifting dunes, Humid dune slacks	Primary: N/A Qualifying: N/A	The machair and dune habitat benefits from the continuity of traditional low-intensity grazing by sheep and cattle. The areas of wet machair are potentially vulnerable to drainage. The substrate is sandy and therefore vulnerable to erosion if subjected to excessive disturbance, for example through extraction.	Over much of the site, appropriate management is ensured through SNH management
Magilligan UK0016613 C686371	1059.4	Primary: Fixed dunes with herbaceous vegetation ('grey dunes'), Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Humid dune slacks. Qualifying: Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes')	Primary: N/A Qualifying: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas aurinia</i> , Petalwort <i>Petalophyllum ralfsii</i>	N/A	Agreements, entry into ESA scheme and RSPB nature reserve management.
Loch nam Madadh * UK0017070 NF924703	2318.5 (OSPAR MPA = 1837)	Primary: Coastal lagoons, Large shallow inlets and bays Qualifying: Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by seawater at low tide, Reefs	Primary: Otter <i>Lutra lutra</i> Qualifying: N/A	The site is one of the main ferry ports for the Uists and has a range of maritime activities occurring within it, including creel fishing, fish-farming and recreational pursuits	Chosen as one of the Marine LIFE Project sites, which has resulted in the formation of a group promoting sustainable management of the site. The management group comprises regulatory agencies, the local community and other users of the site.
Lochs Duich, Long and Aish Reefs * UK0017077 NG845261	2373.68 (OSPAR MPA = 2,367)	Primary: Reefs Qualifying: N/A	Primary: N/A Qualifying: N/A	Most existing fishing and aquaculture activities within the site appear to be compatible with the qualifying interest.	A management forum will develop a management strategy for the site to address any issues of concern through the adoption of appropriate measures or controls.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Obain Loch Euphoirt UK0017101 NF894614	348.6	Primary: Coastal lagoons Qualifying: N/A	Primary: N/A Qualifying: N/A	These rock-silled obs associated with the fjardic Loch Eport are used for angling purposes. Crofting occurs around the shores of the site; however, current practices are compatible with conservation interests of the site. There are no significant threats or pressures on the site at present.	N/A
Claish Moss and Kentra Moss UK0019771 NM719673	1013.8	Primary: Blanket Bogs Qualifying: Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	N/A	Claish Moss is a National Nature Reserve largely maintained under a management plan by non-intervention. Kentra Moss is subject to livestock grazing which is being assessed to ensure that grazing levels are compatible with the site interests. Proposals for development would be subject to the national planning system. A management plan will address the impact of existing drainage.
Coladoir Bog UK0019772 NM558298	155.55	Primary: Blanket Bogs Qualifying: Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	This site has been subject to partial afforestation and drainage in the past, which adversely affected the bog communities, and <i>Molinia</i> has become dominant in places.	The conifers have been removed and SNH is carrying out a damming programme. There is river-deposited gravel within the bog and there may be some natural lateral drainage. If scrub encroachment occurs, remedial action will be taken. Monitoring of vegetation and hydrology will be established by SNH.
Eilean na Muice Duibhe UK0019773 NR312383	568.08	Primary: Blanket Bogs Qualifying: Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	The site contains a network of old drains, which together with commercial peat workings have had an adverse effect over large areas of the site.	Under a S15 management agreement and a Nature Reserve Agreement, work is underway to block the drains and ditches and to restore high water levels, which is having a positive effect.
Feur Lochain UK0019774 NR252693	376.18	Primary: Blanket Bogs Qualifying: Natural dystrophic lakes and ponds, Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	Intensive agricultural grazing within this site stopped in 1993. The site has now recovered well. It is also recovering gradually from a large accidental fire which took place in the 1990s.	The site is covered by management agreements which ensure that grazing, muirburn, drainage are controlled or prevented to maintain the good condition of the blanket bog habitat.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Glac na Criche UK0019775 NR224709	265.11	Primary: Blanket Bogs Qualifying: Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths	Primary: N/A Qualifying: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	N/A	This site is currently grazed at a very low level. There is very little drainage and no burning. While this management continues the interests of the site will be maintained.
Inverasdale Peatlands UK0019794 NG783899	1264.58	Primary: Blanket Bogs Qualifying: N/A	Primary: N/A Qualifying: N/A	Most of the site is subject to light grazing by sheep, which is compatible with the peatland interest.	A management scheme is available to encourage sympathetic management with respect to grazing, burning and other agricultural activities. Condition monitoring will be undertaken to establish whether any adjustments to management are necessary.
Sligachan Peatlands UK0019798 NG485284	1438.63	Primary: Natural dystrophic lakes and ponds, Blanket bogs Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Northern Atlantic wet heaths with <i>Erica tetralix</i> , Transition mires and quaking bogs, Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	Most of the site is ungrazed or subject to light grazing which appears to be compatible with the peatland interest.	A management scheme has been developed which encourages sympathetic management with respect to grazing, burning and other agricultural activities. The northern part of the site is being restored under an agreed management plan which includes removal of planted conifers, blocking of drains to restore the natural hydrology, and control of non-native tree regeneration. Localised recreational impacts from hillwalkers are being managed through a programme of footpath maintenance.
Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) * UK0019802 NM638753	4556.12 (OSPAR MPA = 4,556)	Primary: Sandbanks which are slightly covered by sea water all the time. Qualifying: N/A	Primary: N/A Qualifying: N/A	Most existing fishing and aquaculture activities within the site appear to be compatible with the interests.	Under the LIFE marine SACs Project, a management forum has been established and a management scheme prepared. Suction-dredging and scallop-dredging could be locally damaging but under the voluntary management scheme they are no longer permitted in areas of maerl habitat.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Sunart * UK0019803 NM665605	10247.13 (OSPAR MPA = 5,486)	Primary: Old sessile oak woods with Ilex and Blechnum in the British Isles. Qualifying: Reefs, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, <i>Tilio-Acerion</i> forests of slopes, screes and ravines.	Primary: Otter <i>Lutra lutra</i> Qualifying: N/A	Grazing by livestock and deer has in the past restricted natural regeneration over much of the woodland. <i>Rhododendron ponticum</i> invasion and underplanting of conifers are also localised problems.	Issues have been addressed under the Woodland Grant Scheme and LIFE II Atlantic Oakwoods Project and through management on established National Nature Reserves. LIFE II funding has also enabled the publication of an interpretation strategy and a report into management that would maintain or enhance the site's nature conservation interests whilst supporting sustainable use of its natural resources. A LIFE III project will build on the previous conservation work and, additionally, will fund an education and interpretation officer to work with schools and the communities to raise awareness of the natural heritage within the designated area.
North Uist Machair UK0019804 NF781620	3048.52	Primary: Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>), Machairs, Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation Qualifying: Annual vegetation of drift lines, Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes'), Humid dune slacks	Primary: N/A Qualifying: Slender naiad <i>Najas flexilis</i>	N/A	This machair site is dependent upon the maintenance of traditional, extensive arable and grazing regimes. Management to secure the nature conservation interests is being achieved through a combination of an Environmentally Sensitive Area scheme and various management agreements.
Lewis Peatlands UK0019815 NB456490	27945.59	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Blanket bogs Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , Depressions on peat substrates of the Rhynchosporion.	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	The site is mainly used for rough grazing for sheep. The stocking density within the site is generally low, although there are a few localised areas of overgrazing by sheep and trampling damage by deer. Other activities include shooting, angling (salmon, brown trout and sea trout) and some pest control. All-terrain vehicles, mainly quad bikes, are used on the site for recreational, agricultural and sporting purposes. A limited amount of domestic peat-cutting and muirburn occurs.	All these activities will be maintained at levels that are compatible with the site interest through a Peatland Management Scheme.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Mointeach Scadabhaigh UK0019816 NF849686	3320.08	Primary: Blanket bogs Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	This large area of blanket bog and lochs is subject to a number of activities including sheep and deer grazing, shooting, angling and fish-rearing.	These activities are carried out at levels which are compatible with the site interests through a management agreement with the owners and occupiers.
Mointeach nan Lochain Dubha UK0019820 NG673206	410.07	Primary: Blanket bogs Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Transition mires and quaking bogs, Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	Most of the site is subject to light grazing by sheep and deer which is compatible with the peatland interest.	A management scheme has been developed which encourages sympathetic management with respect to grazing, burning and other agricultural and sporting activities.
Mòine Mhór UK0019839 NR812934	1150.41	Primary: Active raised bogs, Degraded raised bogs still capable of natural regeneration. Qualifying: Mudflats and sandflats not covered by seawater at low tide, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: N/A Qualifying: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> , Otter <i>Lutra lutra</i>	This impressive site consists of a matrix of internationally important habitat types. Moine Mhór National Nature Reserve covers 502 ha of mainly degraded or active raised bogs.	The NNR Management Plan includes actions to aid recovery. Consideration is being given to management of the remainder of the site particularly for marsh fritillary butterfly.
Firth of Lorn * UK0030041 NM696089	21002.77 (OSPAR MPA = 20,967)	Primary: Reefs Qualifying: N/A	Primary: N/A Qualifying: N/A	Current activities undertaken at traditional levels are not seen as damaging to this site.	A management scheme for the site will be developed to ensure that the conservation objectives for the site are not compromised by any potential activity which could be damaging to the marine communities present.
Rathlin Island * UK0030055 D133518	3345.9 (estimated OSPAR MPA = 3,111)	Primary: Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, Submerged or partially submerged sea caves Qualifying: Sandbanks which are slightly covered by sea water all the time, Annual vegetation of drift lines	Primary: N/A Qualifying: N/A	Some commercial fishing such as pot fishing occurs within the site. The effect of the current fishing activities on the sea cave habitat is probably minimal. Habitat loss/damage caused by man-made structures and recreational use is also thought to be minimal.	An existing Conservation Plan for this pSAC is now under review. This will update management prescriptions and refine conservation objectives.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
South-East Islay Skerries * UK0030067 NR446474	1498.28 (OSPAR MPA = 1,483)	Primary: N/A Qualifying: N/A	Primary: Common seal <i>Phoca vitulina</i> Qualifying: N/A	Human activities within the site are relatively low key and include creel fishing, yachting and a seal-watching business. At present the levels of human activity in the area, including the seal-watching trips, are tolerated by seals. The remote nature of the site suggests that future development and increased disturbance is unlikely. The threat of pollution from shore-based activities is low due to the remote nature of the site.	N/A
Achnahaird UK0030073 NC016135	21.38	Primary: N/A Qualifying: N/A	Primary: Petalwort <i>Petalophyllum ralfsii</i> Qualifying: N/A	Petalwort requires damp calcareous dune slacks to survive.	The ecological requirements of this species are under investigation to see if more effective conservation management is necessary.
Ardnamurchan Burns UK0030079 NM435662	24.98	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: N/A	N/A	Research is being undertaken to improve understanding of appropriate river management for freshwater pearl mussels. Consideration is being given to a river conservation strategy to ensure integrated catchment management.
Abhainn Clais An Eas and Allt a' Mhuilinn UK0030081 NC082206	1.25	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: N/A	N/A	The long-term wellbeing of the burns and their catchments will be encouraged through discussion with land managers. Freshwater pearl mussels are directly reliant on a healthy salmonid population to complete successful recruitment, and these will form an essential part of management considerations.
Bann Estuary UK0030084 C797363	348.29	Primary: Fixed dunes with herbaceous vegetation ('grey dunes') Qualifying: Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes')	Primary: N/A Qualifying: N/A	In recent years the spread of sea-buckthorn scrub has occurred. Tourist pressures, including vehicle access to Portstewart beach, have locally increased dune erosion and beach compaction. Potentially, the site could be detrimentally affected by changes to the supply of sand to the dunes although this is not a problem at present.	Maintenance of a scrub-clearance programme. Inappropriate management of part of the Grangemore dune system in the past has been addressed through the National Trust site management plan. Conservation Objectives are being prepared.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Binevenagh UK0030089 C686309	90.91	Primary: Calcareous rocky slopes with chasmophytic vegetation Qualifying: N/A	Primary: N/A Qualifying: N/A	Increased use, such as trampling by animals (including humans) or physical removal of plants are likely to be the biggest threats to these habitats.	The grasslands at Binevenagh are dependent upon traditional grazing with no use of agrochemicals. These practices are maintained by grazing agreements within most of the site. Environment and Heritage Service own most of the site. Management agreements operate over a substantial part of the site and will be used elsewhere if necessary.
Breen Wood UK0030097 D123336	36.03	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. Qualifying: Bog woodland	Primary: N/A Qualifying: N/A	N/A	The site is one of the most important semi-natural woodlands in this part of Northern Ireland. The greater proportion of the site is currently managed as National Nature Reserve by EHS and Forest Service (DARDNI). The site is comparatively small and is currently surrounded on three sides by commercial forest plantations. EHS and Forest Service are considering options to extend the area of semi-natural woodland cover. The Conservation Plan for the site is being updated.
Cape Wrath UK0030108 NC320716	1019.19	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	Current recreational use of the site is low and disturbance is minimal.	The site is owned by the Ministry of Defence and used as a naval bombardment range. A MoD Conservation Group provides a forum for discussion of ways in which range procedures might be modified if there is a need to reduce the impacts on conservation and other interests. Changes to the maritime cliff communities are not expected as a result of current activity.
Coille Mhór UK0030120 NG811303	311.23	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	The two main landowners, National Trust for Scotland and Forest Enterprise, are committed to protecting and enhancing existing native woodland within their ownership. It is intended that Coille Mhór be included in a LIFE III bid to fund the woodland restoration. Any spread of non-native species, in particular <i>Rhododendron ponticum</i> , will be controlled.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Glen Beasdale UK0030154 NM721843	507.33	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. Qualifying: N/A	Primary: N/A Qualifying: Freshwater pearl mussel <i>Margaritifera margaritifera</i> , Otter <i>Lutra lutra</i>	N/A	For most of the site, natural regeneration is being encouraged through a Woodland Grant Scheme that includes control of deer and <i>Rhododendron ponticum</i> . Management of grazing and <i>Rhododendron</i> control over the rest of the site is being discussed. There is a Fire Management Plan in operation to protect the woodland from steam train sparks.
Glen Creran Woods UK0030155 NN004463	703.89	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: <i>Tilio-Acerion</i> forests of slopes, screes and ravines	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	An EU LIFE bid is being pursued to assist woodland management including control of <i>Rhododendron ponticum</i> which has spread into the northern section of the site.	The boundary encompasses areas of extant ancient semi-natural woodland and areas of former semi-natural woodland which were planted with commercial conifer crops. Most of the introduced conifers have now been removed and Forest Enterprise are committed to removing the rest. By natural regeneration, the semi-natural woodland will expand to occupy its former range. Part of the site is managed as a National Nature Reserve.
Inverpolly UK0030171 NC129123	11877.5	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Northern Atlantic wet heaths with <i>Erica tetralix</i> , Blanket bogs, Transition mires and quaking bogs, Depressions on peat substrates of the <i>Rhynchosporion</i> . Qualifying: European dry heaths, Alpine and Boreal heaths, Siliceous alpine and boreal grasslands, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), Siliceous rocky slopes with chasmophytic vegetation, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: Otter <i>Lutra lutra</i> Qualifying: Freshwater pearl mussel <i>Margaritifera margaritifera</i>	Trampling by animals has localised affects on the more fragile habitats.	Grazing by deer and sheep is the principal factor in the management of the site. The footpaths on Stac Pollaidh and Cul Mor are being upgraded to improve visitor management and safety. Freshwater pearl mussels and otter are dependent on the maintenance of a high quality river habitat which is influenced by management of the river itself and by activities outside the site boundary.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Kinloch and Kyleakin Hills UK0030176 NG749201	5266.96	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Alpine and Boreal heaths, Blanket bogs, <i>Tilio-Acerion</i> forests of slopes, screes and ravines	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	Overgrazing occurred in the past and its deleterious effects were compounded by subsequent forestry operations.	This large site is owned principally by Forestry Commission Scotland; they are keen to promote conservation, sensitive public access and interpretation projects. Deer numbers are now being controlled and livestock are excluded from most of the site. A woodland restoration plan which aims to increase the extent of native woodland cover, and improve the representation of woodland at different stages of development, is proposed. A major element of the plan concerns the management of areas adjacent to existing woodland, encouraging natural regeneration and some new planting of an appropriate mixture of native species of local provenance, mimicking the woodland composition which would have occurred naturally in the past.
Eileanan agus Sgeiran Lios mór * UK0030182 NM888471	1139.8 (OSPAR MPA = 1,137)	Primary: N/A Qualifying: N/A	Primary: Common seal <i>Phoca vitulina</i> Qualifying: N/A	Pressure on the site would most likely come from boat movement (fishing and passenger carriers) or coastal development (e.g. fish-farms). The main threats to the use of the site by common seals would be in the form of disturbance or pollution of the marine habitat in the immediate area.	SNH will work with user groups to ensure sustainable management of the site.
Little Gruinard River UK0030183 NG953795	1179.76	Primary: N/A Qualifying: N/A	Primary: Atlantic salmon <i>Salmo salar</i> Qualifying: N/A	Salmon are vulnerable to a range of potential threats, but this site is currently under favourable management.	Any future proposals for marine fish farming adjacent to the site would be subject to strict planning processes. Consideration will be given to a river conservation strategy to ensure integrated catchment management.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Loch a`Phuill UK0030188 NL957418	151.17	Primary: Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation Qualifying: N/A	Primary: N/A Qualifying: N/A	The surrounding land is partly machair common grazings, and partly small fields with damp pasture; any improvements or increase in fertiliser applications would have implications for the water quality in the loch.	The loch is occasionally used for water extraction by West of Scotland Water Authority when insufficient groundwater supplies are available nearby, and can experience a significant water level fall in very dry summer periods; SNH staff will liaise with WSWA to address this issue.
Loch Creran * UK0030190 NM945428	1226.39 (OSPAR MPA = 1,226)	Primary: Reefs Qualifying: N/A	Primary: N/A Qualifying: N/A	The biogenic reefs in Loch Creran are only known to survive in one other (significantly smaller) European location, and their biology is presently poorly understood. They are vulnerable to direct physical damage from underwater operations and may be at risk of indirect impacts related to changes in water quality, hydrodynamics and sedimentation regimes. Activities which could affect the reefs include laying of moorings, diving, some types of fishing, industrial discharge, and construction of jetties or other structures.	It is expected that, with careful planning and the co-operation of users, most of the current activities within the loch can continue to be accommodated without significant impact on the reefs. It is expected that a management forum will be established to assist the process of dialogue between interested parties.
Loch Fada UK0030191 NR382958	80.34	Primary: N/A Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>	Primary: Slender naiad <i>Najas flexilis</i> Qualifying: Otter <i>Lutra lutra</i>	Potential nutrient enrichment comes mainly from fertiliser inputs to the surrounding agricultural land, although these are currently at low levels. Other pollution possibilities are domestic waste and aerial pollution.	At present the levels are not causing concern and regular water chemistry monitoring will be established to ensure that any adverse trends can be detected and acted upon.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Loch Laxford * UK0030192 NC198501	1221 (OSPAR MPA = 1,211)	Primary: Large shallow inlets and bays Qualifying: Reefs	Primary: N/A Qualifying: N/A	N/A	There are salmon and mussel fish farms within the site; these are regulated by Highland Council through the issue of seabed leases. There is a long-established adventure school based adjacent to the site and boat tours operate occasionally within the loch. All of these activities will be included within an integrated site management scheme and it is likely that a project officer will be appointed to co-ordinate this.
Mingarry Burn UK0030206 NM436544	4.25	Primary: N/A Qualifying: N/A	Primary: freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: N/A	The main direct threat to the freshwater pearl mussel population is from pearl-collecting. The site lies within commercial forestry plantations managed by Forest Enterprise, and the main indirect threats are from forestry operations affecting water quality (through increased siltation, for example).	However adherence to current standards of good practice should help to maintain the interest. Discussions are also underway with Forest Enterprise over development of more specific management guidelines.
Loch Moidart and Loch Shiel Woods * UK0030209 NM823743	1756.76 (OSPAR MPA = 284)	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Mudflats and sandflats not covered by seawater at low tide, <i>Tilio-Acerion</i> forests of slopes, screes and ravines, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	N/A	Woodland Grant Schemes, a Woodland Improvement Grant around Loch Moidart, and a Management Agreement for part of the Loch Shiel Woods, are encouraging the natural regeneration of these woodlands.
Morvern Woods UK0030217 NM759423	1927.49	Primary: <i>Tilio-Acerion</i> forests of slopes, screes and ravines, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. Qualifying: N/A	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	Grazing by deer and livestock in the past has restricted natural regeneration over much of the woodlands.	Several Woodland Grant Schemes are in place and are aimed at protecting and enhancing the native woods. Part of the site is a Scottish Wildlife Trust (SWT) nature reserve which is being positively managed by SWT. Invasive <i>Rhododendron ponticum</i> is a localised problem but clearance is now underway.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Mull Oakwoods UK0030219 NM730298	1401.9	Primary: Old sessile oak woods with Ilex and Blechnum in the British Isles Qualifying: N/A	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	Rhododendron invasion is a problem locally. Dense bracken growth is common in many areas and can inhibit regeneration. The woodlands are open to adjacent hill ground and grazed/browsed by livestock and red deer.	Throughout much of the site, these issues are being addressed through active management under the Woodland Grant Scheme and/or SNH Management Agreements, and efforts are being made to implement similar measures in the remaining areas.
North Antrim Coast UK0030224 D022440	314.81	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: Annual vegetation of drift lines, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>), Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes') * Priority feature, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe) * Priority feature	Primary: Narrow-mouthed whorl snail <i>Vertigo angustior</i> Qualifying: N/A	N/A	Management issues at Giant's Causeway are dealt with in the context of the National Trust's site management plan. Notable issues include maintenance and restoration of heath. Steeper-face grasslands are undergrazed; the impact of increased rankness will be monitored. The long-term management of these mesophile grasslands may require use of specialist 'old breed' livestock. Visitor impact at this very popular natural attraction is well managed, with maintenance of defined paths preventing site damage
Ascrib, Isay and Dunvegan * UK0030230 NG222565	2584.39 (OSPAR MPA = 2,577)	Primary: N/A Qualifying: N/A	Primary: Common seal <i>Phoca vitulina</i> Qualifying: N/A	N/A	Current boat activity appears to be compatible with the maintenance of conditions required by the seals. All other activities appear to be carried out in a manner and at a level that is compatible with maintenance of the seal population.
Ardvar and Loch a' Mhuilinn Woodlands UK0030231 NC190331	807.2	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: N/A	Primary: N/A Qualifying: Freshwater pearl mussel <i>Margaritifera margaritifera</i> , Otter <i>Lutra lutra</i>	N/A	Management to address deer-browsing within the oak woods is under discussion. Freshwater pearl mussels and otters are dependent on the maintenance of a high quality river habitat which is influenced by management of the river itself and by activities outside the site boundary, particularly those affecting water quality. The long-term wellbeing of the river and its catchment will be encouraged through discussion with land managers.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Rassal UK0030243 NG869441	1017.18	Primary: Alkaline fens, Limestone pavements * Priority feature, <i>Tilio-Acerion</i> forests of slopes, screes and ravines. Qualifying: Sub-Arctic <i>Salix</i> spp. Scrub, Alpine and subalpine calcareous grasslands, Petrifying springs with tufa formation (<i>Cratoneurion</i>) * Priority feature, Calcareous rocky slopes with chasmophytic vegetation	Primary: N/A Qualifying: N/A	N/A	Part of the site is a long-established National Nature Reserve. There is a Nature Reserve Agreement and Woodland Grant Scheme in place to develop and expand the native woodlands. The current grazing regime will be reviewed to ensure that it is compatible with the key features.
Rinns of Islay UK0030247 NR230611	1088.06	Primary: N/A Qualifying: N/A	Primary: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> Qualifying: N/A	N/A	The metapopulations of marsh fritillary on the Rinns of Islay depend on a low to moderate grazing pressure to maintain favourable sward heights and composition. At present, the butterfly population is in good condition under current agricultural practices, although ongoing monitoring of the species is required to distinguish natural fluctuations in the populations from any adverse results of habitat change or the impact of changes in grazing management.
Langavat UK0030255 NB201203	1471.23	Primary: N/A Qualifying: N/A	Primary: Atlantic salmon <i>Salmo salar</i> Qualifying: N/A	N/A	The site consists of a network of freshwater lochs and burns linked by river and smaller tributaries. Six estates have fishing rights on the system and manage the site for its sporting interest. The adjacent land is mainly used for rough grazing for sheep. The existing site management is generally compatible with the site interest.
River Oykel UK0030261 NH494999	960.2	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: Atlantic salmon <i>Salmo salar</i>	N/A	Future river management issues will be discussed with land managers and the relevant district Salmon Fishery Board. River engineering works have been undertaken where necessary to control natural processes such as flooding, bank erosion and to enhance fishing activities.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Tarbert Woods UK0030286 NR759602	1595.95	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	Control of colonisation by <i>Rhododendron</i> is being conducted through several management agreements. Forest Enterprise rangers undertake regular deer-culling on many parts of the site to minimise the impact of browsing on regeneration. Browsing impacts are also being reduced by the elimination of domestic grazing. Bracken has become dominant in parts of the woodland, though this is being controlled by agreements.
Tayvallich Juniper and Coast UK0030287 NR712825	1213.47	Primary: <i>Juniperus communis</i> formations on heaths or calcareous grasslands Qualifying: N/A	Primary: Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> Qualifying: Otter <i>Lutra lutra</i>	N/A	The intensity and timing of grazing by domestic livestock and deer are important contributory factors to the conservation and enhancement of the SAC interests. Reduction in grazing intensity is needed in places to gain regeneration of juniper and heathland. However, some grazing is still needed to maintain and enhance the floral and faunal diversity and prevent the spread of bracken. The vast proportion of this site is governed by a management agreement that promotes positive management for both juniper heath and the marsh fritillary butterfly.
Treshnish Isles * UK0030289 NM289429	1962.66 (OSPAR MPA = 1,856)	Primary: N/A Qualifying: Reefs	Primary: Grey seal <i>Halichoerus grypus</i> Qualifying: N/A	Existing users on and around the Treshnish Isles, in particular tour-boat operators, are considered to be compatible with the special interests of the site providing codes of good practice are followed.	Available data does not indicate damage to the rocky reef interests, though this will continue to be monitored as certain types of fishing activity could potentially impact on the reefs. SNH will continue to work in partnership with all existing user groups to ensure the sustainable use of the site.
Rigg – Bile UK0030307 NG515488	500.89	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature	Primary: N/A Qualifying: N/A	N/A	Woodland Grant Scheme (WGS) and a managed grazing regime are in place on part of the site to protect and enhance the native woodland. Current grazing levels outside the WGS are inhibiting woodland regeneration and expansion, and it is hoped that this issue can be addressed through a LIFE Project to fund woodland restoration.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Oronsay UK0030341 NR350880	340.07	Primary: Machairs Qualifying: N/A	Primary: N/A Qualifying: N/A	N/A	The machair habitat is dependent on the continuation of an extensive grazing regime. The area is currently managed as a nature reserve by the Royal Society for the Protection of Birds, grant-aided by Scottish Natural Heritage, which aims to ensure appropriate management of this habitat.
Fannich Hills UK0030342 NG217710	9638	Primary: Northern Atlantic wet heaths with <i>Erica tetralix</i> , Alpine and Boreal heaths, Siliceous alpine and boreal grasslands Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , European dry heaths, Blanket bogs * Priority feature, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), Siliceous rocky slopes with chasmophytic vegetation.	Primary: N/A Qualifying: N/A	N/A	This is a large and remote upland site. In the past, overgrazing and excessive muirburn have had a negative impact upon parts of the site. The situation is currently being monitored and should these factors again pose a threat to the habitat interests, they will be addressed through positive management initiatives.
Beinn Bhan UK0030343 NG797446	4181.31	Primary: European dry heaths, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , Alpine and Boreal heaths, Siliceous alpine and boreal grasslands, Siliceous rocky slopes with chasmophytic vegetation.	Primary: N/A Qualifying: N/A	N/A	This is a large and remote upland site. Grazing levels and muirburn activity are currently compatible with maintenance of the interest features. Positive management initiatives are being encouraged to help ensure that this position is maintained.
Onich to North Ballachulish Woods UK0030344 NN042619	619.06	Primary: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Qualifying: Alkaline fens, <i>Tilio-Acerion</i> forests of slopes, screes and ravines * Priority feature	Primary: N/A Qualifying: N/A	The site is grazed by cattle, sheep and deer, and this is limiting natural regeneration of parts of the woodland. Invasive <i>Rhododendron ponticum</i> and <i>Cotoneaster</i> spp. are present in some areas but they are not currently posing a threat to the woodlands.	These issues will be addressed through positive management initiatives.

Regional Sea 7 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Roe and Tributaries UK0030360 C687159	407.6	Primary: N/A Qualifying: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Primary: Atlantic salmon <i>Salmo salar</i> Qualifying: Otter <i>Lutra lutra</i>	As with other freshwater systems, deterioration of water quality is both a local and widespread issue, the former due to point-source pollution from urban and industrial centres and farms, the latter from diffuse runoff of fertiliser from commercial conifer plantations in the upper catchment and intensively farmed land in the lower catchment.	Conservation Objectives for the site have recently been prepared. Implementation of the Water Framework Directive will require action to improve water quality. Negotiations with other relevant government organisations have been initiated to address these issues.
River Moriston	194.53	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: Atlantic salmon <i>Salmo salar</i>	The river is affected by hydropower schemes with rapid changes in water flow-rates. An old weir impedes salmonid migration in the upper reaches of the river, and its removal is under consideration.	The long-term wellbeing of the river, including the riparian woodland and the catchment area, will be encouraged through discussion of site management with land managers and the local Fishery Board.

Regional Sea 7 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Shiant Isles UK9001041 NG413984	212.3158 + 2km seaward extension ²	(OW) barnacle goose	(B) puffin, razorbill, shag	Seabirds: guillemot, kittiwake, fulmar, puffin, razorbill, shag	The impact of black rats (<i>Rattus rattus</i>) on breeding seabird populations is being monitored. Fishing and oil pollution are not threats at present but will be closely monitored.	The interest of the Shiant Isles is best maintained by non-intervention. Sheep grazing will be encouraged to maintain a feeding sward for barnacle geese.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
North Uist Machair and Islands UK9001051 NF781620	4876.2461	(B) corncrake, (OW) barnacle goose	(B) dunlin, oystercatcher, redshank, ringed plover, (OW) purple sandpiper, ringed plover, turnstone	N/A	American mink have recently spread to North Uist via islands in the Sound Of Harris, and could pose a serious threat to ground-nesting birds.	North Uist Machair and Islands SPA comprises seven SSSIs and a non-SSSI section specifically for corncrake. Part of Balranald Bog & Loch nam Feithean SSSI is an RSPB reserve managed for its nature conservation interest. In addition, Scottish Natural Heritage runs a voluntary SPA Management Scheme specifically targeted at corncrakes.
South Uist Machair and Lochs UK9001082 NF790374	5019.046	(B) corncrake, little tern	(B) dunlin, oystercatcher, redshank, ringed plover (OW) ringed plover, sanderling	N/A	The main threats to the SPA interest are erosion caused by rabbits on the machair, introduced species preying ground-nesting birds, changes to the current agricultural practice, pollution from fertilisers/domestic sewage, disturbance from increased tourism/visitors.	These problems are monitored and controlled through NNR and SSSI mechanisms, including management agreements, and through close liaison with the local authority, land owners and crofters. SNH also liaise with the Ministry of Defence Range Command to minimise any potential conflict through their activities on the site.
Kilpheder to Smerclate, South Uist UK9001083 NF732077	380.6247	(B) corncrake	N/A	N/A	The main issue on the site concerns the retention of traditional crofting practices as part of a low intensive agricultural system, as these maintain suitable habitat for corncrakes.	This site is a non-SSSI SPA specifically for corncrake, which is underpinned by a voluntary SNH management scheme. Both the SNH management scheme and the grassland bird measures of the SOAEFD ESA agri-environment scheme help address this issue.
Mingulay and Berneray UK9001121 NL557824	911.1313 + 2km seaward extension ²	N/A	(B) razorbill	(B) puffin, guillemot, kittiwake, shag, fulmar, razorbill	The site is remote and uninhabited and at present the seabird colonies are not threatened.	The site is regularly monitored and this monitoring will have regard to potential threats such as increasing visitor numbers, and increased fishing activity in the area around the islands.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Oronsay and South Colonsay	2016.86	(B) corncrake, chough (OW): chough	N/A	N/A	Corncrake may be vulnerable to changes in farming practice, particularly changes in mowing regimes on improved grassland and a reduction in the areas of early and late cover due to grazing changes. The chough may be vulnerable to alterations in the grazing regime resulting in changes to sward height and composition, and potential reduction in animal dung, important for the invertebrate populations on which chough feed.	A RSPB reserve management plan is in place which maintains a grazing regime. RSPB manage the in by grassland for corncrake and work with another farmer to manage corncrake habitat. On Colonsay there are no management agreements currently in place but SNH are exploring appropriate grassland management options under the SRDP Rural Priorities Scheme.
The Oa	1943	(B) chough	N/A	N/A	Parts of the site are popular with walkers which may be a source of disturbance. Breeding chough are potentially vulnerable where informal recreational takes place close to their cave/building nest sites. The choughs may be vulnerable to alterations in the grazing regime resulting in changes to sward height and composition, and potential reduction in animal dung, important for the invertebrate populations on which chough feed.	Most of the site is a RSPB nature reserve managed for the chough and a RSPB reserve management plan is being developed by RSPB and SNH. A management agreement currently exists with a further owner-occupier to support cattle management for the benefit of chough. Chough cave/nesting sites lie within the RSPB-managed land where visitors are encouraged to use other areas.
Cape Wrath UK9001231 NC320716	1019.1841 + 2km seaward extension ²	N/A	N/A	(B) puffin, razorbill, guillemot, kittiwake, fulmar	Annual military exercises held in mid-June on the nearby Cape Wrath Naval Bombardment Range may have an impact on seabird breeding success on the SPA. At present, there is no evidence of damage from fishing or pollution in the surrounding waters.	SNH will monitor the breeding productivity of kittiwakes on this site over the next three years to assess the significance of disturbance caused by bombing. The Ministry of Defence has indicated a willingness to reschedule the exercises should an adverse effect be proven.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Handa Island UK9001241 NC137483	367.5063 + 2km seaward extension ²	N/A	(B) guillemot, razorbill	kittiwake, great skua, fulmar, razorbill, guillemot.	The island is visited by birdwatchers in the summer but visitors are managed to prevent disturbance to the breeding seabirds.	Handa Island is managed as a nature reserve by the Scottish Wildlife Trust. In 1997, the Trust eradicated the rat population to prevent predation on nesting seabirds.
Priest Island UK9001261 NB925022	131.8255	(B) storm petrel	N/A	N/A	Neither fishing in surrounding waters nor oil pollution are threats at present but they will be closely monitored.	The site is managed for nature conservation by the Royal Society for the Protection of Birds.
Rum UK9001341 NM369982	10942.39 + 4km seaward extension ²	(B) golden eagle, red- throated diver	(B) manx shearwater	(B) guillemot, kittiwake, manx shearwater.	There are no major threats seen to the interest but measures are taken to ensure that populations are not disturbed through visitor management and wardening.	The site is a long-established National Nature Reserve owned and managed for its nature conservation interest by Scottish Natural Heritage.
Canna and Sanday UK9001431 NG273063	1341.1988 + 1km seaward extension ²	N/A	(B) puffin, guillemot, kittiwake, herring gull, shag	Seabirds: (B) puffin, guillemot, kittiwake, herring gull, shag	There are no major threats to the interest at present but measures are being taken to ensure that breeding birds are not disturbed (through visitor management).	The site is owned by the National Trust for Scotland who manage it for its heritage interest. An SNH five year management statement has recently been prepared which aims to ensure that the qualifying bird interest is maintained and/or enhanced.
Mointeach Scadabhaigh UK9001501 NF845689	4148.4378	(B) black-throated diver, red-throated diver	N/A	N/A	The site is not to be widely publicised, at the request of the Land Use Committee, and this will help minimise disturbance to the interest.	A management agreement has been drawn up in conjunction with the Mointeach Scadahaigh Land Use Committee, to address the threats to the site, through regulation of the various land uses carried out on the site (i.e. Estate interests, muirburn, tree planting, stocking rates).
Inverpolly, Loch Urigill and Nearby Lochs UK9001511 NC123139	1986.2845	(B) black-throated diver	N/A	N/A	Traditional angling, at the current level of activity, is considered to be compatible with the black- throated diver interest and disturbance is minimised through liaison and awareness raising via a leaflet for anglers.	The impact of water level fluctuations and ground predators is addressed by the provision of floating rafts for nesting on some of the lochs. Water quality is maintained by encouraging sympathetic catchment management.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Loch Maree UK9001531 NG931715	3173.6707	(B) black-throated diver	N/A	N/A	Traditional angling activity is regulated and other recreational boating disturbance is minimised through liaison and interpretation.	Part of the site is a National Nature Reserve managed for its nature conservation interest by Scottish Natural Heritage. SNH encourages sympathetic catchment management, including the establishment of native woodland, in order to maintain the water quality of the loch and reduce water level fluctuations. In the short term, the impact of water level fluctuations is addressed by the provision of floating rafts for nesting.
Lewis Peatlands UK9001571 NB311382	58984.2363	(B) black-throated diver, golden eagle, golden plover, merlin, red-throated diver	(B) dunlin, greenshank	N/A	The site is used for sheep and red deer grazing. The stocking density within the site is not known but is generally low, although there are a few localised areas of overgrazing by sheep and trampling damage by deer.	A limited amount of domestic peat cutting and muirburn occurs just within the edge of the site. All these activities are currently being maintained at levels which are compatible with the site interest through a Peatland Management Scheme.
Assynt Lochs UK9001591 NC235236	1156.3322	(B) black-throated diver	N/A	N/A	Traditional angling currently occurs at a level compatible with the qualifying interest; disturbance is minimised through liaison and awareness-raising via a leaflet for anglers.	Water level fluctuations are controlled by a sluice. There is a small hydro-electric scheme on Loch Poll that operates such that water level fluctuations largely mimic the natural regime. A floating raft is provided on Loch Assynt in order to minimise the potential impact of water level fluctuations and ground predators.
Beinn Dearg UK9001631 NH267826	5567.5955	(B) dotterel	N/A	N/A	There are no threats to the site at present.	Dotterel habitat can be eroded by overgrazing by deer or by large numbers of hill walkers and SNH will continue to monitor the condition of the dotterel habitat to determine if these activities become threats to the interest.

Regional Sea 7- SPAs						
Name, code & location¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Wester Ross Lochs UK9001711 NG947786	1980.9783	(B) black-throated diver	N/A	N/A	The qualifying interest of the site is not threatened at present. The component lochs are used for angling and boating but at current levels these activities are not thought to be adversely affecting the divers.	Liaison with owners will inform SNH of changes in this situation.
Loch Shiel UK9001721 NM865768	2290.7614	(B) black-throated diver	N/A	N/A	There are no threats to the SPA at present	Scottish Natural Heritage will assess proposals to install flood control measures to ascertain their likely effects on the site. An operating code has been agreed with the owner of a cruise boat and consideration given to the production of a voluntary code of practice for the site to help minimise disturbance to breeding divers.
Ness and Barvas, Lewis UK9001741 NB519638	649.333	(B) corncrake	N/A	N/A	The corncrake population is dependent on the continued availability of early and late cover and provision of late cut or late grazed fields of grass associated with traditional crofting practices in Lewis.	Payments are available to ensure that this traditional management is continued within the SPA under a new Corncrake SPA Management Scheme launched in the autumn of 1997.
Eoligarry, Barra UK9001761 NF708082	144.0426	(B) corncrake	N/A	N/A	The main issue on the site concerns the retention of traditional crofting practices as part of a low intensive agricultural system, as these maintain suitable habitat for corncrakes.	This site is a non-SSSI SPA classified specifically for corncrake, which is underpinned by a voluntary SNH management scheme. Both the SNH management scheme and the grassland bird measures of the SOAEFD ESA agri-environment scheme help address this issue.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Cuillins UK9001781 NG306265	29490.0082	(B) golden eagle	N/A	N/A	Golden eagle overwinter survival is influenced by carrion availability whilst live prey availability influences eagle productivity. In some areas high herbivore densities suppress vegetation and therefore degrade the habitat necessary to sustain wild prey numbers. Parts of the site are suffering from overgrazing and excessive muirburning, activities.	Issues are being addressed through existing Peatland Management Schemes. Provision of advice and funding to landowners and recreation groups plus existing legislation prevents serious disturbance. A holistic Management Scheme is currently being developed for the whole of the site.
Coll UK9003031 NM242605	2321.9055	(OW) barnacle goose, Greenland white-fronted goose	N/A	N/A	Uncontrolled and extensive muirburn has occurred in recent years but SNH will advise on any future muirburn activity.	The feeding and roosting habitat of the geese is maintained by traditional land uses encouraged by payments under the Argyll Islands Environmentally Sensitive Areas scheme.
Sleibhtean agus Cladach Thiriodh UK9003032 NM014454	1938.5891	(OW) barnacle goose, Greenland white-fronted goose	(B) dunlin, oystercatcher, redshank, ringed plover (OW) turnstone	N/A	Crofters undertake occasional ditch creation or clearance on the wet moorland areas, and in some cases this is likely to affect the qualifying interests. Groundwater extraction for public use takes place from Loch a'Phuill and its vicinity and could have a localised impact on the qualifying interests, this issue is addressed through discussion with the local water authority.	Small-scale sand and gravel extraction takes place from intertidal and machair areas, and is locally impacting on the qualifying interest- development of an aggregates strategy by a partnership between SNH, the local authority and islanders. Much of the site is entered into an agri-environment scheme which promotes overall conservation management.
Coll (Corncrake) UK9003033 NM165552	371.0731	(B) corncrake	N/A	N/A	The site is predominately under low intensity agriculture, which is crucial to maintaining the corncrake interest.	Part of the site is covered by an RSPB Reserve which is managed principally for corncrakes. In addition, to help maintain corncrake habitat and encourage sympathetic management for the birds a management scheme has been introduced specifically to underpin the SPA classification.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Tiree (Corncrake) UK9003034 NL973419	544.0724	(B) corncrake	N/A	N/A	The site is predominantly under low intensity agriculture, which is crucial to maintaining the corncrake interest.	In order to help maintain corncrake habitat and encourage sympathetic management for the birds a management scheme has been introduced to underpin the classification.
Treshnish Isles UK9003041 NM280420	240.6694	(B) storm petrel, barnacle goose	N/A	N/A	Visitor pressure occurs during the summer from organised boat trips. Livestock have recently been removed from the Treshnish Isles and their absence may reduce the suitability of the islands as grazing for overwintering geese.	SNH is monitoring the breeding success of seabirds and will seek to manage visitors if there is evidence of damaging disturbance to these populations. SNH is monitoring the numbers of geese and will seek to reintroduce livestock if goose populations fall.
Gruinart Flats UK9003051 NR292698	3261.7546	(OW) barnacle goose, Greenland white-fronted goose	N/A	N/A	The most significant threat to the interest is agricultural intensification.	SNH has encouraged the maintenance of existing practices sympathetic to the interest through its own management agreements and through the encouragement of management agreements under the Argyll Island Environmental Sensitive Area scheme.
Bridgend Flats, Islay UK9003052 NR324615	331.1606	(OW) barnacle goose	N/A	N/A	The site is regularly monitored and there are no significant threats at present.	N/A
Laggan Peninsula UK9003053 NR296559	1230.0193	(OW) barnacle goose, Greenland white-fronted goose	N/A	N/A	The most significant threat to the interest is agricultural intensification.	SNH has encouraged the maintenance of existing practices sympathetic to the interest through its own management agreements and through the encouragement of management agreements under the Argyll Island Environmental Sensitive Area scheme.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Eilean na Muice Duibhe UK9003054 NR328558	576.4167	(OW) Greenland white-fronted goose	N/A	N/A	The site has previously been under significant pressure from peat extraction for fuel and distilling purposes and may be again in the long-term. Disturbance to night-roosting birds through development of an adjacent wind-farm is a potential threat	Peat extraction - This threat is currently addressed through medium to long-term management agreements. Wind farm - this issue is being dealt with through the planning system.
Rinns of Islay UK9003057 NR273629	9409.7213	(B) chough, corncrake, hen harrier (OP) whooper swan (OW) chough, Greenland white-fronted goose	(B) common scoter	N/A	Elements of the interest are threatened by intensification of farming, drainage, inappropriate grazing levels and afforestation.	Much of the SPA interest is sustained by low intensity agricultural activity. SNH has around 30 management agreements with owner/occupiers to encourage management of the site which is beneficial to the SPA interest. Other management incentives are available through the Argyll Islands Environmentally Sensitive Area administered by Scottish Office and the Corncrake Initiative jointly administered by SNH and RSPB.
Kintyre Goose Roosts UK9003071 NR717307	413.74	(OW) Greenland white-fronted goose	N/A	N/A	There are no known significant threats to the interest on the site at present.	A recent draft research report has indicated that further monitoring of the site is required in order to determine the significance of disturbance that may occur through forestry activities and wildfowling. SNH will address any significant threats brought to light by such monitoring through management agreements with private owners and occupiers and through liaison and agreement with other competent authorities.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
North Colonsay and Western Cliffs UK9003171 NR410984	976.0317 + 1km seaward extension ²	(B) chough (OW) chough	N/A	Seabirds: (B) guillemot, kittiwake	The chough population on the site is threatened by the intensification of agriculture.	The maintenance of traditional agricultural practices is encouraged on the site through payments available under the Argyll Islands Environmentally Sensitive area scheme and through SNH management agreements with owner/occupiers.
Glas Eileanan UK9003211 NM714400	1.4412	(B) common tern	N/A	N/A	The colony is vulnerable to predation of eggs, chicks and adults by mink, a non-native mammalian predator.	A mink trapping program on the adjacent coastline is being set in place by SNH and the breeding success of the colony will continue to be monitored.
Knapdale Lochs UK9003301 NR755684	112.39	(B) black-throated diver	N/A	N/A	Disturbance by fishermen and mammalian predation may have an influence on the reproductive success of Black Throated Divers throughout this site. Also, one of the lochs (Loch Clachaig) suffers from a serious draw down of the water level because it is used to feed the Crinan canal.	Negotiations are in progress with local angling clubs, owners of the sites and British Waterways to minimise the affect of disturbance and the reduction of water levels on the divers.
Cnuic agus Cladach Mhuile UK9003311 NM563275	29248.981	(B) golden eagle	N/A	N/A	In some areas high herbivore densities suppress vegetation and therefore degrade the habitat necessary to sustain wild prey numbers for golden eagles. Human activities that could cause disturbance (e.g. deer stalking, recreational pursuits) are currently at levels compatible with eagle interests.	Management measures that address grazing pressures are being developed. Inappropriate design and management of forestry or native woodland could reduce eagle foraging areas but this is controlled through Woodland Grant Schemes and liaison with managers. A Management Scheme is currently being developed for the whole of the site.
Rannoch Lochs UK9004021 NN397558	1170.1871	(B) black-throated diver	N/A	N/A	The qualifying interest of the site is not threatened at present. The component lochs are used for angling and boating but at current levels these activities are not thought to be adversely affecting the divers.	Liaison with owners will inform SNH of changes in this situation.

Regional Sea 7- SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Rathlin Island UK9020011 D127509	3345.9052 + 2km seaward extension ²	(B) peregrine	(B) guillemot, razorbill	Seabirds: (B) puffin, kittiwake, herring gull, lesser black-backed gull, common gull, fulmar, razorbill, guillemot	While no significant threats can be identified at present, the seabird colony could be at risk from a potential lack of available food and the risk of oil pollution/oil spills and the Peregrine Falcons at risk from persecution.	A Conservation Plan for Rathlin Island is now being prepared. This Plan will determine conservation objectives and management prescriptions for the site
Sheep Island UK9020021 D049459	3.4971	(B) Cormorant	N/A	N/A	While no significant threats can be identified at present, the Cormorant colony could be at risk from a potential lack of available food. Although a coastal site, this colony feeds primarily on inland rivers and large lakes.	An existing Conservation Plan for Sheep Island is now under review. This review will up-date existing management prescriptions and refine existing conservation objectives.
Antrim Hills UK9020301 D150253	27107.94	(B) hen harrier, merlin	N/A	N/A	Potentially the site could be damaged by peat-cutting, heavy grazing, excessive burning and inappropriate management of forestry plantations. A proportion of hen harriers in this area prefer mature Sitka spruce for nest sites.	These threats will be addressed by consultation over management with the Forest Service, offering MOSS management agreements to the agricultural landowners within existing ASSIs and encouraging uptake of the ESA and CMS schemes where appropriate. Conservation Objectives have been prepared for all Special Protection Areas and are being activated.

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Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Yell Sound Coast * UK0012687 HU467755	1541.85 (OSPAR MPA = 822)	Primary: N/A Qualifying: N/A	Primary: Otter <i>Lutra lutra</i> , common seal <i>Phoca vitulina</i> Qualifying: N/A	There are no obvious threats to the otter and seal populations at present.	N/A
Monach Islands * UK0012694 NF644622	3646.56 (OSPAR MPA = 3,282)	Primary: Machairs Qualifying: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes')	Primary: Grey seal <i>Halichoerus grypus</i> Qualifying: N/A	The large seal population is subject only to the seasonal presence of local fishermen and a small number of visitors. The seal colony does not appear to be disturbed by this activity.	The land area of the site is a National Nature Reserve.
North Rona * UK0012696 HW811327	628.53 (OSPAR MPA = 512)	Primary: N/A Qualifying: Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, Submerged or partially submerged sea caves	Primary: Grey seal <i>Halichoerus grypus</i> Qualifying: N/A	The main uses of the site include sheep grazing, fishing and sea mammal research. There are also occasional visits by cruise ships, and various groups and individuals. The island's isolated location together with frequent extreme weather conditions greatly reduces fishing activity during the grey seal breeding season which ensures the colony is subject to little or no disturbance. The levels of other activities are also very low and consistent with the interest of the site.	The site is subject to a Nature Reserve Agreement.

Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
South Uist Machair UK0012713 NF790374	3436.83	Primary: Machairs, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i> , Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation Qualifying: Coastal lagoons, Annual vegetation of drift lines, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes'), Humid dune slacks	Primary: Slender naiad <i>Najas flexilis</i> Qualifying: Otter <i>Lutra lutra</i>	This machair site is dependent upon the maintenance of traditional, extensive arable and grazing regimes.	Management to secure the nature conservation interests is achieved through a combination of an Environmentally Sensitive Area scheme.
Durness UK0012786 NC390679	1212.74	Primary: Fixed dunes with herbaceous vegetation ('grey dunes'), Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i> , Alpine and subalpine calcareous grasslands, Limestone pavements. Qualifying: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Humid dune slacks, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Alkaline fens	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	The site is grazed heavily by rabbits, causing erosion which is exacerbated by wind. Other activities, including muirburn, tipping, sand extraction and vehicle use, occur on a localised basis and will be monitored.	A Management Agreement with the nearby golf club is in place to encourage sensitive management, including rabbit control.
Hoy UK0012791 ND239975	9499.78	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, Natural dystrophic lakes and ponds, Northern Atlantic wet heaths with <i>Erica tetralix</i> , Alpine and Boreal heaths, Blanket bogs. Qualifying: European dry heaths, Petrifying springs with tufa formation (<i>Cratoneurion</i>), Alkaline fens, Calcareous rocky slopes with chasmophytic vegetation	Primary: N/A Qualifying: N/A	The heaths, bogs and flushes on this site are dependent on low-intensity management regimes, including very low or zero levels of grazing and no burning.	Management Agreements over about two-thirds of the site ensure that low levels of stocking density are maintained. Part of the site is managed by the Royal Society for the Protection of Birds

Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
North Harris UK0012935 NB072110	13131.73	Primary: Natural dystrophic lakes and ponds, Northern Atlantic wet heaths with <i>Erica tetralix</i> , Siliceous alpine and boreal grasslands Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> European dry heaths Alpine and Boreal heaths Blanket bogs, Depressions on peat substrates of the <i>Rhynchosporion</i> Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) Siliceous rocky slopes with chasmophytic vegetation	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: Atlantic salmon <i>Salmo salar</i> , Otter <i>Lutra lutra</i>	This extensive area of mountain and glen is used for rough grazing for sheep and managed for deer shooting and fishing. Recreational activities include a small amount of hillwalking and climbing. The stocking density within the site is generally low, although there are a few localised areas of overgrazing by sheep and deer.	The sporting estates carry out deer-stalking as well as angling for salmon, sea trout and brown trout. Very little burning or peat-cutting occurs within the site. The existing management is generally consistent with the site interest.
Loch Watten UK0012983 ND226562	428.35	Primary: Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation Qualifying: N/A	Primary: N/A Qualifying: N/A	The water quality of Loch Watten is influenced by land use practices in the catchment area.	The site is extensively monitored and the effects of any changes will be assessed. Current traditional trout fishing management and recreational uses of the Loch are fully compatible with the interests of the site.
River Borgie UK0012995 NC666582	32.28	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> Qualifying: Atlantic salmon <i>Salmo salar</i> , Otter <i>Lutra lutra</i>	Freshwater pearl mussels are particularly sensitive to pollution, acidification, organic enrichment and river engineering. Research is being undertaken to improve understanding of appropriate river management for the species.	Otter and salmon are also dependent on the maintenance of a high quality river habitat, and future river management issues will be discussed with land managers and the relevant district Salmon Fishery Board. Consideration is also being given to a river conservation strategy to ensure integrated catchment management.
Invernaver UK0013041 NC690615	294.54	Primary: Fixed dunes with herbaceous vegetation ('grey dunes'), Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>), Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Coastal dunes with <i>Juniperus</i> spp., Alpine and Boreal heaths, Alpine and subalpine calcareous grasslands Qualifying: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Alkaline fens	Primary: N/A Qualifying: N/A	The fragile dune communities of this site are subject to natural erosion and human activities such as sand extraction, vehicle use and muirburn. Alkaline fens and the dune communities are subject to livestock grazing.	Efforts are being made to control muirburn by management agreement. Further measures to regulate activities on and adjacent to the site are under consideration.

Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Foinaven UK0013141 NC336495	14845.6	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Alpine and Boreal heaths, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), Siliceous rocky slopes with chasmophytic vegetation. Qualifying: Siliceous alpine and boreal grasslands, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe) Blanket bogs, Depressions on peat substrates of the <i>Rhynchosporion</i> , Calcareous rocky slopes with chasmophytic vegetation	Primary: N/A Qualifying: Freshwater pearl mussel <i>Margaritifera margaritifera</i> , Otter <i>Lutra lutra</i>	Many of the habitats are subject to some grazing by deer and sheep while some are also subject to hillwalking. At present levels neither of these activities poses a threat.	Regular contact with the land managers will ensure that there is awareness of the potential impact of management activities on the features of interest. Consideration is being given to the monitoring requirements for the long-term management of the site. Both otter and freshwater pearl mussel are dependent on maintenance of high-quality river habitat which is influenced by management of the river itself and by activities outside the site boundary
Stromness Heaths and Coast UK0013589 HY225133	637.52	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths. Qualifying: Alkaline fens	Primary: N/A Qualifying: N/A	Limited areas are popular with walkers but present levels of use do not threaten the integrity of the site.	The dry heaths found within the site depend on traditional low-intensity agriculture. Management Agreements are in place to protect the site from agricultural intensification.
Caithness and Sutherland Peatlands UK0013602 NC866402	143572.2	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Blanket bogs Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , Transition mires and quaking bogs, Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: Otter <i>Lutra lutra</i> , marsh saxifrage <i>Saxifraga hirculus</i> Qualifying: N/A	The current levels of activity are compatible with the nature conservation interests	This extensive peatland site is managed for a range of crofting, sporting and farming interests. The site contains two National Nature Reserves and much of the remainder is subject to Peatland Management Schemes and other management agreements which encourage traditional management practices

Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
St Kilda * UK0013695 NF093995	25467.58 (OSPAR MPA = 24,607)	Primary: Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, Submerged or partially submerged sea caves. Qualifying: N/A	Primary: N/A Qualifying: N/A	The presence of subtidal reefs means that fishing in the areas of interest is confined to creel fishing, which is not damaging.	The islands' management is very carefully controlled through the SNH-approved reserve management plan of the owners, the National Trust for Scotland. The operation of the Ministry of Defence base and the activities of visitors to the islands are strictly managed by agreements and bylaws. The land area of St Kilda is also a National Nature Reserve, Biosphere Reserve, Special Protection Area, and a World Heritage Site.
Loch of Stenness UK0014749 HY282127	791.87	Primary: Coastal lagoons Qualifying: N/A	Primary: N/A Qualifying: N/A	Current activities on and around this site appear to be compatible with the European interest. Restricted flushing rates in the loch make it sensitive to eutrophication from domestic septic tanks and agricultural runoff.	SNH and other organisations are considering management options should it become necessary to reduce nutrient inputs in the future.
The Vadills UK0017068 HU339556	62.42	Primary: Coastal lagoons Qualifying: N/A	Primary: N/A Qualifying: N/A	There are no apparent threats to the site at present	N/A
Papa Stour * UK0017069 HU170610	2076.44 (OSPAR MPA = 2,064)	Primary: Reefs, Submerged or partially submerged sea caves Qualifying: N/A	Primary: N/A Qualifying: N/A	There are no significant threats to the site at present. The current levels of fishing, including creel fishing, seem to be compatible with maintenance of the interest features on the site.	N/A
Loch Roag Lagoons UK0017074 NB139375	43.53	Primary: Coastal lagoons Qualifying: N/A	Primary: N/A Qualifying: N/A	At present salmon farming is low-intensity and does not have a significant effect on the site interests	N/A

Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Faray and Holm of Faray * UK0017096 HY529378	785.68 (OSPAR MPA = 721)	Primary: N/A Qualifying: N/A	Primary: Grey seal <i>Halichoerus grypus</i> Qualifying: N/A	The site is not subject to any direct pressures, and visitor numbers are low, especially during the grey seal pupping season. A small amount of creel fishing takes place around the islands which is compatible with the interests of the site.	N/A
East Mires and Lumbister UK0019795 HU492954	620.32	Primary: Blanket bogs Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i>	Primary: N/A Qualifying: N/A	Although this site is grazed, the high quality and high proportion of active bog suggest that existing livestock levels are not damaging to the interests of the site.	N/A
Ronas Hill - North Roe UK0019797 HU320852	4900.94	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Alpine and Boreal heaths, Blanket bogs. Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)	Primary: N/A Qualifying: N/A	The site includes three common grazings with sheep on the hill all year round.	Stocking levels are being addressed through research and monitoring. Negotiations over a management agreement with graziers is underway to ensure lower grazing levels over much of the site, including an area where overgrazing is evident.
Tingon UK0019799 HU256833	569.3	Primary: Blanket bogs Qualifying: Natural dystrophic lakes and ponds	Primary: N/A Qualifying: N/A	The ecological character of this site is believed to be compatible with the continued low grazing pressure from sheep.	A Management Agreement over part of the site controls the number of sheep grazing the blanket bog habitat.
North Uist Machair UK0019804 NF781620	3048.52	Primary: Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>), Machairs, Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation Qualifying: Annual vegetation of drift lines, Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes'), Humid dune slacks	Primary: N/A Qualifying: Slender naiad <i>Najas flexilis</i>	N/A	This machair site is dependent upon the maintenance of traditional, extensive arable and grazing regimes. Management to secure the nature conservation interests is being achieved through a combination of an Environmentally Sensitive Area scheme and various management agreements.

Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Lewis Peatlands UK0019815 NB456490	27945.59	Primary: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Blanket bogs Qualifying: Northern Atlantic wet heaths with <i>Erica tetralix</i> , Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	The stocking density within the site is generally low, although there are a few localised areas of overgrazing by sheep and trampling damage by deer. Other activities include shooting, angling (salmon, brown trout and sea trout) and some pest control. All-terrain vehicles, mainly quad bikes, are used on the site for recreational, agricultural and sporting purposes. A limited amount of domestic peat-cutting and muirburn occurs.	All these activities will be maintained at levels that are compatible with the site interest through a Peatland Management Scheme.
Mointeach Scadabhaigh UK0019816 NF849686	3320.08	Primary: Blanket bogs Qualifying: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural dystrophic lakes and ponds, Depressions on peat substrates of the <i>Rhynchosporion</i>	Primary: N/A Qualifying: N/A	This large area of blanket bog and lochs is subject to a number of activities including sheep and deer grazing, shooting, angling and fish-rearing.	These activities are carried out at levels which are compatible with the site interests through a management agreement with the owners and occupiers.
Strathy Point UK0030066 NC816688	203.68	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	There are no threats to the cliff-edge communities as these are inaccessible to humans and grazing animals.	Current moderate levels of grazing on the cliff-top communities are necessary to maintain the site interests.
Sanday * UK0030069 HY715442	10971.64 (OSPAR MPA = 10,966)	Primary: Reefs Qualifying: Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by seawater at low tide	Primary: Common seal <i>Phoca vitulina</i>	This site is not subject to any direct pressure. A low level of traditional cockle gathering occurs on the site and a small amount of creel fishing takes place around the island, which is compatible with the interests of the site. Tourist numbers do not cause any notable problems during the common seal pupping season.	N/A
Broubster Leans UK0030099 ND038611	172.76	Primary: Transition mires and quaking bogs Qualifying: N/A	Primary: N/A Qualifying: N/A	The water regime is currently compatible with the maintenance of the interest features and will continue to be closely assessed.	N/A

Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
Cape Wrath UK0030108 NC320716	1019.19	Primary: Vegetated sea cliffs of the Atlantic and Baltic coasts Qualifying: N/A	Primary: N/A Qualifying: N/A	Changes to the maritime cliff communities are not expected as a result of current activity. Current recreational use of the site is low and disturbance is minimal.	The site is owned by the Ministry of Defence and used as a naval bombardment range. A MoD Conservation Group provides a forum for discussion of ways in which range procedures might be modified if there is a need to reduce the impacts on conservation and other interests.
Loch of Isbister UK0030193 HY255237	105	Primary: Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation Qualifying: Transition mires and quaking bogs	Primary: N/A Qualifying: Otter <i>Lutra lutra</i>	The site is subject to natural seasonal changes in water levels, influencing the intrinsic interest of the wetland and open water communities. Other influences on the site's interests are grazing, which is managed by the RSPB, and pollution from agricultural run-off. At current levels both these factors are compatible with maintenance of the interest features.	The Royal Society for the Protection of Birds has a no-access policy on the reserve and disturbance on the site is minimal. Angling is severely restricted, and shooting is discouraged by all owners.
Langavat UK0030255 NB201203	1471.23	Primary: N/A Qualifying: N/A	Primary: Atlantic salmon <i>Salmo salar</i> Qualifying: N/A	N/A	The site consists of a network of freshwater lochs and burns linked by river and smaller tributaries. Six estates have fishing rights on the system and manage the site for its sporting interest. The adjacent land is mainly used for rough grazing for sheep. The existing site management is generally compatible with the site interest.
River Naver UK0030260 ND629375	1066.95	Primary: N/A Qualifying: N/A	Primary: Freshwater pearl mussel <i>Margaritifera margaritifera</i> , Atlantic salmon <i>Salmo salar</i> Qualifying: N/A	Freshwater pearl mussels are directly reliant on a healthy salmonid population to complete successful recruitment.	Future river management issues will be discussed with land managers and the relevant district Salmon Fishery Board. River engineering works have been undertaken where necessary to control natural processes such as flooding and bank erosion, and to enhance fishing activities. Guidance on best practice regarding this issue is being prepared to ensure that such activities are compatible with the conservation of the species of interest in the SAC.

Regional Sea 8 - SACs					
Name, code & location ¹	Area (ha)	Annex I Habitat	Annex II Species	Vulnerability	Management
River Thurso UK0030264 ND142490	353.25	Primary: N/A Qualifying: N/A	Primary: Atlantic salmon <i>Salmo salar</i> Qualifying: N/A	N/A	Future river management issues will be discussed with land managers and the relevant district Salmon Fishery Board. River engineering works have been undertaken to enhance fishing activities. Guidance on best practice regarding this issue is being prepared to ensure that such activities are compatible with the conservation of the species of interest in the SAC.
Sullom Voe * UK0030273 HU380757	2698.56 (OSPAR MPA = 2,691)	Primary: Large shallow inlets and bays Qualifying: Coastal lagoons, Reefs	Primary: N/A Qualifying: N/A	Sullom Voe is one of the busiest ports in the UK, encompassing the largest oil terminal in Europe, and has an excellent safety record.	A management scheme will be developed for the site through the Marine SAC advisory panel, which will include representatives from the oil terminal and Shetland Oil Terminal Environmental Advisory Group.
Tràigh na Berie UK0030340 NB107356	153.75	Primary: Machairs Qualifying: N/A	Primary: N/A Qualifying: N/A	Erosion resulting from vehicular access to the machair was identified as a potential threat on this site in the past. This has been addressed through excluding vehicles from parts of the machair and restricting caravans to one agreed site.	The machair interest of this site is best maintained by traditional rotational cultivation between cropping and grazing, ideally by cattle. Most of the site is already being managed favourably under the Scottish Executive Environment and Rural Affairs Department's Countryside Premium Scheme. Scottish Natural Heritage (SNH) intends to offer a similar management agreement for that part of the site not already subject to agrienvironment measures. Most of the site is owned by a community trust, which has committed itself to producing a whole-estate management plan for SNH.

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
North Rona and Sula Sgeir UK9001011 HW812325	138.79 + 2km seaward extension ²	(B) Leach's storm-petrel, storm petrel	(B) gannet, guillemot	(B) puffin, razorbill, kittiwake, great black-backed gull, fulmar, guillemot, gannet, Leach's storm-petrel, storm petrel.	N/A	An annual guga (young gannets) harvest is carried out under licence on Sula Sgeir each year. The government require the application for the guga harvesting licence to be made annually, and give very careful consideration to the status of the gannet population. Presently, the guga harvest is considered sustainable and fully compatible with the conservation objectives of the species. The whole site is subject to a Nature Reserve
Flannan Isles UK9001021 NA724469	59.2789 + 2km seaward extension ²	(B) Leach's storm-petrel, storm petrel	N/A	(B) Leach's storm-petrel, puffin, razorbill, guillemot, kittiwake, fulmar.	The site is under no immediate threat from any present activities. Care should be taken to ensure mammalian predators are not introduced as they pose a great threat to burrow/flat-ground nesting species	The interest of the Flannan Isles is best maintained by non-intervention.
St Kilda UK9001031 NF093998	866.8201 + 4km seaward extension ²	(B) Leach's storm-petrel, storm petrel	(B) gannet, great skua, puffin	(B) razorbill, guillemot, kittiwake, manx shearwater, fulmar, puffin, great skua, gannet, Leach's storm-petrel, storm petrel.	Fishing in the areas of greatest interest is confined to creel fishing, which is not damaging.	St Kilda is a National Nature Reserve and the islands' management is very carefully controlled through close liaison between the National Trust for Scotland and Scottish Natural Heritage, respectively owners and tenants. The operation of the Ministry of Defence base and activities of visitors to the island are strictly governed by agreements and by-laws.

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
North Uist Machair and Islands UK9001051 NF781620	4876.25	(B) corncrake (OW) barnacle goose	(B) dunlin, oystercatcher, redshank ringed plover (OW) purple sandpiper, ringed plover, turnstone	N/A	American mink have recently spread to North Uist via islands in the Sound Of Harris, and could pose a serious threat to ground-nesting birds.	North Uist Machair and Islands SPA comprises seven SSSIs and a non-SSSI section specifically for corncrake. Part of Balranald Bog & Loch nam Feithean SSSI is an RSPB reserve managed for its nature conservation interest. In addition, Scottish Natural Heritage runs a voluntary SPA Management Scheme specifically targeted at corncrakes.
Monach Islands UK9001071 NF644622	598.08	(B) common tern little tern (OW) barnacle goose	N/A	N/A	The seasonal presence of local fishermen and low numbers of visitors does not seem to cause significant disturbance.	These uninhabited islands are currently grazed by sheep which benefits the species diversity of the machair vegetation and provides the short cropped sward preferred by barnacle geese. Due to the inaccessibility of these islands and the resultant difficulties in managing sheep there, the continuation of appropriate grazing practices may need to be encouraged through a management agreement. NNR monitoring visits are made annually.
South Uist Machair and Lochs UK9001082 NF790374	5019.05	(B) corncrake, little tern	(B) dunlin, oystercatcher, redshank, ringed plover (OW) ringed plover, sanderling	N/A	The main threats to the SPA interest are erosion caused by rabbits on the machair, introduced species preying ground-nesting birds, changes to the current agricultural practice, pollution from fertilisers/domestic sewage, disturbance from increased tourism/visitors.	The interests of the site depend upon the maintenance of the traditional land uses encouraged through payments. These problems are monitored and controlled through NNR and SSSI mechanisms, including management agreements, and through close liaison with the local authority, land owners and crofters.

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Kilpheder to Smerclate, South Uist UK9001083 NF732077	380.62	(B) corncrake	N/A	N/A	The main issue on the site concerns the retention of traditional crofting practices as part of a low intensive agricultural system, as these maintain suitable habitat for corncrakes.	This site is a non-SSSI SPA specifically for corncrake, which is underpinned by a voluntary SNH management scheme. Both the SNH management scheme and the grassland bird measures of the SOAEFD ESA agri-environment scheme help address this issue.
Mingulay and Berneray UK9001121 NL557824	911.13 + 2km seaward extension ²	N/A	(B) razorbill	(B) puffin, guillemot, kittiwake, shag, fulmar, razorbill	The site is remote and uninhabited and at present the seabird colonies are not threatened.	The site is regularly monitored and this monitoring will have regard to potential threats such as increasing visitor numbers, and increased fishing activity in the area around the islands.
Pentland Firth Islands UK9001131 ND387842	170.58	(B) arctic tern	N/A	N/A	There are no threats to the site at present. Both Muckle Skerry and Swona are uninhabited and are not subject to any direct pressures.	N/A
Caithness and Sutherland Peatlands UK9001151 NC866402	145371.13	(B) black-throated diver, golden eagle, golden plover, hen harrier, merlin, red-throated diver, short-eared owl, wood sandpiper	(B) common scoter, dunlin, greenshank wigeon.	N/A	Current levels of activity are generally compatible with the nature conservation interests. Some areas are subject to moderate overgrazing by deer which in the long-term could result in deterioration of the habitat. Some disturbance to nesting birds can be caused by recreational activities such as angling. SNH is liaising with appropriate parties to minimise such impacts.	This extensive peatland site is managed for a range of crofting, sporting and farming interests. The site also contains two National Nature Reserves and an RSPB nature reserve managed for nature conservation.

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Caithness Lochs UK9001171 ND223567	1378.57	(OW) greenland white-fronted goose, whooper swan	(OW) greylag goose	N/A	Angling occurs on several of the lochs but is mainly outside the wintering period and is not thought to have any impact. Feeding areas at some constituent sites are threatened by field drainage, rough grazing and afforestation.	Liason with local wildfowlers and shooting guides is encouraging adherence to the BASC guide for inland goose shooting. Feeding areas - SNH is monitoring these activities and will encourage sympathetic land management, using wider countryside measures where appropriate.
North Caithness Cliffs UK9001181 ND183744	557.44 + 2km seaward extension ²	(B) peregrine	(B) guillemot	(B) puffin, razorbill, kittiwake, fulmar, guillemot	There are no on-site threats to the interest at present.	N/A
North Sutherland Coastal Islands UK9001211 NC633657	221.12	(OW) barnacle goose	N/A	N/A	There are few threats to the site at present.	Eilean Hoan is managed as a nature reserve by the Royal Society for the Protection of Birds. The current sheep grazing regime will be maintained on Eilean Hoan and Eilean nan Ron to keep the maritime grassland sward at a height favoured by the Barnacle Geese.
Cape Wrath UK9001231 NC320716	1019.18 + 2km seaward extension ²	N/A	N/A	(B) puffin, razorbill, guillemot, kittiwake, fulmar	Annual military exercises held in mid-June on the nearby Cape Wrath Naval Bombardment Range may have an impact on seabird breeding success on the SPA. At present, there is no evidence of damage from fishing or pollution in the surrounding waters.	SNH will monitor the breeding productivity of kittiwakes on this site over the next three years to assess the significance of disturbance caused by bombing

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Mointeach Scadabhaigh UK9001501 NF845689	4148.44	(B) black-throated diver, red-throated diver	N/A	N/A	The site is not to be widely publicised, at the request of the Land Use Committee, and this will help minimise disturbance to the interest.	A management agreement has been drawn up in conjunction with the Mointeach Scadahaigh Land Use Committee, to address the threats to the site, through regulation of the various land uses carried out on the site (i.e. Estate interests, muirburn, tree planting, stocking rates).
Lewis Peatlands UK9001571 NB311382	58984.24	(B) black-throated diver, golden eagle, golden plover, merlin, red-throated diver	(B) dunlin, greenshank	N/A	The site is used for sheep and red deer grazing. The stocking density within the site is not known but is generally low, although there are a few localised areas of overgrazing by sheep and trampling damage by deer.	A limited amount of domestic peat cutting and muirburn occurs just within the edge of the site. All these activities are currently being maintained at levels which are compatible with the site interest through a Peatland Management Scheme.
North Harris Mountains UK9001572 NB071119	13134.27	(B) golden eagle	N/A	N/A	Maintenance of the size and productivity of the golden eagle population is dependant upon the availability of adequate food (winter carrion and live prey) and the minimisation of disturbance.	SNH will continue to monitor the population and its response to changes in land management.
Ness and Barvas, Lewis UK9001741 NB519638	649.33	(B) corncrake	N/A	N/A	The corncrake population is dependent on the continued availability of early and late cover and provision of late cut or late grazed fields of grass associated with traditional crofting practices in Lewis.	Payments are available to ensure that this traditional management is continued within the SPA under a new Corncrake SPA Management Scheme launched in the autumn of 1997.
Aird and Borve, Benbecula UK9001751 NF767534	361.00	(B) corncrake	N/A	N/A	The land within the site is predominantly under crofting agriculture, which is crucial to maintaining the corncrake interest.	In order to help maintain corncrake habitat and encourage sympathetic management for the birds a management scheme has been introduced to underpin the designation.

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Eoligarry, Barra UK9001761 NF708082	144.04	(B) corncrake	N/A	N/A	The main issue on the site concerns the retention of traditional crofting practices as part of a low intensive agricultural system, as these maintain suitable habitat for corncrakes.	This site is a non-SSSI SPA classified specifically for corncrake, which is underpinned by a voluntary SNH management scheme. Both the SNH management scheme and the grassland bird measures of the SOAEFD ESA agri-environment scheme help address this issue.
Hermaness, Saxa Vord and Valla Field UK9002011 HP598152	1662.92 + 2km seaward extension ²	(B) red-throated diver	(B) gannet, great skua, puffin	(B) guillemot, kittiwake, shag, fulmar, puffin, great skua, gannet.	The seabird assemblage on the site is not subject to any direct pressures. The red-throated diver and great skua may be sensitive to changes in the grazing regime, although they are not at risk with current management of the site.	Hermaness is managed as a National Nature Reserve, with visitor numbers reaching 5000 per year, these levels are not detrimental to the interest features of the site.
Ramna Stacks and Gruney UK9002021 HU381967	11.67	(B) Leach's storm-petrel	N/A	N/A	There are no existing threats to the breeding Leach's petrel on the site itself but the population is vulnerable to oil pollution in the surrounding water. Leach's petrels are vulnerable to the introduction of mammalian predators but the site's inaccessibility makes such introduction very unlikely.	N/A
Ronas Hill - North Roe and Tingon UK9002041 HU320852	5470.23	(B) merlin, red-throated diver	(B) great skua	N/A	There are few threats to the interest at present.	Research has been carried out to identify the causes of heather die-back in this area and now work is proposed to try to facilitate the regeneration of heather on the site. SNH is to investigate the effect of angling on the special interest.
Papa Stour UK9002051 HU166613	569.02	(B) arctic aern	(B) ringed plover	N/A	SPA area is primarily for sheep grazing and at current levels this is not considered to conflict with the nature conservation interest.	About 50% of the site is covered by four Management agreements to prevent further apportioning of the common grazings as further fencing or land improvement would be considered undesirable.

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Foula UK9002061 HT954393	1323.31 + 1km seaward extension ²	(B) arctic tern, Leach's storm-petrel, red-throated diver	(B) great skua, guillemot, puffin, shag	N/A	There are no significant threats to the interest at present. Feral cats are known to predate breeding seabirds on the island and the impact of this predation is being assessed.	N/A
West Westray UK9002101 HY423457	350.9749 + 2km seaward extension ²	(B) arctic tern	(B) guillemot	(B) razorbill, kittiwake, arctic skua, fulmar, guillemot, arctic tern	The cliff-nesting birds on the site are not under threat at present. Some parts of the heathland are being over grazed, leading to an expanse of maritime grassland at the expense of the maritime heath which is used by ground-nesting seabirds.	SNH are encouraging the restoration of the maritime heath through Management Agreements which control grazing on affected areas.
Papa Westray UK9002111 HY501549	245.7083	(B) arctic tern	(B) arctic skua	N/A	There are no threats to the site at present.	The North Hill section of the site is managed for nature conservation by RSPB. Grazing levels and natural regeneration of the coastal heath is being addressed through the SOAEFD Habitats Scheme.
Marwick Head UK9002121 HY227250	8.6946 + 1km seaward extension ²	N/A	(B) guillemot	(B) kittiwake, guillemot	There are no threats to the site at present.	The majority of the site is owned and managed by the RSPB as a nature reserve.
Hoy UK9002141 HY239975	9499.70 + 2km seaward extension ²	(B) peregrine, red-throated diver	(B) great skua	(B) puffin, guillemot, kittiwake, great black-backed gull, arctic skua, Fulmar, great skua	The seabird assemblage on the site is not subject to any direct pressures.	Low levels of recreational walking and birdwatching occur. At these levels none of these activities is detrimental to the interest features of the site.
Copinsay UK9002151 HY611016	125.46 + 2km seaward extension ²	N/A	N/A	(B) guillemot, kittiwake, great black-backed gull, fulmar.	There are no significant threats to the interest at present.	Copinsay is managed for its nature conservation interest by RSPB. Informal visits are discouraged as they might introduce mammalian predators.

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Sule Skerry and Sule Stack UK9002181 HX622244	18.90 + 2km seaward extension ²	(B) Leach's storm-petrel, storm petrel	(B) gannet, puffin	(B) Leach's storm-petrel, guillemot, shag, puffin, gannet, storm petrel	At present, there are no significant threats to the interest on these remote islands.	N/A
Orkney Mainland Moors UK9002311 HY351223	4444.35	(B) hen harrier, red-throated diver, short-eared owl (OW) hen harrier	N/A	N/A	Some recreational walking and birdwatching occur on the site. At current levels none of these activities are detrimental to the interest of the site.	The hen harrier and owl populations are dependent on the availability of prey. In the hen harrier's case, there has been a significant decrease in numbers over the last few years. Research has suggested this may be due to changes in agricultural practices; appropriate management options to maintain the interest are currently being explored.
East Sanday Coast UK9002331 HY677423	1514.88	(OW) bar-tailed godwit	(OW) Purple sandpiper, turnstone	N/A	The interest of the site is not threatened at present. Current levels of recreational, agricultural and extraction activities are not detrimental to the wintering bird interest.	N/A
Rousay UK9002371 HY371331	633.67 + 2km seaward extension ²	(B) arctic tern	N/A	(B) guillemot, kittiwake, arctic skua, fulmar, arctic tern	The cliffs are not subject to any direct pressures. There is a public coastal walk and the visitor pressures are at levels which the site can sustain.	The grazing levels on the Faraclett area are maintained through Management Agreements.
Auskerry UK9002381 HY675163	101.9719	(B) arctic tern, storm petrel	N/A	N/A	There are no threats at present to the seabird interest. This small island is managed as a sheep farm and is inhabited only seasonally	N/A
Calf of Eday UK9002431 HY584394	237.8937 + 2km seaward extension ²	N/A	N/A	(B) guillemot, kittiwake, great black-backed gull, cormorant, fulmar	There are no threats to the interest at present. This small uninhabited island is grazed by a flock of semi-feral sheep and visitor pressures on the site are very low.	N/A

Regional Sea 8 - SPAs						
Name, code & location ¹	Area (ha)	Article 4.1 Species	Article 4.2 Migratory Species	Article 4.2 Assemblages	Vulnerability	Management
Lochs of Spiggie and Brow UK9002651 HU373166	141.4845	(OW) whooper swan	N/A	N/A	There are no significant threats to the interest at present	Most of the site is managed for its nature conservation interest by RSPB.
Switha UK9002891 ND364891	57.387	(OW) barnacle goose	N/A	N/A	The Greenland barnacle geese which roost on Switha feed on agricultural areas at South Walls on the island of Hoy, causing concern to the local farmers.	This is being addressed through a management scheme under which geese are encouraged to feed on specially managed 'refuge' areas. The scheme, which has been successful in addressing conflict between geese and agriculture, will be reviewed in the near future.
Otterswick and Graveland UK9002941 HU488857	2241.41	(B) red-throated diver	N/A	N/A	Low levels of recreational walking and birdwatching occur, but at existing levels these activities are not detrimental to the interest feature of the site.	A significant part of the SPA is covered by an agri-environment scheme which promotes conservation management.

A3j.10 OFFSHORE SACS

Offshore SACS				
Name, code & location ¹	Area (ha)	Status ²	Annex I Habitat	Summary description
Braemar Pockmarks UK0030357 58.99°N, 1.48°E	518	Candidate SAC	Submarine structures made by leaking gases	A series of crater-like depressions on the sea floor, two of which contain the habitat "Submarine structures made by leaking gases". In this location, large blocks, pavements slabs and smaller fragments of methane derived authigenic carbonate have been deposited through a process of precipitation during the oxidation of methane gas. These carbonate structures provide a habitat for marine fauna usually associated with rocky reef, and very specific chemosynthetic organisms which feed off both methane (seeping from beneath the sea floor) and its by-product, hydrogen sulphide (Judd 2001). Larger blocks of carbonate also provide shelter for fish species such as wolf-fish and cod. Southwest of the two aforementioned pockmarks is another block of carbonate not associated with a pockmark (Hartley 2005).

Offshore SACs				
Name, code & location ¹	Area (ha)	Status ²	Annex I Habitat	Summary description
Scanner Pockmark UK0030354 58.28°N, 0.97°E	335	Candidate SAC	Submarine structures made by leaking gases	A large seabed depression which contains large blocks of the habitat "Submarine structures made by leaking gases". The blocks lie in the base of the pockmark and support fauna more typically associated with rocky reef. These carbonate structures are notably colonised by large numbers of anemones, squat lobsters (Dando <i>et al.</i> 2001) while the wider feature also supports chemosynthetic organisms which feed off the discharged methane and its by-product, hydrogen sulphide (Judd 2001). The gutless nematode <i>Astomonema southwardorum</i> (a specialist in methane rich environments) is unique to this site (Austen <i>et al.</i> 1993). Fish (hagfish, fourbeard rockling, haddock, wolf-fish and small redfish) also appear to be using the pockmark depressions and the carbonate structures for shelter (Dando <i>et al.</i> 2001). The pockmark itself measures approximately 600 m by 300 m across with a depth of around 20 m below the surrounding sea floor (Dando <i>et al.</i> 1991).
Dogger Bank UK0030352 54.81°N, 2.12°E	1,505,712	Draft SAC	Sandbanks which are slightly covered by seawater all the time.	A large sublittoral sandbank formed in the southern North Sea by glacial processes and submergence through sea-level rise. A large proportion of the southern area of the bank has a water depth rarely exceeding 20m. The bank is non-vegetated and has an invertebrate community of sandy sublittoral including polychaetes. Due to the origin of the structure, the exact locations of the edges of the habitat are difficult to define.
North Norfolk Sandbanks and Saturn Reef UK0030358 53.34°N, 2.13°E	360,341	Possible SAC	Sandbanks which are slightly covered by seawater all the time; reefs.	Sandbanks: North Norfolk Sandbanks extend from approximately 40-110km northeast of the Norfolk coast. The site comprises a series of ten main sandbanks and associated fragmented smaller banks oriented northwest to southeast, formed as a result of tidal processes. They are the most extensive example of offshore linear ridge sandbanks in UK waters. The inner banks show well developed sandwaves, which are small or absent from the outer banks. These sandbanks support invertebrate communities typical of sandy sediments in the southern North Sea such as polychaete worms, isopods, crabs and starfish. Reefs: Saturn Reef covers a small area just northwest of the centre of the site. Discovered in 2002, it consisted of large numbers of sand-tubes formed by the polychaete <i>Sabellaria spinulosa</i> which had consolidated to create a solid biogenic reef, notably elevated from the surrounding seabed. These reefs provide a hard substrate, and allow the settlement of species not found commonly observed in adjacent habitats; a diverse community of epifaunal and infaunal species may develop on the reef. In 2003, the reef was present in varying densities over an area approximately 500m × 750m. More recent survey was unable to find the extensive reef reported in 2003; it is unknown if this absence was caused by damage to the reef (e.g. by demersal trawling) or if these structures are naturally transitory. However, the previous formation of a substantial <i>Sabellaria</i> reef in this location suggests favourable conditions for further reef formation (JNCC 2007).
Haig Fras UK0030353 50.26°N, 7.78°W	48,103	Candidate SAC	Reefs	An isolated, fully submarine bedrock outcrop located in the Celtic Sea, 95km north west of the Isles of Scilly. It is the only substantial area of rocky reef in the Celtic Sea beyond the coastal margin. It supports a variety of fauna ranging from jewel anemones and Devonshire cup coral near the peak of the outcrop to encrusting sponges, crinoids and ross coral towards the base of the rock (where boulders surround its edge) (Rees 2000). The rock is granite, mostly smooth with occasional fissures. The rocky outcrop is approximately 45km long and in one area rises to a peak which lies just 38m beneath the sea surface (Rees 2000); the surrounding seabed is approximately 100m deep.

Offshore SACs				
Name, code & location ¹	Area (ha)	Status ²	Annex I Habitat	Summary description
Stanton Banks UK0030359 56.25°N, 7.94°W	81,727	Candidate SAC	Reefs	A series of granite rises which outcrop from the seafloor south of the Outer Hebrides. While rounded by glacial action, they remain deeply fissured and extremely rugged (Stewart & Long 2006). The inter-connecting gullies are filled with rippled coarse shell sand, while the tops of the banks are smooth and characteristically colonised by encrusting red algae and small encrusting sponges. On the slopes, where the rock is less smooth, featherstars, dead man's fingers and hydroids are abundant (Service & Mitchell 2004). At their edges, the banks are fringed with boulders and cobbles. The Stanton Banks lie approximately 43km west-southwest of Tiree. The rocky outcrops rise from the seabed at 190m to approximately 62m from the sea surface.
North West Rockall Bank UK0030363 57.72°N, 14.25°W	488,569	Draft SAC	Reefs	A large area of bedrock on the northwest slope of the Rockall Bank. The site lies a minimum of 340km west-northwest of North Uist in the Outer Hebrides.
Darwin Mounds UK0030317 59.76°N, 7.22°W	137,726	Candidate SAC	Reefs	An extensive area of sandy mounds formed by seabed fluid expulsion, each of which is capped with multiple thickets of the cold-water coral <i>Lophelia pertusa</i> . The number of thickets vary per mound and may be between one and several metres wide and high. Hundreds of mounds lie within the site but two particularly dense fields of mounds are present to the northeast and northwest limit of the area (Bett 2001). Each of the mounds is approximately 100m in diameter and 5m high, and distinguished by a 'tail' feature visible on sidescan sonar. The mounds support significant populations of the xenophyophore <i>Syringammina fragilissima</i> that is widespread in deep waters, but occurs in particularly high densities on the mounds and the tails (Bett 2001). The occurrence of <i>Lophelia pertusa</i> reef as thickets capping sandy mounds is believed to be unique (Masson <i>et al.</i> 2003). The individual reefs on each mound provide a habitat for various species of larger invertebrates such as sponges and brisingiid starfish. The Darwin Mounds lie at the north end of the Rockall Trough at a depth of approximately 1000m. They lie approximately 160km northwest of Cape Wrath on the northwest Scottish mainland.
Wyville Thomson Ridge UK0030355 59.97°N, 6.71°W	173, 995	Possible SAC	Reefs	A rock ridge situated in the Atlantic Ocean at the northern end of the Rockall Trough. It is approximately 20km wide and 70km long and rises from over 1000m depth to less than 400m at the summit. The ridge is composed of extensive areas of stony reef interspersed with gravel areas and bedrock reef along the flanks. The stony reef is thought to have been formed by the ploughing movement of icebergs through the seabed at the end of the last ice age. These iceberg 'ploughmarks' consist of ridges of boulders, cobbles and gravel where finer sediments have been winnowed away by high energy currents at the site, interspersed with finer sediment troughs up to 5m-10m deep (Masson <i>et al.</i> 2000). The rock and stony reef areas support diverse biological communities representative of hard substratum in deep water. Communities on the bedrock reef vary in species composition between the two sides of the ridge due to the influences of different water masses (Howell <i>et al.</i> 2007) - the ridge divides the relatively warm water of the Rockall Trough from the cold water of the Faroe-Shetland Channel. This combination of water masses in one area is unique in UK waters. The Wyville Thomson Ridge is located on the Scottish continental shelf edge approximately 150km northwest of Cape Wrath; it extends in a westerly direction towards the Faeroe Bank.

A3j.11 NON-UK OFFSHORE NATURA 2000 SITES ADJACENT TO UK WATERS

Country	Name & relevant Directive ¹	Area (ha)	Location and features of Community interest present ²
Germany	Doggerbank Habitats	ca. 170,000	Location: ca. 20km east of the UK-Netherlands median, approximately level with the northern tip of the UK Dogger Bank draft SAC Annex I habitats: sandbanks which are slightly covered by seawater all the time Annex II species: harbour porpoise <i>Phocoena phocoena</i>
Netherlands	Doggersbank Habitats	471,772	Location: immediately adjacent to the UK-Netherlands median over a distance of ca. 115km, approximately level with the eastern limit of the UK Dogger Bank draft SAC Annex I habitats: sandbanks which are slightly covered by seawater all the time Annex II species: harbour porpoise <i>Phocoena phocoena</i> , common seal <i>Phoca vitulina</i> , grey seal <i>Halichoerus grypus</i>
Netherlands	Klaverbank Habitats	123,764	Location: immediately adjacent to the UK-Netherlands median over a distance of ca. 40km, some 190km east of Flamborough Head Annex I habitats: reefs Annex II species: harbour porpoise <i>Phocoena phocoena</i> , common seal <i>Phoca vitulina</i> , grey seal <i>Halichoerus grypus</i>
France	Sandbanks of Flanders Habitats	113,223	Location: immediately adjacent to the UK-France median over a distance of ca. 25km, between 27-40km east of the east Kent coast. Annex I habitats: sandbanks which are slightly covered by seawater all the time Annex II species: common seal <i>Phoca vitulina</i> , grey seal <i>Halichoerus grypus</i> , harbour porpoise <i>Phocoena phocoena</i>
France	Sandbanks of Flanders Birds	117,476	Location: as above Feeding area for breeding colonies of Mediterranean gull, sandwich tern, common tern, little tern Migratory flyway area for red-throated diver, great crested grebe, red-throated grebe, fulmar, Leach's storm petrel, gannet, Brent goose, eider, common scoter, velvet scoter, red-breasted merganser, pomarine skua, Arctic skua, great skua, little gull, kittiwake, sandwich tern, common tern, little tern, black tern, common guillemot, razorbill. Wintering ground for red-throated diver, great northern diver, great-crested grebe, fulmar, gannet, kittiwake, common guillemot, razorbill

Country	Name & relevant Directive ¹	Area (ha)	Location and features of Community interest present ²
France	Recifs gris nez blanc nez Habitats	28,700	Location: a minimum of approximately 6km southeast of the UK-France median, some 22km from the southeast Kent coast Annex I habitats: sandbanks which are slightly covered by seawater all the time, reefs Annex II species: common seal <i>Phoca vitulina</i> , grey seal <i>Halichoerus grypus</i> , harbour porpoise <i>Phocoena phocoena</i>
France	Cap Gris-Nez (inc. extension) Birds	56,155	Location: immediately adjacent to the UK-France median over a distance of ca. 36km, some 16km from the southeast Kent coast Flyway and stopover area for seabirds (divers, grebes, Brent geese, gulls, gannets, skuas and auks), especially in summer/autumn and winter.
France	Megaripples and hydraulic dunes in the Pas-de-Calais/Dover Strait Habitats	68,071	Location: immediately adjacent to the UK-France median over a distance of ca. 54km, extending south and west from a northerly point some 19km from the southeast Kent coast. Annex I habitats: sandbanks which are slightly covered by seawater all the time, reefs Annex II species: common seal <i>Phoca vitulina</i> , grey seal <i>Halichoerus grypus</i> , harbour porpoise <i>Phocoena phocoena</i>