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Qualifying Features And Conservation Objectives, Threats/Vulnerabilities Of Natura 2000 Sites

Document 23 – Appendix 3

National Grid (North Wales Connection Project)

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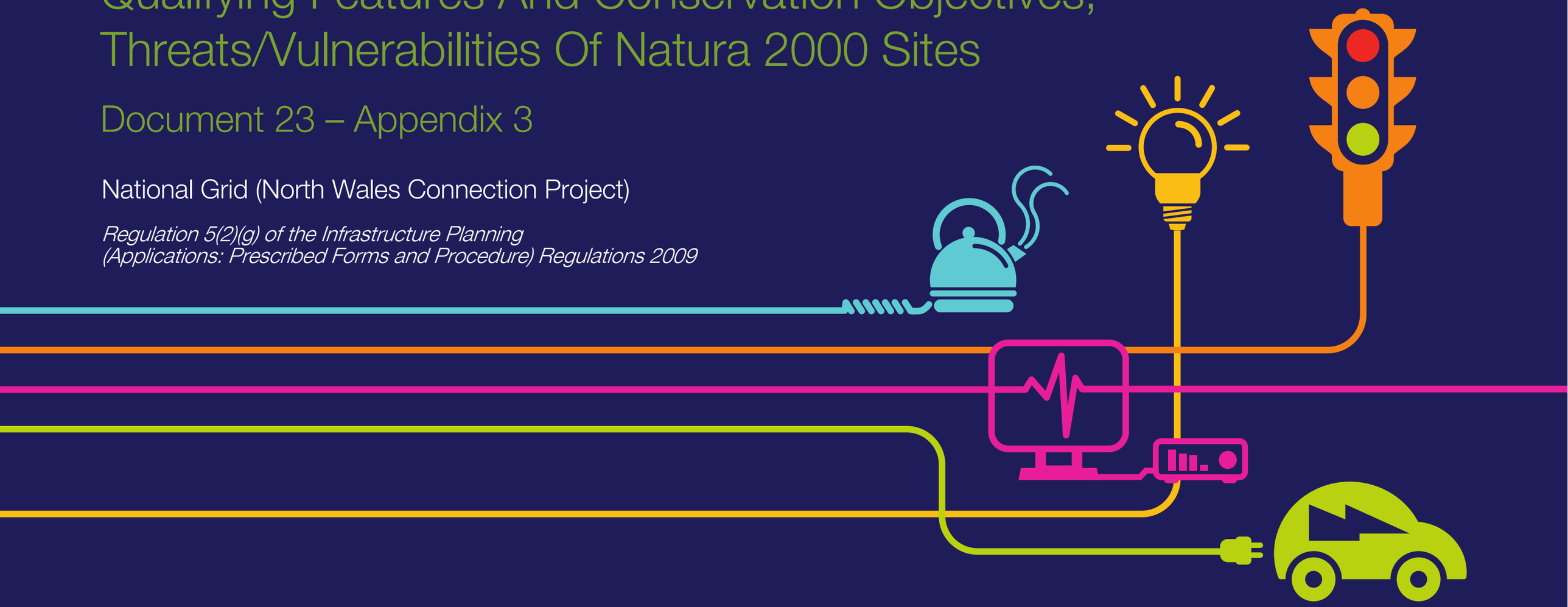

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Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
Corsydd Môn a Llyn/ Anglesey and Llyn Fens Ramsar (Ref 6.4)	**Ramsar criterion 1** • Hard oligo-mesotrophic waters with benthic vegetation of *Chara sp.* • Northern Atlantic wet heaths with *Erica tetralix* • Molinia meadows on calcareous, peaty or clayey— silt-laden soils (*Molinion caeruleae*) • Calcareous fens with *Cladium mariscus* and species of the *Caricion davallinae* • Alkaline fens • Geyer's Whorl Snail • Southern damselfly • Marsh fritillary butterfly **Ramsar Criterion 3** The site supports a diverse flora and fauna with associated rare species and is of special value for maintaining the genetic and ecological diversity of the region. Noteworthy flora include: Higher plants: • Narrow-leaved Marsh-orchid (*Dactylorhiza traunsteineri)* • Slender cottongrass (*Eriophorum gracile)* Lower plants: • Compact stonewort *(Nitella tenuissima)*	The Core Management Plan including conservation objectives for the Corsydd Môn/Anglesey Fens SAC also covers the Corsydd Môn/Anglesey Fens Ramsar (Anglesey sites only) and are presented below. **Conservation Objective for Feature 1: Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Calcareous fen occupies at least 20% (93 ha) of the total site area. • Calcareous fen is distributed over at least 5 of the 7 sites including Cors Erddreiniog, Cors Bodeilio, Cors Goch, Gwenfro-Rhos Y Gad and Cors Y Farl. • Calcareous fen exhibits a range of condition states (see below) in which great fen sedge (*Cladium mariscus*) is frequent to dominant, with no less than 10% preferable to species-poor *Cladium* swamp and the remainder to either vegetation in which Cladium occurs with sweet gale (*Myrica gale*), bluntflowered rush (*Juncus subnodulosus*), purple moor-grass and cross-leaved heath (*Erica tetralix*), or vegetation with many of the above elements as well as bog-bean (*Menyanthes trifoliata*) marsh cinquefoil (*Potentilla palustris*), bladderwort (*Utricularia vulgaris*), and slender sedge (*Carex lasiocarpa*) and other small sedges. • Species indicative of drainage or agricultural modification, such as Yorkshire fog (*Holcus lanatus*), bramble species, nettle are largely absent from the calcareous fen. • Purple moor grass does not exceed 25% of ground cover. • Leaf Litter forms no more than 20% of the ground cover at any location. • Scrub species such as willow Salix and birch Betula sp are largely absent from the calcareous fen. • Rhododendron species is absent. • Standing surface water is present or expressable on footfall over most of the Winter period. • Groundwater is within 15cm of surface in mid Summer. • All hydrological (diffuse, surface and sub-surface) pathways (inputs and outputs) are restored and/or intact (includes ditch infilling, blocking, diversion and re-engineering). Water quality reflects the base-rich but nutrient poor requirements of the habitat. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 2: Alkaline fen** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:	Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects: • Vegetation succession • Drainage/land-claim: (unspecified) • Eutrophication • Pollution - agricultural fertilisers

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Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	Noteworthy fauna include: Invertebrates: • Geyer's whorl snail (Habitats Directive Annex II) • Desmoulin's whorl snail *Vertigo moulinsiana* (Annex II (Habitats Directive; RDB3) • Southern damselfly (Habitats Directive Annex II) • Marsh fritillary (Habitats Directive Annex II) • Ground beetle (*Chlaenius tristis)* (RDB1) • Hornet robber fly (*Asilus crabroniformis)* (Notable) • Solder fly (*Stratiomys chamaeleon)*, Parasitic fly (*Acrometopia wahlbergi)*, Medicinal leech (*Hirudo medicinalis)* (Habitats Directive Annex V) Mammals: • Otter (Habitats Directive Annex II)	• Alkaline fen occupies at least 17% of the total site area. • Alkaline fen is found on all 7 component sites. • The following plants are common in the alkaline fen: black bog rush (*Schoenus nigricans*), moss (*Campyllium stellatum*), great fen sedge (up to 1 m tall), blunt flowered rush, sweet gale, moss, bladderwort, butterwort (*Pinguicula vulgaris)*, • Species indicative of drainage or agricultural modification, such as Yorkshire fog, bramble species, nettle, are largely absent from the alkaline fen. • Purple moor grass does not exceed 25% of ground cover and is restricted to drier areas • Bare ground including tufa constitutes about 10% of the ground cover. • Alkaline Fen exhibits a diverse age and height structure across the site (tussocks are undamaged and 20% short grazed, 50% mature – 30% in between including bare ground). • Scrub species such as willow (*Salix*) species and birch (*Betula pubescens*) are largely absent from the alkaline fen. • Rhododendron species is absent. • Water expressable on foot-fall or running surface water is present between tussocks throughout the year. • All Hydrological (diffuse, surface and sub-surface) pathways (inputs and outputs) should be restored and/or intact (includes ditch infilling, blocking, diversion and re-engineering) • Water quality is appropriate to the needs of the vegetation and species. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 3: Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Open water occupies not less than 1% of the total site area. • Natural deep lakes persist at Cors Goch and Cors Erddreiniog component sites • The macrophyte, phytoplankton, zooplankton and predator components of the ecosystem operate in balance in a clear-water environment, where: • Characteristic macrophyte species are present in the water bodies, including dense beds of stoneworts (*Chara species*), in areas <6 m deep • Invasive non-native species are absent, or occur at no more than rare or occasional frequency. • Locally native (non-coarse) fish are present.	
Corsydd Môn a Llyn/ Anglesey and Llyn Fens SAC (Ref 6.4)	**Annex I habitats that are a primary reason for selection of this site:** • Hard oligo-mesotrophic waters with benthic		**Main pressures and threats for Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.** • Pollution

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	vegetation of *Chara spp.* • Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* * Priority feature • Alkaline fens **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** • Northern Atlantic wet heaths with *Erica tetralix* • Molinia meadows on calcareous, peaty or clayey-silt-laden soils **Annex II species that are a primary reason for selection of this site:** • Geyer`s whorl snail **Annex II species present as a qualifying feature, but not a primary reason for site selection** • Southern damselfly • Marsh fritillary butterfly **Other Annex I habitat present on the site:** • European dry heaths **Other Annex II species present on the site:** • Great Crested Newt • Otter	• All coarse fish are absent • Water quality is such as to maintain pH 7-9 and mean annual Total Phosphorus <15µg/l. • The water is clear throughout the year, with an absence of algal blooms. • Marl deposition occurs within all the lakes. • There is minimal extraneous sediment input • The integrity of the natural hydrological system (inputs and outputs) is intact. • Appropriate water level is maintained throughout the year, (seasonal fluctuation 30cm). • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 4 - Molinia meadows on calcareous, peaty or clayey silt-laden soils** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Molinia meadows occupy at least 2% of the total site area. • Molinia meadows are distributed over at all 7 component sites. • The following plants are common in the Molinia meadows: purple moor-grass; devil's bit scabious (*Succisa pratensis*); carnation sedge (*Carex panicea*); saw wort (*Serratula tinctoria*); lousewort (*Pedicularis sylvestris*), *Carex pulicaris and C. hostiana* and Marsh orchids • Soft rush (*Juncus effusus*) and species indicative of agricultural modification, such as perennial rye grass (*Lolium perenne*) and white clover (*Trifolium repens*) are largely absent from the Molinia Meadows. • Purple moor grass does not exceed 50% of ground cover. • Scrub species such as willow and birch are largely absent from the Molinia meadows • Rhododendron species are absent • Leaf litter should comprise <25% of ground cover • Groundwater will be between –10cm and –25cm below ground level for most of the year • The integrity of the hydrological system (inputs and outputs) will be intact. • Swards structure should reflect the requirements of feature 9 (Marsh fritillary) • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 5: Northern Atlantic wet heaths with Erica tetralix** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Wet heath covers at least 4%ha of the site • The following plants are common in the wet heath: heather (*Calluna vulgaris*); Cross-	• Air pollution • Sea level rise • Water abstraction **Main pressures and threats for Calcareous fens with Cladium mariscus and species of the Caricion davallianae** • Grazing • Fragmentation • absence of or inappropriate management • pollution (though air pollution is not considered to be a threat) • climate change • Water abstraction **Main pressures and threats for Alkaline fens** • Grazing • Burning • Fragmentation • Absence of or inappropriate management • Pollution • Air pollution • Grazing **Main pressures and threats for Northern Atlantic wet heaths with Erica tetralix** • Invasive species • Development pressures • Burning • Water management • Air pollution

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		leaved heath (*Erica tetralix)* as well as bog moss (*Sphagnum Species*) Devil's bit scabious and *Narthecium ossifragum*. • Competitive species indicative of under-grazing, particularly bracken Pteridium aquilinum, purple moor-grass and western gorse Ulex gallii will be kept in check. • 70% of wet heath will be "good condition" wet heath. • The wet heath supports viable populations of marsh gentian at Cors Erddreiniog • The wet heath contributes to the support of a viable meta-population of marsh fritillary • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 7: Geyer's whorl snail** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Geyer's whorl snail is frequent in suitable habitat at Cors Erddreiniog and Waun Eurad Sections: • There are abundant areas of flushed fen grassland (M13/feature 2) with sedge/moss lawns 5-15cm tall, containing species such as *Carex viridula subsp. brachyrrhyncha, Pinguicula vulgaris, Briza media, Equisetum palustre, Juncus articulatus and the mosses Drepanocladus revolvens, Campylium stellatum*, with scattered tussocks of *Schoenus nigricans* no greater than 80cm tall. • Soils are saturated *schoenus* tussocks lower than 80cm **Conservation Objective for Feature 8: Coenagrion mercurial** The vision for this feature is for it to be in favourable conservation status, where all of the following conditions are satisfied: • Population size is stable or increasing • The population occupies at least 3 distinct management units • The total area of good breeding habitat does not fall below 1000 m^2 • Seepages and shallow runnels at Nant Isaf will be clear, pollution free and will support good numbers of native aquatic plants. • The population of southern damselflies on the site (allowing for normal annual fluctuations) is maintained or increases. • Species indicative of drainage or agricultural modification, such as Yorkshire fog, bramblespecies, nettle are largely absent • Alkaline Fen habitat exhibits a diverse age and height structure across the site (tussocks are undamaged and 20% short grazed, 50% mature – 30% in between inch bare ground • Scrub species such as willow species and birch are largely absent from the alkaline fen habitat	• Grazing **Main pressures and threats for Molinia meadows on calcareous, peaty or clayey-silt-laden soils** • Lack of remedial management • Water management and quality • Agricultural improvement • Air pollution • invasive species • too frequent burning • agricultural abandonment • development • afforestation • Drainage **Main pressures and threats for the Geyer`s whorl snail** • grazing • modification of cultivation practices • Inappropriate heathland management **Main pressures and threats for the Southern damselfly** • agricultural drainage and water pollution • dredging of breeding sites • Cultivation, mowing and cutting **Main pressures and threats for the Marsh fritillary butterfly** • use of pesticides and fertilisers

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		• Rhododendronspecies is absent from the feature. • Appropriate grazing is managed across 100% of the site • Standing or running surface water is present between tussocks throughout the year, and visible over 30% of the tussock covered area. • All Hydrological (diffuse, surface and sub-surface) pathways (inputs and outputs) should be restored and/or intact (includes ditch infilling, blocking, diversion and re-engineering) • Water quality is appropriate to the needs of the vegetation and species. • All factors affecting the achievement of the foregoing conditions are under control. **Conservation Objective for Feature 9: Marsh fritillary butterfly** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The site supports a sustainable meta population of the marsh fritillary. • The population is viable in the long-term, (acknowledging the extreme population fluctuations of the species). • Habitats on the site are in optimal condition to support the metapopulation. • At least 6% (approximately 30ha) of the total site area is marshy grassland or wet heath suitable for supporting marsh fritillary, with Devil's-bit scabious Succisa pratensis present and only a low cover of scrub. • At least 40% of this 30ha is good marsh fritillary breeding habitat, dominated by purple moor grass, with *S. pratensis* abundant throughout and a vegetation height of 10-20cm over the Winter period. • Areas of good marsh fritillary habitat are scattered over several management units. • Off site habitats that function as stepping stone or corridors located between SAC compartments will be maintained for migration, dispersal, foraging and genetic exchange purposes • All factors affecting the achievement of the foregoing conditions are under control. In addition, each Conservation Objective has a number of performance indicators attached to it for example the extent of a feature and the condition of the feature in terms of species composition. The performance indicators are part of the conservation objective, not a substitute for it. The performance indicators can be found within the Core Management Plan including Conservation Objectives for Corsydd Môn/Anglesey Fens SAC.	• grazing pressures and changes in agricultural management • planting and scrub encroachment • burning and soil pollution/nutrient enrichment • drainage • development • recreation
Y Fenai a Bae Conwy/ Menai Strait and Conwy Bay SAC (Ref 6.5)	**Annex I habitats that are a primary reason for selection of this site:** • Sandbanks which are	**To achieve favourable conservation status all the following, subject to natural processes, need to be fulfilled and maintained in the long-term. If these objectives are not met restoration measures will be needed to achieve favourable conservation status.** *Habitat Features*	**Sandbanks which are slightly covered by sea water all the time** Main pressures are: Fish and Shellfish Aquaculture, Professional

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	slightly covered by sea water all the time • Mudflats and sandflats not covered by seawater at low tide • Reefs **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** • Large shallow inlets and bays • Submerged or partially submerged sea caves	• Mudflats and sandflats not covered by seawater at low tide • Reefs • Sandbanks which are slightly covered by seawater all the time • Large shallow inlets and bays • Submerged or partially submerged sea caves *Range* The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing. For the intertidal mudflats and sandflats feature these include; • Muddy gravel communities • Dwarf eelgrass, *Zostera noltei* beds • Sediment communities at Traeth Lafan For the reef feature these include; • Reef communities in high energy wave-sheltered, tide-swept conditions • Under-boulder, overhang and crevice communities • Limestone reef communities • Clay outcrop reef communities For the large shallow bay feature these include; • Organically enriched muddy sediment areas *Structure and function* The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. Important elements include; • geology, • sedimentology, • geomorphology, • hydrography and meteorology, • water and sediment chemistry, • biological interactions. This includes a need for nutrient levels in the water column and sediments to be: • at or below existing statutory guideline concentrations • within ranges that are not potentially detrimental to the long-term maintenance of the features species populations, their abundance and range.	fishing, Trawling, Drift-net fishing, Leisure fishing, Sand and gravel extraction, exploration and extraction of oil or gas, Urbanised areas, human habitation, Industrial or commercial areas, Discharges, Port areas, Energy transport, Pipe lines, Shipping, pollution, water pollution, Modification of hydrographic functioning/general, Modification of marine currents, Dumping/depositing of dredged deposits, Sea defence or coast protection works, Erosion, Euthrophication, Invasion of a species, Interspecific faunal relations, Other forms or mixed forms of interspecific faunal competition, Genetic pollution, and the introduction of disease. **Mudflats and sandflats not covered by seawater at low tide** Main pressures are: Fish and shellfish aquaculture, Professional fishing, Fixed location fishing, Leisure fishing, Bait digging, trampling/overuse, Erosion, Dykes/Embankments/artificial beaches/general, urbanized areas/human habitation, Industrial or commercial areas, Port areas, Sport and leirsure structures, Nautical sports, Motorised vehicles, Discharges, Pollution, Water pollution, Eutrophication, Genetic pollution, Interspecific faunal and floral relations, and invasion by a species. **Reefs**

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		Contaminant levels in the water column and sediments derived from human activity to be: • at or below existing statutory guideline concentrations • below levels that would potentially result in increase in contaminant concentrations within sediments or biota • below levels potentially detrimental to the long-term maintenance of the feature species populations, their abundance or range taking into account bioaccumulation and biomagnification. *Restoration and recovery* This includes the need for restoration of some reef features such as underboulder, overhang and crevice communities, and of some mudflat and sandflat features such as the muddy gravel habitats and sheltered muddy habitats. All of these habitats are also part of the large inlets and bays feature. *Typical Species* The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded. Important elements include: • species richness • population structure and dynamics, • physiological heath, • reproductive capacity • recruitment, • mobility • range As part of this objective it should be noted that: • populations of typical species subject to existing commercial fisheries need to be at an abundance equal to or greater than that required to achieve maximum sustainable yield and secure in the long-term the management and control of activities or operations likely to adversely affect the habitat feature is appropriate for maintaining it in favourable condition and is secure in the long-term	Main pressures are: Fish and Shellfish Aquaculture, Professional fishing, Fixed location fishing, Trawling, Leisure fishing, Taking / Removal of fauna and flora/ general, Urbanised areas/ human habitation, Industrial or commercial areas, Discharges, Nautical sports, Other leisure and tourism impacts, Trampling/ overuse, Landfill/ land reclamation and drying out/general, Modification of marine currents, Dumping/depositing of dredged deposits, Sea defense or coast protection works, Eurrophication, Natural catastrophes, Pollution, Water pollution, Invasion by a species, Interspecific faunal and floral relations, Genetic pollution. **Large shallow inlets and bays** Main pressures are: Fish and Shellfish Aquaculture, Professional fishing, fixed location fishing, trawling, Leisure fishing, bait digging, Taking/Removal of fauna/general, Taking/Removal of flora/general, Exploration and extraction of oil or gas, Urbanised areas/human habitation, Industrial or commercial areas, Discharges, port areas, Energy transport, pipe lines, Shipping, Sport and leisure structures, nautical sports, Pollution, water pollution, Dumping/depositing of dredged deposits, Sand and gravel extraction, removal of beach materials, Landfill/land reclamation and drying out/general,

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			polderisation, reclamation of land from sea, estuary or marsh, sea defense or coast protection works, Erosion, invasion by a species, Interspecific faunal relations, introduction of disease, other forms or mixed forms of interspecific faunal competition. **Submerged or partially submerged sea caves** Main pressures are: Biocenotic evolution, Interspecific faunal relations, Interspecific floral relations, genetic pollution, Urbanised areas/human habitation, Industrial or commercial areas, Railway lines, port areas, sea defense or coast protection works, Trampling/overuse, Dumping/depositing of dredged deposits, Hunting, fishing or collecting activities not referred to above, Landfill, land reclamation and drying out/general, eutrophication, Discharges, Pollution, other forms or mixed forms of pollution, and water pollution. Major future threats are: Erosion, Submersion, collapse of terrain/landslide, invasion by a species, Interspecific faunal and floral relations, genetic pollution, Urbanised areas/human habitation, Industrial or commercial areas, Railway lines/TGV, port areas, Trampling/overuse, Dumping/depositing of dredged deposits, Hunting, fishing or

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			collecting activities not referred to above, Landfill, land reclamation and drying out/general, eutrophication, Discharges, Pollution, other forms or mixed forms of pollution, and water pollution.
Afon Gwyrfai / Llyn Cwellyn SAC (Ref 6.6)	**Annex I habitats that are a primary reason for selection of this site:** • Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* • Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation **Annex II species that are a primary reason for selection of this site:** • Atlantic salmon • Floating water-plantain **Annex II species present as a qualifying feature, but not a primary reason for site selection:** • Otter	**Conservation Objective for Feature 1: Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Water quality of the lake is within parameters which are suitable to support the characteristic flora and fauna. • The lake shows a characteristic vegetation zonation from the shore to the deeper water. • The lake has a macrophyte flora which includes many of the characteristic species including *Littorella uniflora, Lobelia dortmanna*, *Isoetes lacustris, Luronium natans and Subularia aquatica, together with a diverse range of associates including Myriophyllum alterniflorum, Callitriche hamulata, Nitella flexilis and Potamogeton berchtoldii.* • *Nitella gracilis and Luronium natans* to be present as characteristic plants. **Conservation Objective for Feature 2: Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The conservation objective for the water course as defined in 4.1 above must be met. • The extent of this feature within its potential range in this SAC should be stable or increasing. • The extent of the sub-communities that are represented within this feature should be stable or increasing. • The conservation status of the feature's typical species should be favourable. • All known, controllable factors, affecting the achievement of these conditions are under control (many factors may be unknown or beyond human control). **Conservation Objective for Feature 3: Atlantic salmon**	The lake is utilised as a raw drinking water reservoir. The present abstraction regime is compatible with its nature conservation status. Recent investigations have revealed that Llyn Cwellyn has acidified by 0.7 pH units since the late 1800s, due to increases in emissions of oxides of sulphur and nitrogen and subsequent acidic depositions in the form of 'acid rain'. The management of the extensive block of coniferous plantation on the shores of Llyn Cwellyn is an important factor in safeguarding the conservation value of the lake. A management plan has been agreed upon between the Countryside Council for Wales 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. The Afon Gwyrfai is likely to be most vulnerable to cumulative impacts of small-scale changes along its length which may affect water quality and habitat structure.

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		The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The conservation objective for the water course as defined in 4.1 above must be met • The population of the feature in the SAC is stable or increasing over the long-term. • The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches where predominantly suitable habitat for each life stage exists over the long-term. Suitable habitat is defined in terms of near-natural. • The Gwyrfai will continue to be a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis. **Conservation Objective for Feature 4: Floating water-plantain** The vision for this feature is for it to be in favourable conservation status, where all of the following conditions are satisfied: • The conservation objective for the water course as defined in 4.1 above must be met. • Llyn Cwellyn will continue to support a peripheral floating water-plantain assemblage, as well as a deeper water assemblage, with a characteristic zonation of vegetation from the shore at two areas of the lake. • Floating water-plantain will continue to flourish in the Afon Gwyrfai and will continue to occur in every selected section • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 5: European otter** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The population of otters in the SAC is stable or increasing over the long-term and reflects the natural carrying capacity of the habitat within the SAC, as determined by natural levels of prey abundance and associated territorial behaviour. • The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches that are potentially suitable to form part of a breeding territory and/or provide routes between breeding territories. • The size of breeding territories may vary depending on prey abundance. • The population size should not be limited by the availability of suitable undisturbed breeding sites. Where these are insufficient they should be created through habitat enhancement and where necessary the provision of artificial holts. No otter breeding site is subject to a level of disturbance that could have an adverse effect on breeding success. Where necessary, potentially harmful levels of disturbance are managed.	

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Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		• The safe movement and dispersal of individuals around the SAC is facilitated by the provision, where necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc. at road bridges and other artificial barriers. • All factors affecting the achievement of these conditions are under control. In addition, each Conservation Objective has a number of performance indicators attached to it for example the extent of a feature, distribution of the feature, typical species and the adult run size. The performance indicators are part of the conservation objective, not a substitute for it. The performance indicators can be found within the Core Management Plan including Conservation Objectives for Afon Gwyrfai a Llyn Cwellyn SAC.	
Bae Cemlyn/ Cemlyn Bay SAC (Ref A3.1)	**Annex I habitats that are a primary reason for selection of this site:** • Coastal lagoons **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** • Perennial vegetation of stony banks	**Conservation Objective for Feature 5: Coastal Lagoon and Feature 9: Spiral tasselweed Ruppia cirrhosa** The vision for these features is for them to be in a favourable conservation status, where all the following conditions are satisfied: • There is no loss of area other than that due to natural processes. • The specialised plant and animal communities within the lagoon remain. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 6: Perennial Vegetation of Stony Banks** The vision of this feature is for it to be in a favourable conservation status, where all the following conditions are satisfied: • The extent of the vegetation of shingle banks is maintained unless altered by natural (e.g. storm) events. • Typical component species of vegetation of shingle banks are maintained. • Invasive alien species (e.g. Fallopia japonica) are absent. • The management of activities or operations likely to damage or degrade the population dynamics, natural range and supporting habitat of the feature is appropriate for maintaining favourable conservation status and is secure in the long-term. In addition, each Conservation Objective has a number of performance indicators attached to it for example the population size of a feature and productivity of a feature. The performance indicators are part of the conservation objective, not a substitute for it. The performance indicators can be found within the Core management Plan including Conservation Objectives for Ynys Feurig, Cemlyn Bay and The Skerries SPA, Cemlyn Bay SAC, Ynys Feurig SSSI, the Skerries SSSI and Cemlyn Bay SSSI. (Countryside Council for Wales, March 2008).	**Main pressures and threats for the Coastal Lagoon** In general, the pressures are Fish and Shellfish Aquaculture, Professional fishing, Fixed location fishing, Leisure fishing, Bait digging, Trampling, overuse, Invasion by a species, Interspecific faunal and floral relations, Genetic pollution, Urbanised areas, human habitation, Industrial or commercial areas, Discharges, Port areas, Energy transport, Pipelines, Shipping, Sport and leisure structures, nautical sports, pollution, water pollution, Dumping/depositing of dredged deposits, euthrophication, landfill/land reclamation and drying out, Polderisation, erosion, removal of sediments, management of water levels, and reclamation of land from sea/estuary or marsh. **Main pressures and threats for the Perennial Vegetation of Stony Banks** • Sediment supply • Natural mobility • Exploitation

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
			• Access • Grazing • Air pollution
Eryri/ Snowdonia SAC (Ref 6.7)	**Annex I habitats that are a primary reason for selection of this site:** • Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea • 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 (Androsacetalia alpinae and Galeopsietalia ladani) • Calcareous rocky slopes with chasmophytic vegetation • Siliceous rocky slopes with chasmophytic vegetation **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** • Northern Atlantic wet heaths with Erica tetralix • European dry heaths	**Conservation Objective for Feature 1: Siliceous alpine and boreal grasslands** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The high summits of the Carneddau (Carnedd Dafydd, Pen yr Ole Wen, Carnedd Llewelyn, Garnedd Uchaf, Yr Aryg, Foel Grach, Llwytmor, Drosgl, Foel Fras, Pen Llythrig y Wrach and Pen yr Helgi Ddu) the Glyderau (Y Garn, Glyder Fach, Glyder Fawr, Elidir Fach, Carnedd y Ffiliast and Mynydd Perfedd), should each support summit heath vegetation which does not show signs of heavy modification by grazing and/or heavy trampling. • There should be no further loss of summit heath on Yr Wyddfa. The extent of the habitat at Crib y Ddysgl and Garnedd Uchaf should be retained as an absolute minimum and there should be no loss of quality. • The vegetation should be dominated by species typical of species of summit heath such as Racomitrium lanuginosum (woolly hair moss), Carex bigelowii (stiff sedge), shrubs dwarfed by the high altitude conditions such as Vaccinium myrtillus (bilberry) and Salix herbacea, lichens and montane bryophytes. • Grasses should not comprise a significant proportion of the vegetation. • The habitat should grade into montane heath at its lower level. • All factors affecting the achievement of these conditions are under control. CCW believes that we should be aiming to achieve this vision because the habitat is of such high conservation value being at its southerly limit in the UK. However this is a very long-term vision and at present we have no means of controlling all of the factors impacting on the feature. However, research has indicated that if we could control the grazing impact the habitat should respond. Exclusion of grazing animals from the most degraded heath is therefore a priority in the Pen yr Ole Wen – Carnedd Dafydd area. It is not possible to predict exactly what quality can be achieved since the habitat is now in a very poor condition and is possibly being impacted to some extent by atmospheric pollution, but any improvement to this habitat will help reduce further erosion and loss of vegetation cover. We cannot make exact inferences from one summit to another since they each have differing amounts of impact. In the short term we should expect to see increases in the cover of Racomitrium and dwarf shrubs while seeing a decrease in grass cover, particularly Agrostis species, as nutrients are leached out of the habitat and not replaced. **Conservation Objective for Feature 2: Alpine and Boreal Heaths (EU code 4060) (Montane**	The area is extensively grazed by sheep. 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 in area. Resolution of this problem is complex, due to the breakdown of traditional shepherding, other changes in livestock management on these open mountain areas, and the economics of upland farming. This is being actively tackled by the Countryside Council for Wales (CCW) by the negotiation of management agreements. Snowdonia, which contains the highest peaks in Wales, has long been used for rock-climbing and fellwalking. It is subject to intense recreational pressures and where these are concentrated, particularly on paths and summit areas, there are severe erosion problems, despite management. However, these rarely impinge upon the special features of the area. Remedial work by Snowdonia National Park Authority, National Trust and CCW is tackling this problem. The high rainfall and extensive acidic geology/pedology renders this area, especially its watercourses and lakes, vulnerable

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	• Alpine and Boreal heaths • Alpine and subalpine calcareous grasslands • Species-rich Nardus 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 • Petrifying springs with tufa formation (Cratoneurion) * Priority feature • Alkaline fens • Alpine pioneer formations of the Caricion bicoloris-atrofuscae * Priority feature • Old sessile oak woods with Ilex and Blechnum in the British Isles **Annex II species that are a primary reason for selection of this site:** • Slender green feather-moss Drepanocladus (Hamatocaulis) vernicosus • Floating water-plantain	**Heath)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Alpine and Boreal heath habitat should cover considerable areas of the Eryri SAC at high altitudes i.e. from about 600m upwards, though it may extend below this in particularly exposed areas. • It should grade into summit heath on the high summits and ridges, and into dry heath at its lower end. • This vegetation should be dominated by dwarf shrubs, typically stunted by the high altitude conditions, such as cowberry (Vaccinium vitis idea), bilberry (Vaccinium myrtillus) and mountain crowberry (Empetrum hermaphroditum), prostrate ling (Calluna vulgaris) and in some stands dwarf juniper (Juniperus communis ssp. nana.)Other montane species such as wooley hair moss (Racomitrium lanuginosum) and other montane bryophytes and lichens should be present. • Although some grasses, particularly sheep's fescue, will be present, they should not be at high cover. In the long term we expect existing habitat to be retained and to improve in quality in its current locations, and also to expand into other suitable localities where the habitat now exists in a degraded state. • All factors affecting the achievement of these conditions are under control. Although much of this habitat has been converted to grassland over many years, there are still good stands of it, notably on Lliwedd on the Wyddfa massif and below the summits of Carnedd Dafydd and Pen y Ole Wen on the Carneddau massif. There is also good quality habitat in the Glyderau as at Esgair Felen. Elsewhere it is very fragmented and there is no clear zonation between degraded montane heath and the more ubiquitous dry heath. We expect to see a decline in the grasses, especially Agrostis species as nutrients get leached out and don't get replaced, and an increase in Racomitrium and dwarf shrubs. **Conservation Objective for Feature 3: Hydrophilous tall herb communities of plains and of the montane to alpine levels (EU Habitat Code: 6430)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The area of tall herb ledge must be stable, or increasing in the long term. There will be no loss of tall herb ledge vegetation and the feature will occur in all management units in which it currently occurs • Tall herb ledge vegetation will develop on ledges and on damp calcareous grassland below cliffs where the potential exists but expansion is currently prevented by grazing. • Tall herb vegetation will consist of a number of flowering plant species such as Lady's mantle Alchemilla spp., Meadowsweet Filipendula vulgaris, Globeflower Trollius	to acidification. Sections of the site (Cwm Crafnant, Cwm Idwal and Yr Wyddfa) are managed as National Nature Reserves and are covered by CCW management plans.

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	Luronium natans	europaeus, Welsh poppy Meconopsis cambrica, Devilsbit scabious Succisa pratensis, Ox-eye daisy Leucanthemum vulgare, Wild Angelica Angelica sylvestris, Roseroot Sedum rosea, Lesser meadow rue Thalictrum minus and Common valerian Valeriana officinalis • The flowering plants will be un-grazed and able to mature and set seed freely. **Conservation Objective for Feature 4: Calcareous rocky slopes with chasmophytic vegetation (EU Habitat Code: 8210)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The feature must be stable or increasing in the long term. There will be no loss of calcareous chasmophytic vegetation and it will continue to occur in all of management units in which it currently occurs. • The feature must continue to support a range of arctic alpine plant populations. • The plants will be un-grazed and able to mature and set seed freely, or non-flowering plants reproduce by propagules or vegetative means. • The feature will not be inhibited by invasive non-native plant species. **Conservation Objective for Feature 5: Alpine and subalpine calcareous grasslands (EU Habitat Code: 6170)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • This habitat should remain in its current locations although there may be some shifts in its extent. • The feature should continue to support the characteristic plants including arctic alpine plant species. • The only acceptable losses of this habitat should be due to succession to other valuable montane communities such as tall herb ledge vegetation. **Conservation Objective for Feature 6: Siliceous rocky slopes with chasmophytic vegetation (EU Habitat Code: 8220)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • This habitat should support a range of bryophytes and ferns in suitable crevices on acid rocks. • The feature should not be damaged by grazing. • It should be widespread on suitable moist acidic rock crevices on each massif.	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		Conservation Objective for Feature 7: Siliceous scree of the montane to snow levels (EU Habitat Code: 8110) The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The naturally mobile scree on each massif will have open vegetation on or among the boulders, with Cryptogramma crispa, Deschampsia flexuosa, Festuca ovina, Galium saxatile, Huperzia selago and an extensive and varied bryophyte flora. • There will not be excessive disturbance to the as a result of human or animal activity. **Conservation Objective for Feature 8: Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea (EU Habitat Code: 3130)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Each of the lakes has a macrophyte flora which includes some of the characteristic species such as Littorella uniflora, Lobelia dortmanna, Isoetes lacustris, Myriophorum alterniflorum, Juncus bulbosus, Potamogeton species and Subularia aquatic. • The lakes which have not been dammed for use as reservoirs retain a natural profile. All of the lakes show a characteristic vegetation zonation from the shore to the deeper water. • Water quality of each lake is within parameters which are suitable to support the characteristic flora and fauna. **Conservation Objective for Feature 9: North Atlantic wet heaths with Erica tetralix (EU Habitat Code: 4010)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The feature must be stable or increasing in the long term. • The habitat will typically comprise Erica tetralix and Calluna vulgaris and mosses on a wet peaty substrate with a range of small flowering plants such as bog asphodel Narthecium ossifragum, milkwort Polygala serpyllifolia, Common butterwort Pinguicula vulgaris, small sedges and round leaved sundew Drosera rotundifolia. **Conservation Objective for Feature 10: European dry heath (EU Habitat Code: 4030) Vision for feature 10** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The feature must be stable or increasing in the long term. • The habitat will be dominated by at least two dwarf shrub species, usually heather	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		Calluna vulgaris and bilberry Vaccinium mytillus, but sometimes western gorse Ulex gallii or crowberry Empetrum nigrum may be prominent. • There will be a mixed age range of heath at an appropriate scale which includes stands of young vigorous dwarf shrubs, mature stands where the heather is becoming senescent, and all age ranges in between. • The heath shrubs will not exhibit forms characteristic of overgrazing. There will be no signs of frequent burning or reversion to grassland. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 11: Blanket bog (EU Habitat Code: 7130) Vision for feature 11** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The extent of this habitat should be of the order of 1342 ha (as notified on the N2K data form). • This figure however includes a considerable amount of degraded blanket bog. At present it is unknown how much of this is capable of restoration to good quality blanket bog habitat. • The good quality blanket bog will support typical species e.g. oligotrophic Sphagnum spp., cotton grass Eriophourm spp, ling Calluna vulgaris, bell heather Erica cinerea, crowberry Empetrum nigrum, cow berry Vaccinium vitis-idaea, and cranberry Vaccinium oxycoccus. The intact habitat will not show any signs of degradation as a result of overgrazing, drainage, or burning, such as depletion of dwarf shrubs and sphagna with increased grass cover. • The degraded habitat will not show any recent signs of further degradation as a result of overgrazing, drainage or burning. • All factors affecting the achievement of these conditions are under control. 4.12 **Conservation Objective for Feature 12: Depressions on peat substrates of the Rhynchosporion (EU Habitat Code: 7150)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The extent has not been fully measured because the nature of the habitat is small scale and patchy within mosaics of blanket bog and wet heath. However the extent should be at least that which has been mapped. • The habitat, characterised by white beak sedge Rhynchospora alba will support a range of plant species such as bog pimpernel Anagallis tenella, ling Calluna vulgaris, round leaved sundew Drosera rotundifolia, cross-leaved heath Erica tetralix, cottongrass	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		Eriophorum angustifolium, marsh St John's wort Hypericum elodes, purple moor grass Molinia caerulea, bog asphodel Narthecium ossifragum, bog pondweed Potamogeton polygonifolius, Sphagnum spp., and short sedges. • There will be no signs of excessive grazing which would result in large areas of bare peat and possibly significant cover of rushes Juncus spp. • Drainage or burning would damage this habitat and neither activity should be consented where this habitat could potentially be affected. At Cwmffynnon and other small areas in the Glyderau, the habitat supports the uncommon species, marsh clubmoss Lycopodiella inundata. Here we would expect to see frequent small patches of bare peat which support the species. Many of these areas may be caused by vigorous flushing of water rather than by grazing animals. **Conservation Objective for Feature 13: Species-rich Nardus grassland on siliceous substrates in mountain areas (EU Habitat Code: 6230)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The extent will be at least 10 hectares of the habitat to include 5 ha on the slopes above Llyn Llydaw. • The grassland will support a range of plant species such as Harebell Campanula rotundifolia, Eyebright Euphrasia spp. Devilsbit scabious Succisa pratensis, Wild thyme Thymus polytrichus, Heath speedwell Veronica officinalis, Spring sedge Carex caryophyllea, Flea sedge Carex pulicaris, Carnation sedge Carex panicea, Lady's mantle Alchemila glabr. • There will not be any significant cover of invasive species. New Zealand willow herb, Epilobium brunnescens is a long established alien plant on the site and is accepted at present as it doesn't appear to adversely affect the feature. (At present CCW has no knowledge of any means of reducing or eliminating it). **Conservation Objective for Feature 14: Old sessile oak woods with Ilex and Blechnum (EU Habitat Code: 91A0)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The extent is increasing. • The woodland comprises locally native canopy forming trees including: Quercus petraea, Betula pubescens, B. pendula, Fraxinus excelsior and Sorbus aucuparia. • There is a mixed age structure within the woodland. • Regeneration is occurring and sufficient seedlings can grow on to saplings and ultimately canopy trees.	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		• There are no significant alien species. **Conservation Objective for Feature 15: Petrifying springs with tufa formation (Cratoneuron) (EU Habitat Code: 7220** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • This feature on Eryri does not form tufa but should display a dominant cover of mosses such as Cratoneuron communatum, Philonotis fontana and Bryum pseudotriquetrum with frequent characteristic forbs such as Montia fontana, Chrysosplenium oppositifolium and Saxifraga stellaris. • There are no significant increases in grass or rush cover. • The extent of the spring vegetation is largely dictated by natural factors, chiefly hydrology. Reductions in extent could occur in response to trampling, and encroachment by rush and grass species due to nutrient enrichment. • The associated vegetation should be dominated by rushes and sedges, with the flushes. In addition, each Conservation Objective has a number of performance indicators attached to it for example the extent of a feature and condition of a feature. The performance indicators are part of the conservation objective, not a substitute for it. The performance indicators can be found within the Core management Plan including Conservation Objectives for Eryri SAC (Countryside Council for Wales, March 2008).	
Glannau Môn: Cors heli / Anglesey Coast: Saltmarsh SAC (Ref A3.2)	**Annex I habitats that are a primary reason for selection of this site:** • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows (Glauco-Puccinellietalia maritimae) **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** • Estuaries • Mudflats and sandflats not covered by seawater at low tide	**Conservation Objective for Feature 11: Estuaries** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • the distribution and extent of the estuaries, and their encompassed habitats, are determined predominantly by natural structure and environmental processes • the natural habitat structures necessary for the long-term maintenance of the estuaries and their encompassed habitats and typical species are maintained; • the granulometry and structure of the estuaries' sediments, and their natural variation, distribution and extent, are determined predominantly by natural sediment supply and transport processes • the quality of habitat structure is no more degraded as a consequence of human action or by materials of anthropogenic origin • the natural environmental processes necessary for the long-term maintenance of the estuaries, their encompassed habitats and their typical species are maintained • Water & sediment chemistry are determined predominantly by natural hydrodynamic, hydrological and meteorological processes • the salinity regime and gradients within the estuaries are determined predominantly by	Drastic modification to the Cefni estuary in the early 19th century continues to cause rapid accretion of sediment, permitting invasion by Spartina anglica on the seaward edges of the saltmarsh. This is reduced by herbicide treatment but successional development of saltmarsh over much of the present mudflat area is inevitable. Some development of Spartina anglica on the Braint estuary is also likely. This site forms part of Newborough Warren NNR.

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	• Spartina swards (Spartinion maritimae) • Vegetated sea cliffs of the Atlantic and Baltic Coasts	natural hydrodynamic, hydrological and meteorological processes • typical species are determined predominantly by inherent population dynamics and ecological processes • the species richness, population dynamics, abundance, biomass, population structures, physiological health, reproductive capacity, recruitment, range and mobility are maintained • the management of activities or operations likely to degrade the distribution, extent, structure, function or typical species populations of the feature, is appropriate for maintaining favourable conservation status and is secure in the long-term; and • the management of existing commercial fisheries for typical species ensures that species exploitation is at or below maximum sustainable yield and is secure in the long-term. NB. Detailed requirements for the maintenance of favourable condition for the other estuarine habitat features and their typical species are provided under their respective conservation objectives. **Conservation Objective for Feature 12: Salicornia and other annuals colonising mud and sand** The vision for this feature is for it to be in a favourable conservation status, where, subject to natural processes1 all of the following conditions are satisfied: • the distribution and extent of Salicornia and other annuals is determined predominantly by natural structure and environmental processes; • the natural habitat structures necessary for the long-term maintenance of Salicornia and other annuals and their typical species are maintained; • the granulometry and structure of Salicornia and other annuals' sediments, and their natural variation, distribution and extent, are determined predominantly by natural sediment supply and transport processes; • the geomorphology of the Salicornia and other annuals feature, and its natural variation, distribution and extent, are determined predominantly by the underlying geology and natural environmental processes; • the natural environmental processes necessary for the long-term maintenance of the Salicornia and other annuals feature and its typical species, are maintained; • the hydrographic and meteorological processes necessary for the long-term maintenance of the Salicornia and other annuals feature and its typical species are determined predominantly by natural environmental processes; • the salinity regime and gradients of the Salicornia and other annuals feature are determined predominantly by natural hydrodynamic, hydrological and meteorological processes;	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		• nutrients in the water column and sediments remain within ranges that are not potentially detrimental to the long-term maintenance of the Salicornia and other annuals' communities, their distribution and range; • contaminants in the water column and sediments derived from human activity remain below levels potentially detrimental to the long-term maintenance of the Salicornia and other annuals' communities, their distribution and range; • dissolved oxygen levels in the water column and sediments are determined predominantly by natural environmental processes • communities of typical species are maintaining their conservation status on a long-term basis as viable components of the Salicornia and other annuals' habitats • the management of activities or operations likely to degrade the distribution, extent, structure, function or typical species communities of the feature, is appropriate for maintaining favourable conservation status and is secure in the long-term. **Conservation Objective for Feature 13: Mudflats and sandflats not covered by seawater at low tide** The vision for this feature is for it to be in a favourable conservation status, whereall of the following conditions are satisfied: • the distribution and extent of the mudflats and sandflats, and their encompassed habitat, are determined predominantly by natural structure and environmental processes • the natural habitat structures necessary for the long-term maintenance of the mudflats and sandflats, and their encompassed habitat and typical species are maintained • the granulometry and structure of the mudflats and sandflats' sediments, and their natural variation, distribution and extent, are determined predominantly by natural sediment supply and transport processes • the quality of habitat structure is no more degraded as a consequence of human action or by materials of anthropogenic origin • the natural environmental processes necessary for the long-term maintenance of the mudflats and sandflats, their encompassed habitats and their typical species are maintained • Water & sediment chemistry are determined predominantly by natural hydrodynamic, hydrological and meteorological processes • the salinity regime and gradients within the mudflats and sandflats are determined predominantly by natural hydrodynamic, hydrological and meteorological processes • typical species are determined predominantly by inherent population dynamics and ecological processes • the species richness, population dynamics, abundance, biomass, population structures,	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		physiological health, reproductive capacity, recruitment, range and mobility are maintained • the management of activities or operations likely to degrade the distribution, extent, structure, function or typical species populations of the feature, is appropriate for maintaining favourable conservation status and is secure in the long-term; and • the management of existing commercial fisheries for typical species ensures that species exploitation is at or below maximum sustainable yield and is secure in the long-term. **Conservation Objective for Feature 14: Atlantic salt meadow (ASM)** The vision for this feature is for it to be in a favourable conservation status, where, subject to natural processes1 all of the following conditions are satisfied: • the distribution and extent of the saltmeadows is determined predominantly by natural structure and environmental processes; • the natural habitat structures necessary for the long-term maintenance of the saltmeadows and typical species are maintained; • the granulometry and structure of the saltmeadows' sediments, and their natural variation, distribution and extent, are determined predominantly by natural sediment supply and transport processes; • the geomorphology of the saltmeadows, and their natural variation, distribution and extent, are determined predominantly by the underlying geology and natural environmental processes; • the hydrographic and meteorological processes necessary for the long-term maintenance of the saltmeadows and their typical species are determined predominantly by natural environmental processes; • the salinity regime and gradients within the saltmeadows are determined predominantly by natural hydrodynamic, hydrological and meteorological processes; • nutrients in the water column and sediments are within ranges that are not potentially detrimental to the long-term maintenance of the saltmeadows' communities, their distribution and range; • contaminants in the water column and sediments derived from human activity remain below levels potentially detrimental to the long-term maintenance of the saltmeadows' communities, their distribution and range; • dissolved oxygen levels in the water column and sediments are determined predominantly by natural environmental processes; • the zonation of saltmarsh from pioneer, lower mid marsh and upper mid marsh and their transitions to fresh water and terrestrial vegetation are maintained; • communities of typical species are maintaining their conservation status on a long-term	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		basis as viable components of the saltmeadows' habitats, • the species richness, community dynamics, abundance, biomass, community structures, physiological health, reproductive capacity, recruitment and range are maintained: • the management of activities or operations likely to degrade the distribution, extent, structure, function or typical species comunities of the feature, is appropriate for maintaining favourable conservation status and is secure in the long-term. **Conservation Objective for Feature 15: Spartina swards (Spartinion maritimae)** This is a minor SAC feature and no specific conservation objectives are required at this stage. **Conservation Objective for Feature 16: Vegetated sea cliffs of the Atlantic and Baltic coasts** This is a minor SAC feature on this site and no specific conservation objectives are required at this stage. In addition, each Conservation Objective has a number of performance indicators attached to it for example the extent of a feature and the quality of the feature. The performance indicators are part of the conservation objective, not a substitute for it. The performance indicators can be found within the Core management Plan including Conservation Objectives for Glannau Môn: Cors Heli/ Anglesey Coast: Saltmarsh SAC.	
Llyn Dinam SAC (Ref A3.3)	**Annex I habitats that are a primary reason for selection of this site:** Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation	**Conservation Objective for Feature 1: Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation (includes SSSI features: Standing water – eutrophic & Standing water – marl/high alkalinity)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • There is no loss of area other than that due to natural processes (succession). • The aquatic plant community is typical of this lake type in terms of composition and structure. • Plants indicating very high nutrient levels and/or excessive silt loads are not dominant • Invasive non-native water plants do not threaten to out-compete the native flora. • Invasive non-native fauna do not threaten the native flora and/or fauna. • Bird species listed as SSSI features continue to be present at m1% of UK populations. • The nutrient, pH and dissolved oxygen levels are typical for a lake of this type and there is no excessive growth of cyanobacteria or greenalgae. • Chlorophyll values are low, and sufficient to allow Llyn Dinam and Llyn Penrhyn to be passed as 'Good' or better for a 'high alkalinity shallow lake' using Water Framework Directive classification methods. http://www.wfduk.org/management_info/News/UKCLASSPUB/	**Main pressures and threats include** • Water levels • Water quality • Nutrient inputs • Air pollution • Sea level rise • Fish populations/angling • Grazing • Recreational use • Invasive species

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		• The fringing swamp and mire vegetation is maintained. • All factors affecting the achievement of these conditions are under control. In addition, each Conservation Objective has a number of performance indicators attached to it for example the condition of the feature natural range and area on the site and community composioton. The performance indicators are part of the conservation objective, not a substitute for it. The performance indicators can be found within the Core management Plan including Conservation Objectives for for Llyn Dinam Special Area for Conservation and Llynnau Y Fali Site of Special Scientific Interest (Countryside Council for Wales, March 2008).	
Y Twyni o Abermenai i Aberffraw/ Abermenai to Aberffraw Dunes SAC (Ref A3.4)	**Annex I habitats that are a primary reason for selection of this site:** • Embryonic shifting dunes • Shifting dunes along the shoreline with Ammophila arenaria (`white dunes`) • Fixed dunes with herbaceous vegetation (`grey dunes`) * Priority feature • Atlantic decalcified fixed dunes (Calluno-Ulicetea) • Dunes with Salix repens ssp. argentea (Salicion arenariae) • Humid dune slacks **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** • Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation • Transition mires and	**Conservation Objective for Feature 1: Embryonic shifting dunes** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The distribution and extent of embryonic shifting dunes in late summer is determined by the availability of naturally accreting sand and strand line organic material. However, we would not expect all this potential embryonic dune habitat area to be vegetated in any one year and embryonic dunes may be absent in some years. Continuous absence over the six-year reporting cycle would cause the condition to be considered unfavourable. • The potential for the embryonic shifting dunes element of the typical zonation, from beach to fixed dune, is intact along the soft coastal frontage. This includes an unrestricted supply of sediment, opportunity for aeolian transport and naturally occurring organic strandline material. • The typical species of the strandline vegetation include Atriplex spp., Beta vulgaris, Cakile maritime, Honkenya peploides, Salsola kali. • The typical species of the embryonic dune vegetation include Elytrigia juncea and /or Leymus arenarius. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 2: Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • Shifting dunes with Ammophila arenaria are present along the dune front facing prevailing (southwest) winds where sediment supply is adequate. • There should be no decrease in the total (aggregate) area of qualifying dune habitats for which this site was designated (i.e., the sum total of qualifying dune habitat should not diminish). The extent and location of individual dune habitat features may be subject to periodic and seasonal variation. • The shifting dunes element of the typical zonation from beach to fixed dune is intact	**Main pressures and threats include** • Dune stabilization • Existing conifer forest constraining dunes and reducing water table • Spread of Hippophae rhamnoides and pine seedlings • Abandonment of traditional grazing • Shading and scrub development Dune stabilisation is leading to the gradual loss of early successional phases. The maintenance of dynamic geomorphological processes is constrained at Newborough by the conifer forest that occupies the same part of the site. The hydrological integrity of the site is also compromised by water-table reduction due to the conifer crop. The spread of Hippophae rhamnoides and pine seedlings from the forest threaten the dunes, and both are controlled by cutting and spraying. There is no ready solution to these problems

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	quaking bogs **Annex II species that are a primary reason for selection of this site:** • Petalwort Petalophyllum ralfsii • Shore dock Rumex rupestris **Annex II species present as a qualifying feature, but not a primary reason for selection of this site:** • Great Crested Newt Triturus cristatus	along the soft coastal frontage. • Bare ground is present. • The typical species of the shifting dune vegetation include Ammophila arenaria, Leymus arenarius, Elymus farctus, Eryngium maritimum, Euphorbia portlandica, Euphorbia paralias, and Calystegia soldanella. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 3: Fixed dunes with herbaceous vegetation (`grey dunes`)* (Habitats Directive priority feature)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The distribution of fixed dunes within the site may vary in response to natural dynamic processes and changes to other qualifying dune habitats for the site. • There should be no decrease in the total area of fixed dunes with herbaceous vegetation. • The fixed dunes element of the typical zonation from beach to fixed dune is intact along the soft coastal frontage. • Bare ground is present • The typical species of the fixed dune vegetation include Cerastium fontanum, Crepis capillaris, Cladonia spp., Peltigera spp., Erodium cicutarium, Geranium molle, Luzula campestris, Odontites verna, Pilosella officinarum, Plantago lanceolata, Prunella vulgaris, Festuca rubra, Galium verum, Anacamptis pyramidalis, Thymus polytrichus, Sedum acre, Veronica chamaedrys, Carex arenaria, C. flacca, Euphrasia officinalis, Hypnum cupressiforme, Hypochaeris radicata, Linum catharticum, Lotus corniculatus, Ononis repens, Rhinanthus minor, Rhytidiadelphus squarrosus, R triquetrus, Tortula muralis Viola canina, V. riviniana and V. tricolor. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 4: Dunes with Salix repens ssp. argentea (Salicion arenariae)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The distribution of dunes with Salix repens ssp argentea is consistent with the typical dune zonation and where topographic conditions are suitable. The location of dunes with Salix repens ssp argentea within the site may vary in response to natural dynamic processes and changes to other qualifying dune habitats for the site • There should be no decrease in the total (aggregate) area of qualifying dune habitats for which this site was designated (i.e., the sum total of qualifying dune habitat should not diminish). The extent of individual dune habitat features may be subject to periodic and	without removal of part of the forest. Redesign of the forest is now under discussion with the Forestry Commission. Abandonment of traditional grazing on Aberffraw common land could occur due to traffic hazards on unfenced roads, and the installation of cattle grids is under discussion with the owners. The ecological requirements of shore dock are not well known, although shading and scrub development on its forest refuge appears to be a threat. This is being tackled by tree removal and pony grazing, resulting in an increase in the shore dock population.

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		seasonal variation. • Salix repens is at least frequent and generally 5 - 30cm tall. • Opportunities for the initiation of embryonic dune slacks by wind erosion exist. • Bare ground is present. • The groundwater level is appropriate in winter and summer. • Groundwater quality is unaffected by pollution. • The typical species include Salix repens, Carex arenaria, C flacca, Euphrasia officinalis, Festuca rubra, Lotus corniculatus, Ononis repens, Equisetum variegatum, Epipactis palustris, Epipactis leptochila spp dunensis and Pilosella officinarum. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 5: Humid dune slacks** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The distribution of humid dune slacks is consistent with the typical dune zonation and where topographical conditions are suitable. The location of humid dune slacks within the site may vary in response to natural dynamic processes and changes to other qualifying dune habitats for the site. • There should be no decrease in the total (aggregate) area of qualifying dune habitats for which this site was designated (i.e., the sum total of qualifying dune habitat should not diminish). The extent and location of individual dune habitat features may be subject to periodic and seasonal variation. • All humid dune slack communities should be present, from embryonic dune slacks with a high % of bare ground to more closed vegetation with Salix repens. • Opportunities for the initiation of embryonic dune slacks (by wind erosion) exist. • Bare ground is present. • The ground water level is appropriate in winter and summer. • Ground water quality is unaffected by pollution. • The typical species include Salix repens, Carex arenaria, C flacca, Equisetum variegatum, Lotus corniculatus, Ononis repens, Potentilla anserina, Galium palustre, Mentha aquatica, Hydrocotyle vulgaris, Campyllium stellatum, Prunella vulgaris, Ranunculus flammula, Calliergon cuspidatum, Anagallis tenella. Parnassia palustris, Selaginalla selaginoides, Dactylorhiza incarnata and Epipactis palustris. • Petalwort occurs in humid dune slacks in which Equisetum variegatum is frequent at Aberffraw and Newborough compartments. • All factors affecting the achievement of these conditions are under control.	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		Conservation Objective for Feature 6: Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The distribution of the lakes reflects their physiographic status as dune-dammed lakes of shallow valleys. • The extent (area) of the habitat is 30ha, except if reduced by natural succession to swamp or bog. • The catchment of the lakes continues to provide adequate quality and quantity of water. • Appropriate water level is maintained throughout the year, (seasonal fluctuation +/- 30cm). • Water quality is characteristic of maritime, high alkalinity shallow lakes, such as to maintain pH 7-9, alkalinity 1500-2500µeq/l, dissolved oxygen and peak annual Total Phosphorus <50µg/l. • Chlorophyll α values are low, and sufficient to allow both lakes to be passed as 'Good' or better for a 'high alkalinity shallow lake' using Water Framework Directive classification methods. • The typical species are submerged aquatic plants including Elatine hydropiper, Potamogeton trichoides, P pectinatus P. perfoliatus P. lucens, Ranunculus circinatus, , Eleocharis acicularis, Myriophyllum spicatum, Callitriche hermaphroditica, , and Chara spp.. • Emergent aquatic plants, typically Phragmites australis, Schoenoplectus lacustris, Sparganium erectum, Typha latifolia, Alisma plantago-aquatica, and Litorella uniflora should be present on the shoreline. • Invasive or disruptive species such as Crassula helmsii or coarse fish should be absent. • All factors affecting the achievement of these conditions are under control. **Conservation Objectives for feature 7: Transition mires and quaking bogs** This is a minor SAC feature and no specific conservation objectives are required at this stage. **Conservation Objective for Feature 8: Petalwort Petallophyllum ralfsii** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The population of petalwort is stable or increasing. • Petalwort occurs in humid dune slacks in which Equisetum variegatum is frequent, across all sectors of the site where habitat conditions are suitable, i.e. Aberffraw and Newborough compartments. • Humid dune slack with bare sand or humus crust and short vegetation characterised by	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		Equisetum variegatum is present at Aberffraw and Newborough compartments where sediment and hydrological conditions permit. (see Objective for humid dune slacks). • Competition (including shading) from other species is controlled. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature 9: Shore dock Rumex rupestris** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The population of shore dock is stable or increasing. • Shore dock occurs in at least 3 locations across the site. • Opportunities occur for marine dispersal of seed. • Open streamside, coastal soft cliff seepages or dune slack pool habitat is adequate for its survival. • Adequate freshwater supply is maintained. • Bare ground or disturbed areas are maintained (e.g. by grazing animals) to permit germination. • Competition (including shading) from other species is controlled. • All factors affecting the achievement of these conditions are under control. **Conservation objective for feature 10: Great Crested newt** This is a minor SAC feature and no specific conservation objectives are required at this stage. In addition, each Conservation Objective has a number of performance indicators attached to it for example the extent of a feature and the quality of the feature. The performance indicators are part of the conservation objective, not a substitute for it. The performance indicators can be found within the Core management Plan including Conservation Objectives for Y Twyni o Abermenai i Aberffraw/ Abermenai to Aberffraw Dunes SAC.	
Pen Llyn a'r Sarnau / Lleyn Peninsula and the Sarnau SAC (Ref 6.8)	**Annex I habitats that are a primary reason for selection of this site:** • Sandbanks which are slightly covered by sea water all the time • Estuaries • Coastal lagoons * Priority feature • Large shallow inlets and	**To achieve favourable conservation status all the following, subject to natural processes, need to be fulfilled and maintained in the long-term. If these objectives are not met restoration measures will be needed to achieve favourable conservation status.** **Habitat Features : Reefs, Large shallow inlets and bays, Sandbanks which are slightly covered by seawater all the time, Estuaries, Coastal lagoons, Mudflats and sandflats not covered by seawater at low tide, Atlantic salt meadows, Salicornia and other annuals colonising mud and sand, Submerged or partially submerged sea caves** Range The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing.	Some of the key activities and issues directly or indirectly influenced by human activity that are currently believed to be actual or potential threats to the long term sustainability of the habitats and wildlife of the SAC and which either require better management or further investigation include (not in any particular order): • Coastal & flood defence:

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	bays • Reefs **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** • Mudflats and sandflats not covered by seawater at low tide • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Submerged or partially submerged sea caves **Annex II species present as a qualifying feature, but not a primary reason for site selection:** • Bottlenose dolphin • Otter • Grey seal	For the reef feature these include: • Rocky intertidal reefs • Rocky subtidal reefs • Extensive boulder and cobble reefs – the Sarnau • Biogenic reefs (horse mussel (*Modiolus modiolus)* reef/green crenella (*Musculus discors*) reef and Honeycomb worm (*Sabellaria alveolata*) reef • Carbonate reef formed by methane gas leaking from the seabed. For the intertidal mudflat and sandflat feature these include: • *Mya arenaria* and polychaetes in muddy gravel • Muddy gullies in the Mawddach estuary. For the Salicornia feature this includes: • Communities characterised by the species *Sarcocornia perennis*. For the intertidal mudflats and sandflats and sandbanks features this requires an overall stability or increase in the amount of the feature, taking into account the areas of long-term stability and localised losses and additions arising from environmental processes. For estuaries this includes the stability of sandy sediments in proportion to the muddy sediments. Restoration and recovery: As part of this objective it should be noted that; for the estuaries feature additional land which should form an integral part of the estuarine ecosystem should be restored. <u>Structure and Function</u> The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. Important elements include: • geology • sedimentology • geomorphology, • hydrography and meteorology • water and sediment chemistry • biological interactions. This includes a need for nutrient levels in the water column and sediments to be: • at or below existing statutory guideline concentrations • within ranges that are not potentially detrimental to the long-term maintenance of the features species populations, their abundance and range.	constraint on the functioning of the coastal and estuarine areas from artificial boundaries which affects the extent of habitat (coastal squeeze). Need for strategic plans for vulnerable areas of the coast • Land use management in the surrounding catchments (including forestry management) and the influence of this on the estuarine and coastal habitats. Need for integrated planning • Water quality and nutrient enrichment • Harvesting of marine resources (commercial and non-commercial): need for improved management and regulatory regime to prevent damage to SAC features and support sustainable harvesting regimes. • Mobile fishing gear • Over grazing in some locations in the estuaries • High speed power craft (including PWCs) • Litter & debris • Climate change issues (e.g. warming sea water temperature, sea level rise, increase storminess) • Introduction of non-native

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		Contaminant levels in the water column and sediments derived from human activity to be: • at or below existing statutory guideline concentrations • below levels that would potentially result in increase in contaminant concentrations within sediments or biota • below levels potentially detrimental to the long-term maintenance of the features species populations, their abundance or range. For Atlantic salt meadows this includes the morphology of the saltmarsh creeks and pans Restoration and recovery: As part of this objective it should be noted that; for the estuaries feature the structure and functions of the estuaries that have been damaged/degraded by the constraints of artificial structures such as flood banks, are restored. <u>Typical Species</u> The presence, abundance, condition and diversity of typical species are such that habitat quality is not degraded. Important elements include: • species richness • population structure and dynamics, • physiological heath, • reproductive capacity • recruitment, • mobility • range As part of this objective it should be noted that: • populations of typical species subject to existing commercial fisheries need to be at an abundance equal to or greater than that required to achieve maximum sustainable yield and secure in the long-term. • the management and control of activities or operations likely to adversely affect the habitat feature, is appropriate for maintaining it in favourable condition and is secure in the long-term. Restoration and recovery: As part of this objective it should be noted that; for the reefs feature the potential for expansion of the horse mussel Modiolus modiolus community off the north Llŷn coast is not inhibited. **Species Features: Grey seal, Bottlenose dolphin, Otter** <u>Populations</u> The population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements are population size, structure, production, and condition of the	species • Marine wildlife watching / Eco tourism • Scientific research • Poor public awareness and lack of understanding or interest in the marine environment.

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		species within the site. As part of this objective it should be noted that : • for bottlenose dolphin, otter and grey seal; contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression • grey seal populations should not be reduced as a consequence of human activity <u>Range</u> The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. • As part of this objective it should be noted that for bottlenose dolphin, otter and grey seal • Their range within the SAC and adjacent inter-connected areas is not constrained or hindered • There are appropriate and sufficient food resources within the SAC and beyond The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing <u>Supporting Habitats and Species</u> The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; • distribution, • extent, • structure, • function and quality of habitat, • prey availability and quality. As part of this objective it should be noted that; • The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long-term. • The management and control of activities or operations likely to adversely affect the species feature, is appropriate for maintaining it in favourable condition and is secure in the long-term. • Contamination of potential prey species should be below concentrations potentially harmful to their physiological health. • Disturbance by human activity is below levels that suppress reproductive success,	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		physiological health or long-term behaviour • For otter there are sufficient sources within the SAC and beyond of high quality freshwater for drinking and bathing. Restoration and recovery: As part of this objective it should be noted that for the bottlenose dolphin and otter, populations should be increasing.	
Cardigan Bay SAC (Ref 6.9)	**Annex I habitats present as a qualifying feature :** Sandbanks which are slightly covered by sea water all the time Mudflats and sandflats not covered by seawater at low tide Reefs Submerged or partially submerged sea caves **Annex II species present as a qualifying feature:** Grey seal River lamprey Sea lamprey Bottlenose dolphin Harbour Porpoise Allis shad Twait Shad	**To achieve favourable conservation status all the following, subject to natural processes, need to be fulfilled and maintained in the long-term. If these objectives are not met, then restoration measures will be needed to achieve favourable conservation status.** **Habitat Features: Sandbanks which are slightly covered by seawater all the time, Reefs, Submerged or partially submerged sea caves** <u>Range</u> The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing. For the reef feature these include; • Intertidal bedrock reefs • Intertidal cobble, pebble with *Sabellaria alveolata* (biogenic) reefs • Subtidal bedrock reefs • Subtidal pebble, cobble and boulder reefs • Sea caves <u>Structure and Function</u> The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. Important elements include; • geology, • sedimentology, • geomorphology, • hydrography and meteorology, • water and sediment chemistry, • biological interactions. This includes a need for nutrient levels in the water column and sediments to be: • at or below existing statutory guideline concentrations • within ranges that are not potentially detrimental to the long-term maintenance of the features species populations, their abundance and range. Contaminant levels in the water column and sediments derived from human activity to be:	**Operations which may cause deterioration or disturbance to the features** • Docks, Marinas & Shipping • Civil Engineering • Exploitation Of Living Resources • Cultivation Of Living Resources • Exploitation Of Non-Living Resources • Pollution Response • Recreation • Military Activities • Miscellaneous Operations And Uses

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		• at or below existing statutory guideline concentrations • below levels that would potentially result in increase in contaminant concentrations within sediments or biota • below levels potentially detrimental to the long-term maintenance of the feature species populations, their abundance or range taking into account bioaccumulation and biomagnification. <u>Typical Species</u> The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded. Important elements include • species richness: • population structure and dynamics, • physiological heath, • reproductive capacity • recruitment, • mobility • range As part of this objective it should be noted that: • populations of typical species subject to existing commercial fisheries need to be at an abundance equal to or greater than that required to achieve maximum sustainable yield and secure in the long-term; • the management and control of activities or operations likely to adversely affect the habitat feature is appropriate for maintaining it in favourable condition and is secure in the long-term. **Species Features: Grey seal, Bottlenose dolphin, River lamprey, Sea lamprey** <u>Populations</u> The population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include: • population size • structure, production • condition of the species within the site. As part of this objective it should be noted that for bottlenose dolphin and grey seal; • Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression	

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		• For grey seal populations should not be reduced as a consequence of human activity <u>Range</u> The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. • As part of this objective it should be noted that for bottlenose dolphin and grey seal • Their range within the SAC and adjacent inter-connected areas is not constrained or hindered • There are appropriate and sufficient food resources within the SAC and beyond • The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing <u>Supporting Habitats And Species</u> The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; • distribution • extent • structure • function and quality of habitat • prey availability and quality. As part of this objective it should be noted that; • The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long-term. • The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long-term. • Contamination of potential prey species should be below concentrations potentially harmful to their physiological health. • Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour Restoration and recovery: As part of this objective it should be noted that for the bottlenose dolphin populations should be increasing.	
North Anglesey Marine/Gogledd	**Annex II species that are a primary reason for selection**	**To avoid deterioration of the habitats of the harbour porpoise or significant disturbance to the harbour porpoise, thus ensuring that the integrity of the site is maintained and the**	**Fisheries (commercial and recreational) with harbour**

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
Môn Forol cSAC (Ref 7.3)	**of this site:** • Harbour porpoise	**site makes an appropriate contribution to maintaining Favourable Conservation Status (FCS) for the UK harbour porpoise.** To ensure for harbour porpoise that, subject to natural change, the following attributes are maintained or restored in the long-term: • The species is a viable component of the site. • There is no significant disturbance of the species. • The supporting habitats and processes relevant to harbour porpoises and their prey are maintained. (Ref 6.17)	**porpoise bycatch** • Removal of non-target (bycatch) species **Discharge/run-off from land-fill, terrestrial/offshore industries** • Contaminants **Shipping, Oil and gas drilling, Pile driving, Dredging and disposal, Aggregate extraction, Acoustic (including seismic) surveys, Recreational boating activity, Acoustic deterrent/mitigation devices, Pinger devices** • Anthropogenic underwater sound **Shipping, Recreational boating activity, Renewable energy developments** • Death or injury by collision **Commercial fisheries (and recreational set nets)** • Removal of target (prey) species
West Wales Marine cSAC (Ref 7.4)	**The qualifying feature of the site is the Habitats Directive Annex II species:** • Harbour porpoise	**To avoid deterioration of the habitats of the harbour porpoise or significant disturbance to the harbour porpoise, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to maintaining Favourable Conservation Status (FCS) for the UK harbour porpoise.** To ensure for harbour porpoise that, subject to natural change, the following attributes are maintained or restored in the long-term: 1. The species is a viable component of the site. 2. There is no significant disturbance of the species. 3. The supporting habitats and processes relevant to harbour porpoises and their prey are	**Fisheries (commercial and recreational) with harbour porpoise bycatch** • Removal of non-target (bycatch) species **Discharge/run-off from land-fill, terrestrial/offshore industries** • Contaminants **Shipping, Oil and gas drilling, Pile driving, Dredging and**

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		maintained. These Conservation Objectives are common across all UK sites proposed for this species to ensure coherence across the network (EC, 2012[1]). These Conservation Objectives are based on considerations of the ecological requirements of the species within the site, although their interpretation is contextualised in their contribution to maintaining FCS at a wider scale (EC, 2012[7]). With regard the West Wales Marine/Gorllewin Cymru Forol site, attributes need to be maintained. Maintain implies that, based on our existing understanding, the feature is regarded as being in favourable condition and will, subject to natural change, remain in this condition. **1. The species is a viable component of the site.** Harbour porpoises are considered to be a 'viable component' of the site if they are able to survive and live successfully within it. The West Wales Marine/Gorllewin Cymru Forol site has been selected primarily on the basis of its long-term, preferential use by harbour porpoise in contrast to other areas of the UK portion of the Irish Sea. The implication is that this site provides good foraging habitat and it may also be used for breeding and calving. However, because the number of harbour porpoise using the site naturally varies, there is not an exact number of animals within the site above which the species is viable or below which it will become unviable. For that reason, the intent of this objective is to minimise the risk posed by activities within the site to the species viability. Activities that kill, injure or significantly disturb harbour porpoise have the potential to affect species viability within the site. **2. There is no significant disturbance of the species within the site.** Disturbance of harbour porpoise generally, but not exclusively, originates from activities that cause underwater noise. Responses to noise can be physiological and/or behavioural. JNCC has produced guidelines[2] to minimise the risk of physical injury to cetaceans from various sources of loud, underwater noise. However, disturbance is a behavioural (non-injurious) response to noise and may lead to harbour porpoises being displaced from the area affected. Within sites, the immediate effects of disturbance are in the loss (usually temporary) of habitat available to harbour porpoise. The West Wales Marine/Gorllewin Cymru Forol site has been identified on the basis of having persistent higher densities of harbour porpoises when compared to other areas of the UK's Irish Sea and Celtic Sea continental shelf, which is linked to the habitats within the site that likely promote good feeding opportunities. Therefore, activities within the site should be managed to ensure access to the site. Any disturbance should not lead to the exclusion of harbour porpoise from a significant portion of it for a significant period of time. Case Work Advice Guidance in relation to various activities is being developed and expands this supplementary advice to define 'significant portion and period' in	**disposal, Aggregate extraction, Pile driving, Acoustic (including seismic) surveys, Military activity, Recreational boating activity, Acoustic deterrent/mitigation devices, Pinger devices** • Anthropogenic underwater sound **Shipping, Recreational boating activity, Wet renewables (tidal turbines)** • Death or injury by collision **Commercial fisheries (and recreational set nets)** • Removal of target (prey) species

[1] EC, 2012. Commission Note on Setting Conservation Objectives for Natura 2000 Sites

[2] http://jncc.defra.gov.uk/page-4273

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		the context of impacting site integrity. This Conservation Objective aims to ensure that the site contributes as best it can to maintaining the Favourable Conservation Status of the wider harbour porpoise population. As such, how any impacts within the site translate into effects on the Management Unit population are of greatest concern. **3. The supporting habitats and processes relevant to harbour porpoises and their prey are maintained.** The harbour porpoise is a species that is highly dependent on a year-round proximity to food sources and its distribution and condition may strongly reflect the availability and energy density of its prey (Brodie 1995 in Santos & Pierce, 2003[3]). The densities of porpoise using the site are likely linked to the availability (and density) of prey within this site. Porpoise eat a variety of prey including gobies (*Gobiidae* species), sand eel (*Ammodytes* species), whiting (*Merlangius merlangus*), herring (*Clupea harengus*) and sprat (*Clupea harengus*) (some of which may have spawning grounds within the West Wales Marine/Gorllewin Cymru Forol site). However, the diet of porpoises specifically when using the site is unknown. In the UK as a whole, the activity which potentially poses a risk to the achievement of this conservation objective is commercial fishing; although environmental variability also plays a role in determining the status of fish stocks. The delineation of the West Wales Marine/Gorllewin Cymru Forol site is based on the prediction of 'harbour porpoise habitat' within the Celtic and Irish Seas (Ref 6.11). Habitat, in this context, means the characteristics of the seabed and water column. Peaks in density of harbour porpoise in the West Wales Marine/Gorllewin Cymru Forol site are likely to vary seasonally. At the Management Unit scale, for both the Summer and Winter seasons, the distribution of harbour porpoise is related to water depth and variables within the water column (Heinänen & Skov, 2015). Harbour porpoise density peaked in stable stratified waters (based on vertical differences in temperature) with lower gradients of eddy activity (turbulence); higher densities were also found in areas with current speeds of 0.4-0.6 m/s. The analysis indicated a preference for water depths between 30 and 50 m throughout the year. In general, in both seasons, harbour porpoise preferred coarser seabed sediments (sand/gravel). How these environmental characteristics of the site influence the prey of harbour porpoise or other aspects of their life directly (e.g. breeding/calving) is currently unknown.	
Anglesey Terns / Morwenoliaid Ynys Môn SPA (which has replaced the Ynys Feurig, Cemlyn Bay and	**This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of**	**Draft conservation objectives (December 2015)** Feature 1: Breeding population of Arctic tern Sterna paradisae • The breeding population of Arctic tern should be stable or increasing. The site was designated for 1,290 pairs across the SPA. • The range and distribution of terns within the SPA and beyond is not constrained or	**Below taken from Ynys Feurig, Cemlyn Bay and The Skerries SPA** The SPA is subdivided into three distinct areas which are used at

[3] Santos, M.B. and Pierce, G.J. 2003. The diet of harbour porpoise (*Phocoena phocoena*) in the northeast Atlantic. Oceanography and Marine Biology: an Annual Review, 41, 355-390

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
The Skerries SPA) (Ref A3.5)	**the Directive:** During the breeding season: • Common Tern Sterna hirundo, 189 pairs representing at least 1.5% of the breeding population in Great Britain (5 year mean, 1992-1996) • Arctic Tern Sterna paradisaea, 1,290 pairs representing at least 2.9% of the breeding population in Great Britain (5 year mean, 1992-1996) • Roseate Tern Sterna dougallii, 3 pairs representing at least 5.0% of the breeding population in Great Britain (5 year mean, 1992-1996) • Sandwich Tern Sterna sandvicensis, 460 pairs representing at least 3.3% of the breeding population in Great Britain (5 year mean, 1993-1997)	hindered. • The extent of supporting habitats used by terns is stable or increasing. • Supporting habitats are of sufficient quality to support the requirements of terns • There are appropriate and sufficient food sources for terns within access of the SPA. • The number of chicks successfully fledged in the SPA and beyond is sufficient to help sustain the population. • Actions or events likely to impinge on the sustainability of the population are under control. • There should be no mammalian land predators present in the SPA, and control measures should be in place to ensure that accidental introduction does not take place. Feature 2: Breeding population of common tern Sterna hirundo • The breeding population of Common Tern should be stable or increasing. The site was designated for 189 pairs across the SPA. • The range and distribution of terns within the SPA and beyond is not constrained or hindered. • The extent of supporting habitats used by terns is stable or increasing. • Supporting habitats are of sufficient quality to support the requirements of terns • There are appropriate and sufficient food sources for terns within access of the SPA. • The number of chicks successfully fledged in the SPA and beyond is sufficient to help sustain the population. • Actions or events likely to impinge on the sustainability of the population are under control. • There should be no mammalian land predators present in the SPA, and control measures should be in place to ensure that accidental introduction does not take place. Feature 3: Breeding population of roseate tern Sterna dougallii • The breeding population of Roseate tern should be stable or increasing. The site was designated for 3 pairs across the SPA. • The range and distribution of terns within the SPA and beyond is not constrained or hindered. • The extent of supporting habitats used by terns is stable or increasing. • Supporting habitats are of sufficient quality to support the requirements of terns • There are appropriate and sufficient food sources for terns within access of the SPA. • The number of chicks successfully fledged in the SPA and beyond is sufficient to help sustain the population.	various times as breeding sites by the Irish Sea Roseate Tern populations, though may be deserted for a period of years while other sites are more favoured, for reasons unknown. Currently Rockabill Island in Dunlin Bay is the favoured breeding location. The three islands within the SPA continue to support important colonies of Arctic, Common and Sandwich Terns. Roseate Terns spend much of their lifespan away from these breeding colonies and are therefore vulnerable to pressures beyond the control of the site managers; including factors affecting food supply, winter survival etc. Recreational pressures at Cemlyn Bay arise from the promotion of the coastal footpath which passes close to the colonies and requires 24 hour wardens to guide the public below the skyline. Other colonies suffer occasional disturbance from inadvertent public access and also require wardens. Ground predators (Stoat Mustela erminea and Fox Vulpes vulpes) require regular control at Cemlyn Bay and Ynys Feurig. Peregrine falcons Falco peregrinus and rogue gulls have caused mortality and desertion of colonies on some occasions. Theft of eggs by collectors continues to be a threat. Close co-operation, research and monitoring of the Irish Sea Roseate

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
		• Actions or events likely to impinge on the sustainability of the population are under control. • There should be no mammalian land predators present in the SPA, and control measures should be in place to ensure that accidental introduction does not take place. Feature 4: Breeding population of sandwich tern Sterna sandvicensis • The breeding population of Sandwich tern should be stable or increasing. The site was designated for 460 pairs across the SPA. • The range and distribution of terns within the SPA and beyond is not constrained or hindered. • The extent of supporting habitats used by terns is stable or increasing. • Supporting habitats are of sufficient quality to support the requirements of terns • There are appropriate and sufficient food sources for terns within access of the SPA. • The number of chicks successfully fledged in the SPA and beyond is sufficient to help sustain the population. • Actions or events likely to impinge on the sustainability of the population are under control. • There should be no mammalian land predators present in the SPA, and control measures should be in place to ensure that accidental introduction does not take place.	Tern population are maintained through the Interreg Programme.
Liverpool Bay/Bae Lerpwl SPA (Ref 6.13, 6.14)	**This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:** Over Winter: • Red-throated diver (North-western Europe - Wintering) 5.4% of the GB population 5 year peak mean 2001/02 - 2006/07 (N.B. Insufficient data recorded for period 2003/2004). ***Included as part of the***	**Internationally important non-breeding population of red-throated diver** Subject to natural change, maintain or enhance the red-throated diver population and its supporting habitats in favourable condition. The interest feature red-throated diver will be considered to be in favourable condition only when both of the following two conditions are met: • The size of the red-throated diver population is at, or shows only non-significant fluctuation around the mean population at the time of designation of the SPA. to account for natural change; • The extent of the supporting habitat within the site is maintained. **Internationally important non-breeding population of common scoter** Subject to natural change, maintain or enhance the common scoter population and its supporting habitats in favourable condition. The interest feature common scoter will be considered to be in favourable condition only when each of the following two conditions is met: • The size of the common scoter population is at, or shows only non-significant fluctuation around the mean population at the time of designation of the SPA to account for natural change; • The extent of the supporting habitat within the site is maintained. In addition there are also explanatory notes which should be read in conjunction with the	The site is subject to commercial fishing. The sandbanks of Liverpool Bay support the nursery and feeding grounds for many fish species. The distribution and concentrations of red-throated divers will at least partly be determined by the presence, abundance, and availability of their prey species. The site holds various fish of commercial importance, and extraction of the red-throated diver's main fish prey, as either target and/or by-catch species, or through recreational fishing could impact the population. Entanglement in static fishing nets is an important cause of death for red-throated divers in the UK

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	proposed Liverpool Bay/Bae Lerpwl SPA extension 1,171 individuals (2004/05 – 2010/11), 6.89% of GB population ***Included as part of the proposed Liverpool Bay/Bae Lerpwl SPA extension*** During the breeding season: • Little tern 260 individuals (2010 – 2014), 6.84% of GB population • Common Tern 360 individuals (2011 – 2015), 1.80% of GB population Over Winter: • Little gull 319 individuals (2004/05 – 2010/11) **This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:** Over Winter the area regularly supports: • Common Scoter (Western Siberia/Western & Northern Europe/North-western Africa) 3.4% of	Conservation Objectives above. The notes are contained within Liverpool Bay/Bae Lerpwl Special Protection Area - Advice under Regulation 35(3) of The Conservation of Habitats and Species Regulations 2010 (as amended) (Natural England, countryside Council for Wales and Welsh Assembly Government: October 2012).[4] Liverpool Bay/Bae Lerpwl pSPA has been proposed to protect important areas of coast and sea used for a variety of purposes by the qualifying features. The pSPA is an expansion of the existing Liverpool Bay/Bae Lerpwl SPA. The proposed extension includes an area to the north and west of the existing SPA, identified to support non-breeding little gulls. It also includes a marine foraging area for terns identified and defined by little terns breeding within The Dee Estuary SPA and the predicted foraging area for common terns breeding within Mersey Narrows & North Wirral Foreshore SPA. These areas add marine habitat extending into the Mersey Estuary, and a small intertidal area abutting the western boundary of The Dee Estuary SPA. The new pSPA site overlaps with the site for Anglesey Terns/Morwenoliaid Ynys Môn SPA. The Liverpool Bay/Bae Lerpwl pSPA therefore comprises areas for foraging breeding seabirds, and non-breeding seabirds and waterbirds. In addition there are also explanatory notes which should be read in conjunction with the Conservation Objectives above. The notes are contained within Liverpool Bay / Bae Lerpwl Special Protection Area - Advice under Regulation 35(3) of The Conservation of Habitats and Species Regulations 2010 (as amended). The additional qualifying features proposed are little gull, common tern and little tern. Red-breasted merganser and cormorant are new main components of the waterbird assemblage.	waters however the extent of this impact in Liverpool Bay is not known. Commercial and recreational fishing could directly affect both the food source and feeding grounds used by common scoters and in addition a number of ports undertake navigational dredging and disposal both in, and adjacent to, the site. Dredging for bivalves has been shown to have significant negative effects on their benthic habitat. Red throated divers and common scoters are sensitive to non-physical, (noise and visual) disturbance by both commercial and recreational activities, for example disturbance by moving vessels - the larger the vessel, the greater disturbance distance expected. Aggregate extraction presents some risks of disturbance and also changes to sediment structures which may, in particular, impact on common scoter through changes to their benthic feeding grounds. However, aggregrate extraction tends to be temporary and localised and so is not anticipated that moderate and targeted extraction will present a significant risk to either of the qualifying species. Liverpool Bay is an attractive location for the off-shore renewal

[4] Liverpool Bay/Bae Lerpwl Special Protection Area - Advice under Regulation 35(3) of The Conservation of Habitats and Species Regulations 2010 (as amended) (Natural England, Countryside Council for Wales and Welsh Assembly Government: October 2012).

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	the population 5 year peak mean 2001/02 - 2006/07 (N.B. Insufficient data recorded for period 2003/2004) ***Included as part of the proposed Liverpool Bay/Bae Lerpwl SPA extension*** 56,679 individuals (2004/05 – 2010/11), 10.31% of NW European population. **This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive: An Internationally Important Assemblage Of Birds** Non-breeding: • 55,597 waterfowl 5 year peak mean 2001/02 - 2006/07 (N.B. Insufficient data recorded for period 2003/2004) including: Red-throated diver, Common Scoter. ***Included as part of the proposed Liverpool Bay/Bae Lerpwl SPA extension*** over 20,000 individuals: 69,687 individuals (2004/05 – 2010/11), all species listed above plus		energy industry and there is evidence that red-throated divers and common scoters are displaced by the presence of the turbines and the associated activities of construction and maintenance vessels. A number of wind farms in the site are currently in operation, under construction or consented. There are a number of areas along the coast where marine tourism and leisure activities are common, with existing marinas and partially completed and proposed marina developments. As a result of these leisure users of the area, in combination with the whole suite of commercial activities, including those outlined above, the site is a very active boating and shipping site. However, most vessel activity is restricted to well-established areas which the birds already tend to avoid.

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	cormorant and red – breasted merganser as key components. Other species as part of the assemblage contribute to the assemblage in numbers <1% of their GB populations or <2,000 individuals		
Traeth Lafan / Lavan Sands, Conway Bay SPA (Ref 6.15)	**This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:** Over Winter: • Oystercatcher, 4,931 individuals representing at least 0.5% of the Wintering Europe & Northern/Western Africa population (5 year peak mean 1991/2 - 1995/6) • Red-breasted merganser 120 individuals during Winter. No further statistics available on citation. • Eurasian curlew 1,500 individuals during Winter, 1% of the population in Great Britain based on 5 year peak mean 1991/92-1995/96 • Common redshank 1,200 individuals in	**Oystercatcher** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The 5 year mean peak of the number of Wintering oystercatchers is at least 4,000. • The abundance and distribution of cockles of 15 mm or larger and other suitable food are maintained at levels sufficient to support the population with a 5 year mean peak of 4,000 individuals. • Oystercatchers are not disturbed in ways that prevent them spending enough time feeding for survival. • Roost sites, including high tide roost sites, remain suitable for oystercatchers to roost undisturbed. • The management and control of activities or operations likely to adversely affect the oystercatchers, is appropriate for maintaining the feature in favourable condition and is secure in the long-term. In addition, this Conservation Objective has a number of performance indicators attached to it for example numbers of a feature, extent of supporting habitats and abundance and distribution of prey. The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the Core Management Plan including Conservation Objectives for Traeth Lafan/Lavan Sands, Conway Bay SPA .	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.

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	Winter. No further statistics provided on citation. On passage: • Great crested grebe 500 individuals on passage (north – western Europe Wintering population) No further statistics provided on citation.		
Glannau Ynys Gybi / Holy Island Coast SPA (Ref A3.6)	**This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:** During the breeding season • Chough *Pyrrhocorax pyrrhocorax*, 18 pairs representing at least 5.3% of the breeding population in Great Britain (count as at 1998) Over winter • Chough *Pyrrhocorax pyrrhocorax*, 18 pairs representing at least 2.6% of the wintering population in Great Britain (count as at 1998)	**Conservation Objective for Feature 7: Chough** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The breeding population of Chough within the SPA is at least 18 pairs, of which at least 12 should be within the Glannau Ynys Gybi / Tre Wilmot SSSI and at least 6 should be within the Glannau Rhoscolyn SSSI. • The non-breeding population of Chough is at least 18 individuals or 2.5 % of the GB wintering population. • Sufficient suitable habitat (including Atlantic sea cliffs, maritime grassland, maritime heath, wet heath and dry heath) is present and in appropriate condition to support the breeding populations. • All factors affecting the achievement of these conditions are under control. In addition, this Conservation Objective has a number of performance indicators attached to which include the breeding population and the wintering population lower limits. The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the Core management Plan including Conservation Objectives for Glannau Ynys Gybi SAC & Glannau Ynys Gybi SPA (Countryside Council for Wales, April 2008).	Holy Island Coast is a spectacular coastal heath and cliff site, with ornithological, botanical and geological interest. Part of the designated site is an RSPB reserve. However, given that much of the site is declared statutory access land, there are heavy recreational pressures which require careful management. This is partly achieved by a policy of restricting parking spaces and a long standing voluntary ban on climbing in key areas during the nesting season. Chough breeding numbers have increased in the reserve in recent years partly due to control of disturbance. However, 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. The heathland habitat (away from the cliff top) is dependent upon periodic fires, which are carried out in a controlled (and sometimes

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			uncontrolled) manner and partly on maintaining traditional pastoral practices.
Ynys Seiriol / Puffin Island SPA (Ref 6.16)	**This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:** During the breeding season the area regularly supports: • Cormorant (North-western Europe) 1.35% of the breeding population 5 year mean for 1996 - 2000	**Conservation Objective for Feature 1: Breeding population of cormorant** The conservation objective for the cormorant is to achieve and maintain favourable conservation status, in which all the following conditions are satisfied: • The number of breeding cormorants within the SPA are stable or increasing. • The abundance and distribution of prey species are sufficient to support this number of breeding pairs and for successful breeding. • The management and control of activities or operations likely to adversely affect the Cormorants, is appropriate for maintaining the feature in favourable condition and is secure in the long-term." In addition, this Conservation Objective has a number of performance indicators attached to it which include population size, reproductive success, physical disturbance, fishing, introduction of ground predators, supporting habitat, food supply and wintering territory. The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the Core Management Plan including Conservation Objectives for Ynys Seiriol/Puffin Island SPA .	**Disturbance** Breeding seabirds require secure nesting sites, free from human disturbance. Visits to the island should be controlled during the nesting season (February to July inclusive) and any visits necessary should seek to avoid disturbance to sensitive areas, particularly nesting cliffs. No dogs (except guide-dogs) or cats should be permitted at any time. **Fishing** Non-sustainable exploitation of fishing stocks within the cormorants' feeding range during the breeding season can have a negative effect on breeding success and adequate recruitment of fledglings. Presence of fishing nets, especially fixed nets, close to the colony carries risk to foraging birds. **Predation** Breeding seabirds require freedom from ground predators to thrive. Small offshore islands should be naturally ground predator-free. Rats, cats or other ground predators can decimate breeding colonies. Although cormorants appear to have thrived alongside brown rats until their eradication in 1998, other seabirds appear to

Table 6.3 Qualifying Features and Conservation Objectives			
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			have been confined to marginal habitat. Every effort should be made to avoid introduction and to eradicate any ground predators present. Avian predators such as peregrine or greater black-backed gulls should be tolerated. **Invasive Species** The expansion of the elderwood may be inimical to further expansion of the seabird numbers. Consideration is being given to the reintroduction of grazing animals to control the vegetation.
Migneint Arenig Dduallt SPA (Ref A3.6)	**This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:** During the breeding season the area regularly supports: • Hen Harrier *Circus cyaneus* at least 2.1% of the GB breeding population 5 year mean 1993/94 to 1997/98 • Merlin *Falco columbarius* at least 0.7% of the population in Great Britain 5 year mean for 1993/94 to 1997/98 • Peregrine *Falco peregrines* at least 1% of the population in Great Britain 5 year	**Conservation Objective for SPA Feature: Hen harrier Circus cyaneus (EU Code: A082)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The size of the population is at least 8 breeding pairs (SPA form 2003 10-12 pairs) and preferably increasing. (2007 –11 pairs) • Hen Harrier nesting distribution within the site is maintained or expanded, so that breeding occurs in all appropriate habitats. • Hen Harrier breeding success is at least one young fledged per nest. • There is sufficient nesting and roosting tall heather habitat to support the population in the long-term. • There is sufficient hunting habitat, often in mosaic and including areas of grassland, bogs, flushes, short heath and bracken with low trees/scrub present. There is an adequate supply of prey species in the form of small birds and small mammals to maintain successful breeding. Prey supply cannot be easily monitored or assessed but may be an important attribute, for research and study, if productivity is low. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for Feature: Merlin Falco columbarius (EU Code: A098)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The size of the population is at least 9 breeding pairs (SPA form 2003 9-12 pairs, 0.7-0.9% GB) and preferably increasing. • Merlin nesting distribution within the site is maintained or expanded, so that breeding	Inappropriate grazing/burning/drainage management has damaged the feeding/breeding habitat of hen harrier and merlin, and damaged the feeding habitat of peregrine falcon, the three SPA features. This is being addressed in some areas through S15 Management Agreements and Tir Cymen/Tir Gofal agreements. Afforestation of blanket bog has also reduced breeding/feeding habitat in the past, but this is being addressed to some extent by a joint RSPB/Forestry Commission/CCW habitat restoration project. The feeding/breeding habitats of all three species are also vulnerable to acidification due to atmospheric pollution being compounded by the high rainfall and acidic geology/pedology of the site. This site has also been significantly

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	mean 1993/94 to 1997/98	occurs in all appropriate habitats. • Merlin breeding success is at least one young fledged per nest when sample monitoring is carried out. • There is sufficient nesting and roosting tall heather, individual trees often with crows' nests and forestry edge habitat to support the population in the long-term. • There is sufficient hunting habitat, often in mosaic and including areas of grassland, bogs, flushes, short heath and bracken with low trees/scrub present. There is an adequate supply of prey species in the form of small birds (commonly meadow pipit and skylark) and large insects to maintain successful breeding. Prey supply cannot be easily monitored or assessed but may be an important attribute, for research and study, if productivity is low. • All factors affecting the achievement of these conditions are under control. **Conservation Objective for SPA Feature: Peregrine Falco peregrinus (EU Code: A103)** The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The size of the population is at least 9 breeding pairs (SPA form 2003 9-12 pairs, 0.7-0.9% GB) and preferably increasing. • Peregrine nesting distribution within the site is maintained or expanded, so that breeding occurs in all appropriate nest sites. • Peregrine breeding success is at least one young fledged per nest when sample population monitoring is carried out. • There are sufficient cliff and crag with ledges suitable for nesting usually known traditional nest sites to support the population in the longterm. • There is a sufficient hunting habitat and prey. Prey supply cannot be easily monitored or assessed but may be an important attribute, for research and study, if peregrine productivity is low. • All factors affecting the achievement of these conditions are under control. In addition, each Conservation Objective has a number of performance indicators attached to it for example breeding population size and distribution, breeding success and extent of available nesting habitats. The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the Core management Plan including Conservation Objectives for Migneint-Arenig-Ddualt SAC/SPA (Countryside Council for Wales, March 2008).	affected in the past by quarrying operations which have resulted in the destruction of habitats used by breeding birds, including the three SPA species. The recreational pressure from walkers is currently fairly low and diffused across the site, but the SPA features could be affected if usage were to increase significantly close to breeding sites, for example following the implementation of CROW Act legislation or increased publicity through guidebooks. Persecution has been a problem in the recent past, with birds being shot at the nest. It is hoped that this threat will be reduced by greater vigilance and by raising public awareness.
Dyfi Estuary SPA (Ref 6.17)	**This site qualifies under Article 4.1 of the Directive**	**Conservation Objective for Feature 1: Greenland white-fronted goose** The vision for this feature is for it to be in a favourable conservation status, where all of the	The Dyfi estuary regularly supports over 1% of the GB wintering

Table 6.3 Qualifying Features and Conservation Objectives			
Site	Qualifying Features	Conservation Objectives	Threats to Site Integrity
	(79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive: Overwinter: Regularly supports Greenland white-fronted goose (Greenland/Ireland/UK) 1% of the GB population 5 year peak mean for 1993/94 - 1997/98	following conditions are satisfied: • The Dyfi Wintering population attains national importance level (ie.1% of the national (UK) population), annually. • Winter mortality levels are <1% annually. • Juvenile/sub-adult birds comprise > 5% of the Wintering population annually. • All site-specific factors affecting the achievement of these conditions (e.g. avoidable disturbance), are under control. In addition, this Conservation Objective has a number of performance indicators attached to it which relate to population size, winter survival / mortality rate, proportion of juvenile geese to adults, disturbance of geese feeding and roosting habitat and sward height. The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the Core Management Plan including Conservation Objectives for Dyfi Estuary/Aber Dyfi SPA (Ref 6.16).	population of Greenland white-fronted geese, and as the only site in England and Wales, it is the most southerly population in the UK. Disturbance by leisure activities including wildfowling, and also low-flying aircraft, may be significant to feeding and roosting geese. CCW and the RSPB lease the sporting rights over the majority of the site. The sporting rights are left 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. CCW and RSPB have wardens in place 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. The interactions between this species and the Greenland white-fronted geese and the impact on the habitat are unknown.