

Habitat types	Attribute	Target	Sub-feature (in bold) / Key biotopes (in italics)
Large Shallow Inlet & Bay	Extent	No change in extent of whole feature: 63,135ha (Wash SSSI citation)	
	Diversity of component habitats	Maintain variety of habitats identified for the site, subject to natural change	Subtidal and boulder communities, Subtidal mixed sediment communities, and the following which are interest features in their own right: Reef, Subtidal sandbanks, Intertidal mudflats and sandflats, Samphire and other annuals, Atlantic saltmeadows, Mediterranean saltmarsh scrub, Lagoons.
	Distribution / spatial pattern of habitats	Maintain the pattern of distribution of predominant habitats throughout the feature (as identified in Foster-Smith & Sotheran, 1999; Bailey, Coad & Bamber, 2005)	Subtidal and boulder communities: Rich faunal turf dominated by tall and short hydroids (<i>MCR.ByH.Flu</i>). Encrusting bryozoans and coralline algae mixed with short tufted bryozoans (<i>ECR.EFaPomByC</i>), sparse to moderately rich bryozoan/hydroid turf epifauna on silty gravel sand with Sabellaria (<i>MCR.ByH</i>). Subtidal mixed sediment communities: Subtidal mussel beds (<i>IMX.MytX</i>).
	Water quality	Target based on appropriate national or international standards (ie Water framework Directive, Urban Waste Water Treatment Directive, OSPAR convention)	
Ross worm (<i>Sabellaria spinulosa</i>) Reef	Extent	No change in extent of Sabellaria spinulosa reef, subject to natural change. 1846.5ha (Jessop & Stout, 2006). Note this comprises several discrete areas of reef, not one continuous feature.	
	Distribution of reef biotope.	Maintain the distribution of reef (as identified in Jessop & Stout, 2006), subject to natural change.	
	Biotope composition	Maintain the variety of reef biotopes identified for the site, subject to natural change	Foster-Smith & Sotheran identify two reef biotopes: super-abundant ross worm including reefs (<i>CMX.SspiMx.reef</i>) and ross worm / sand-mason worm communities (<i>CMX.SspiMx</i>)
	Topography	No alteration in topography of inshore subtidal sediment, subject to natural change. Topography as shown on admiralty charts and Foster-Smith & Sotheran (1999).	
	Sediment character: sediment type	No change in composition of sediment types across feature, subject to natural change (as identified in Foster-Smith & Sotheran, 1999; Bailey et al, 2005)	
Subtidal Sandbanks	Extent	No change in extent of inshore subtidal sediment, subject to natural change. No data?	
	Topography	No alteration in topography of inshore subtidal sediment, subject to natural change. Topography as shown on admiralty charts and Foster-Smith & Sotheran (1999).	
	Sediment character: sediment type	Maintain distribution of biotopes, subject to natural change (as identified in Foster-Smith & Sotheran, 1999; Bailey, Coad & Bamber, 2005)	Gravel & Sand communities: Brittlestar beds (<i>CGS.VenBra</i>), Sandmason worm beds (<i>IGS.Fas.Lcon</i>). Muddy sand communities: Peacock worm beds, Peacock & Ross worm beds, Abra alba community, dense brittle star beds (<i>CMS.AbrNucCor</i>), worm dominated community (<i>IMS.FaMS.SpiSpi</i>)
	Extent of sub-feature	No change in extent of inshore subtidal sediment biotopes or sub-feature, subject to natural change	
	Species population measures: presence or abundance of specified species	No increase in abundance of negative indicator species: American jack-knife clam <i>Ensis directus</i> , Pacific oyster <i>Crassostrea gigas</i> and slipper limpet <i>Crepidula fornicata</i>	
Intertidal Mudflats and Sandflats	Extent	No decrease in extent of intertidal sediment, subject to natural change. No data?	
	Biotope composition of littoral sediment	Maintain the variety of biotopes identified for The Wash in Yates et al (2002) and North Norfolk in Perrins & Bunker 1998 and West (2002), allowing for natural successional change. Gibraltar Point: No data?	Sand & gravel communities: Burrowing amphipods and polychaetes (often lugworm) in clean sand shores (<i>LGS.S.AP.P</i>), dense sandmason worm beds (<i>LGS.S.Lan</i>), red algae and piddocks on intertidal fossilised peat (<i>MLR.R.Rpid</i>), Mussel beds (<i>SLR.MytX</i>). Muddy sand communities: Baltic tellin & lugworm in muddy sands (<i>LMS.MS.MacAre</i>), Baltic tellin, lugworm and sand gaper in muddy sand (<i>LMS.MS.MacAre.Mare</i>), Cockle beds (<i>LMS.PCer</i>), Seagrass beds (<i>LMS.ZOS.Znol</i>). Mud communities: Ragworm, baltic tellin & lugworm in muddy sand or sandy mud (<i>LMU.SMu.HedMac.Are</i>), Ragworm, baltic tellin and Pygospio elegans in sandy mud (<i>LMU.SMu.HedMac.Pyg</i>), Ragworm, baltic tellin and sand gaper in sandy mud (<i>LMU.SMu.HedMac.Mare</i>), Ragworm and oligochaetes in low salinity muds (<i>LMU.Mu.HedOI</i>), Ragworm and peppery furrow shell in reduced salinity muds (<i>LMU.Mu.HedScr</i>)
	Sediment character	Maintain distribution of mud, muddy sand, and sand across the feature, subject to natural change. For The Wash identified in Yates et al, 2002; ESFJC qualitative assessments, Yates et al 1993. For North Norfolk identified in Perrins & Bunker 1998. Gibraltar Point: No data?	
	Distribution of biotopes	Maintain distribution of biotopes, subject to natural change. Identified for The Wash in Yates et al, 2002, and North Norfolk in Perrins & Bunker, 1998 and West, 2002. Gibraltar Point: No data?	

	Extent of seagrass (<i>Zostera</i> spp.)	Not present in The Wash, Gibraltar Point. North Norfolk : No change in extent of <i>Zostera</i> biotope as shown in West 2002, subject to natural change: East Hills / Lodge Marsh, 25ha; Scolthead, 0.03ha, 0.75ha, 0.05ha; Stiffkey, 0.48ha.	
	Extent of mussel biotope		
	Extent of cockle biotope		
	Species composition of representative or notable biotopes	No decline in biotope quality due to change in species composition or loss of notable species, subject to natural change	
	Species population measures: population structure of a species and presence / abundance of specified species	Maintain age/size class distribution of mussel and cockle. Maintain abundance of positive indicator species. No increase in presence or abundance of negative indicator species: invasive non-natives Pacific oyster, American slipper limpet, American jack-knife clam.	
	No change in topography of intertidal flats, subject to natural change. Topography as shown in EA beach profiles 1992-2006		
Saltmarsh Interest features (Samphire and other annuals colonising mud and sand, Atlantic salt meadows, Mediterranean Saltmarsh Scrub)	Extent	No decrease in extent of saltmarsh, subject to natural change. The Wash : 1982-85: 4,158ha (Hill, 1988) and 2001-2002: 4,886ha (Hemphill et al 2003). North Norfolk : 2127ha (Burd, 1989) and 2157.41ha (Stark et al, 2003). Gibraltar Point : 97ha (Holder, 1999)	
	Physical structure: creeks and pans	No alteration of natural creek patterns or loss of pans (as determined at the time of notification) as a result of anthropogenic factors	
	Vegetation structure: zonation of vegetation	Maintain the baseline range of saltmarsh zonation, NVC communities and Annex 1 habitats within the levels recorded in the 1982-85 and 2001-2002 surveys in The Wash , and the 2001-2002 surveys of North Norfolk , and Holder, 1999 for Gibraltar Point	
	Vegetation structure: sward height	Maintain the saltmarsh area as a mosaic of short turf swards (5 – 15 cm) interspersed with areas of tussocks (>15cm).	These habitats should ideally occur together in roughly equal amounts, although actual levels will be determined by accessibility to grazing animals/birds, vulnerability to coastal erosion as well as the distribution and requirements of nationally important species.
	Vegetation composition: characteristic species	Maintain frequency of characteristic species of saltmarsh zones	Samphire and other annuals: Annual samphire saltmarsh community, annual seablite (<i>Suaeda maritima</i>) saltmarsh community, ephemeral saltmarsh vegetation with <i>Sagina maritima</i> saltmarsh community. Atlantic salt meadows: Low marsh and low-mid marsh communities, Mid & mid-upper marsh communities, Mediterranean saltmarsh scrub: shrubby seablite (<i>Suaeda vera</i>) saltmarsh community, shrubby seablite (<i>Suaeda vera</i>) and <i>Limonium binervosum</i> saltmarsh community, Transitional communities.
	Vegetation composition: negative indicator species	Existing cordgrass (<i>Spartina anglica</i>) stands to show no evidence of expansion into pioneer saltmarsh zone.	
	Other negative indicators	Other negative indicators include: artificial drainage channels limited to those established by IDBs at their drainage outfalls prior to notification of SSSI. No unauthorised loss saltmarsh through erection of artificial structures.	
	Indicators of local distinctiveness	Maintain Annex 1 habitats (Pioneer saltmarsh, Atlantic saltmeadows, mediteranean saltmarsh scrub at levels recorded in 2001-2002 for The Wash, North Norfolk ; Holder, 1999 for Gibraltar Point). Maintain populations of nationally scarce plants. Maintain populations of nationally scarce invertebrates	
	Lagoons (Snettisham)	Extent	No reduction in saline lagoon extent: 17.38ha
Isolating barrier - presence and nature		No change in structure of shingle bank	
Salinity regime		Maintain salinity within 10-50ppt range	
Biotope composition of lagoon		Maintain variety of biotopes identified for the site, subject to natural change	Lagoons with muddy sand bed supporting a worm dominated community (<i>EN.Lag.IMS.Ann</i>)
Extent of water		Lagoonal specialists are sublittoral specialists. At least 60% of the water of the lagoon persisting at all times	
Distribution of biotopes		Maintain distribution of <i>EN.Lag.IMS.Ann</i> biotope, subject to natural change	
Species population measures - presence or abundance of specified species		Maintain presence or abundance of specified species including worms such as <i>Polydora cornuta</i> , lagoon snails: <i>Ventrosa ventrosa</i> , <i>Hydrobia neglecta</i> , <i>Littorina saxatilis lagunae</i> , crustaceans: such as lagoon sand shrimp <i>Gammarus insensibilis</i>	

Species Features	Attribute	Target	
Harbour (Common) Seal	Moult (& breeding) distribution	A stable or increasing area of usage (moult distribution as identified in Thompson, 2005; breeding distribution in Thompson, 2007).	
	Number of harbour seals present during the moulting season	A stable or increasing number of harbour seals present throughout the site (SMRU annual moult and breeding surveys, Thompson 2005, 2007). Peak of 3,000 seals in Wash in 1988 prior to distemper virus outbreak, and in 2000 prior to 2002 outbreak. Pup production increased from 550 seals in 2001 to 1013 in 2006. Significant population at Blakeney. Peak count of 700 seals in 1988 and 2000 and since 2004.	
Otter	Food availability	Fish biomass stays within expected natural fluctuations. No data?	
	Habitat requirements coastal areas: freshwater for rinsing sea salt from fur	No reduction in overall availability of freshwater; number of streams or small pools on or near the site	
	Toxic chemicals	No increase in pollutants potentially toxic to otters.	
	Otter population - coastal	No decline in otter distribution or abundance.	
	Anthropogenic mortality	Otter populations not significantly impacted by human induced kills. Data?	
Gibraltar Point SPA			
Interest feature	Attribute	Target	Details of features
Aggregations of non-breeding birds (Internationally important populations of regularly occurring migratory species)	Population size	Site unfavourable if population declines of 50% or more from the baseline level are recorded. Baseline is usually 5 year mean of peak winter counts, Nov-Mar. For some species (indicated in Conservation Objective) passage counts used, July-Oct & Apr-June.	Bar-tailed Godwit (*2,580 winter; 7,400 autumn passage), Dark-bellied Brent Goose (*3,100 winter), Grey Plover (*3,300 winter, 4,180 Aug-May), Knot (*26,500 winter, 32,600 on passage), Oystercatcher (*6,560), Ringed Plover (*26), Sanderling (*382 winter, 750 passage) (*baseline population)
	Population size	The site should be judged unfavourable if the baseline population of 20,974 waterfowl declines by 50% or more. Baseline is based upon five-year mean counts of the total number of waterfowl.	
Aggregations of non-breeding birds >20,000 waterfowl	Habitat extent	190ha. Extent of all habitats used by the feature should be maintained, subject to natural change - anthropogenic loss of 5% or more of any relevant habitat type is unacceptable.	
	Population size	Baseline based on known natural fluctuation. If population drops below this size then it is in unfavourable condition: 23 pairs. Average no. nesting pairs (1988-1992)	
Breeding Annex 1 birds. Little Tern	Habitat extent	1,311ha. Extent of all habitats used by the feature should be maintained, subject to natural change - anthropogenic loss of 5% or more of any relevant habitat type is unacceptable.	
	Presence of predator populations	Maintain effects of predators on nesting birds at an acceptable level	
The Wash SPA			
Interest feature	Attribute	Target	Details of features
Aggregations of non-breeding birds. Individual species exceeding internationally important population thresholds	Population size	Site unfavourable if population declines of 50% or more from the baseline level are recorded. Baseline is usually 5 year mean of peak winter counts, Nov-Mar. For some species (indicated in Conservation Objective) passage counts used, July-Oct & Apr-June.	Mandatory features - non-breeding waterbirds listed in the SPA & Ramsar Citations: Pink-footed Goose (*5,300), Dark-bellied Brent Goose (*14,713), Shelduck (*17,043), Pintail (*1,497), Oystercatcher (*19,602), Grey Plover (*7,396), Knot (*67,839), Dunlin (*33,791), Bar-tailed Godwit (*7,396), Curlew (*3,072), Redshank (*3,715), Turnstone (*899), Sanderling (*300). Discretionary features - waterbirds listed in the JNCC SPA Review and WeBS reports: Ringed Plover (*passage 1,431), Golden Plover (*7,980), Lapwing (*28,297), Black-tailed Godwit (*853), Sanderling (*passage 1,195). (*baseline population), \$ baseline population no longer internationally significant due to higher qualifying thresholds in 2008
	Habitat extent (coastal saltmarsh, saline lagoons, coastal vegetated shingle and littoral sediment)	No decrease in extent of habitats from established baselines as defined in the conservation objectives for these habitats, subject to natural change	
Aggregations of non-breeding Annex 1 birds. Individual species exceeding nationally important thresholds	Population size	Site unfavourable if population declines of 50% or more from the baseline level are recorded for non-breeding Annex 1 Species, cited in the SPA citation. Baseline is 5 year mean of peak winter counts, Nov-Mar	Mandatory features - non-breeding Annex 1 birds listed in the SPA citation: Bewick's Swan(*43)+, Whooper Swan (*28)+, Bar-tailed Godwit (*7,396)\$ Discretionary features - non-breeding Annex 1 birds listed in the JNCC SPA Review and WeBS reports: Avocet (*109), Golden Plover (*7,980) (*baseline population), + Baseline population not of national significance, \$ Baseline population of international significance
	Habitat extent (coastal saltmarsh, saline lagoons, coastal vegetated shingle and littoral sediment)	No decrease in extent of habitats from established baselines as defined in the conservation objectives for these habitats, subject to natural change	

Aggregations of non-breeding birds >20,000 waterfowl	Population size	The site should be judged unfavourable if the baseline population of 203,829 waterfowl declines by 50% or more. Baseline is based upon five-year mean counts of the total number of waterfowl.	<p>The following species have been cited (JNCC SPA Review/WeBS annual reports) as contributing to the non-breeding species assemblage:</p> <p>Avocet <i>Recurvirostra avosetta</i>+, Golden Plover <i>Pluvialis apricaria</i>*, Lapwing <i>Vanellus vanellus</i>*, Ringed Plover <i>Charadrius hiaticula</i>*P, Black-tailed Godwit <i>Limosa limosa islandica</i>*, Bar-tailed Godwit <i>Limosa lapponica</i>*, Oystercatcher <i>Haematopus ostralegus</i>*, Grey Plover <i>Pluvialis squatarola</i>*, Dunlin <i>Calidris alpina alpina</i>*, Knot <i>Calidris canutus</i>*, Sanderling <i>Calidris alba</i>+P, Curlew <i>Numenius arquata</i>+, Whimbrel <i>PNumenius phaeopus</i>+, Redshank <i>Tringa totanus</i>*, Turnstone <i>Arenaria interpres</i>+, (Little Grebe <i>Tachybaptus ruficollis</i>), Cormorant <i>Phalacrocorax carbo</i>+, (Whooper Swan <i>Cygnus cygnus</i>), (White-fronted Goose <i>Anser albifrons albifrons</i>), Pink-footed Goose <i>Anser brachyrhynchus</i>*, Dark-bellied Brent Goose <i>Branta bernicla bernicla</i>*, Shelduck <i>Tadorna tadorna</i>*, Pintail <i>Anas acuta</i>*, (Wigeon <i>Anas penelope</i>), Teal <i>Anas crecca</i>+, Mallard <i>Anas platyrhynchos</i>+, Eider <i>Somateria mollissima</i>+, Common Scoter <i>Melanitta nigra</i>+, Black-headed Gull <i>Larus ridibundus</i>+, Lesser Black-l</p> <p>* Internationally important + Nationally important () Locally significant P Passage population</p>
	Habitat extent (coastal saltmarsh, saline lagoons, coastal vegetated shingle and littoral sediment)	No decrease in extent of habitats from established baselines as defined in the conservation objectives for these habitats, subject to natural change	
Breeding Annex 1 birds. Common Tern	Population size	Based on the known natural fluctuations of the Snettisham population within the site, maintain the population above 59 pairs i.e. the minimum recorded at this site.	
	Habitat extent	Maintain extent (up to 0.25ha) & location of existing shingle islands within the saline lagoons in the Snettisham Nature Reserve (subject to natural change). Losses >5% of the shingle island habitat that are not caused by natural change are not acceptable	
Breeding Annex 1 birds. Little Tern	Population size	There is no site specific target for Little Tern for The Wash SPA as species does not regularly breed within the site and was erroneously included in The Wash SPA citation.	
	Habitat extent		
Breeding Annex 1 birds. Mediterranean Gull	Population size	Discretionary interest feature because species was not recorded in the SPA when designated or when the JNCC SPA review was undertaken. However, the current breeding population of this Annex 1 species in The Wash is of national importance and should be maintained.	
	Habitat extent	Maintain extent (up to 0.25ha) & location of existing shingle islands within the saline lagoons in the Snettisham Nature Reserve (subject to natural change). Losses >5% of the shingle island habitat that are not caused by natural change are not acceptable	
North Norfolk Coast SPA			
Interest feature	Attribute	Target	Details of features
Aggregations of non-breeding birds. Individual species exceeding internationally important population thresholds	Population size		Ringed Plover (passage) (\$1,256), Dark-bellied Brent Goose (winter) (*9,000, \$11,152), Knot (winter) (*6,000, \$10,801), Pink-footed Goose (winter) (*6,000, \$23,802), Pintail (winter)(*450, \$1138), Redshank (winter)(*800, \$2998), Wigeon (winter)(*5,000, \$14,039) (*bird numbers, citation baseline), (\$bird numbers, SPA review baseline)
Aggregations of non-breeding birds >20,000 waterfowl	Population size	The site should be judged unfavourable if the baseline population of 43,159 (citation assemblage), 91,249 (SPA Review assemblage) declines by 50% or more. Baseline is based upon five-year mean counts of the total number of waterfowl.	Includes internationally important species and also the following species present in nationally important numbers: White-fronted Goose, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Velvet Scoter, Cormorant, Oystercatcher, Ringed Plover (winter), Grey Plover, Sanderling (winter), Red-breasted Merganser, Lapwing, Dunlin (winter, autumn), Black-tailed Godwit (winter), Curlew (winter), Turnstone, Black-headed Gull, Herring Gull
Aggregations of breeding birds. Individual species exceeding internationally important population thresholds	Population size		Redshank (\$700), Ringed Plover (*220, \$156) (*breeding pairs, citation baseline), (\$breeding pairs, SPA review baseline)
Non-Breeding Annex 1 birds. Avocet (winter)	Population size	153 (SPA review)	
Non-Breeding Annex 1 birds. Bar-tailed Godwit (winter)	Population size	1,236 (SPA review)	
Non-Breeding Annex 1 birds. Bittern (winter)	Population size	5 (SPA review)	
Non-Breeding Annex 1 birds. Golden Plover (winter)	Population size	2,667 (SPA review)	

Non-Breeding Annex 1 birds. Hen Harrier (winter)	Population size	16 (SPA review)	
Non-Breeding Annex 1 birds. Ruff (winter)	Population size	54 (SPA Review)	
	Habitat extent	Losses >5% of habitat that are not caused by natural change are not acceptable	
Breeding Annex 1 birds. Avocet	Population size	128 pairs (citation), 177 pairs (SPA review)	
Breeding Annex 1 birds. Bittern	Population size	6 booming (citation), 3 booming (SPA review)	
Breeding Annex 1 birds. Common Tern	Population size	Up to 1,000 pairs (citation), 460 pairs (SPA review)	
Breeding Annex 1 birds. Little Tern	Population size	Up to 400 pairs (citation), 377 paris (SPA review)	
Breeding Annex 1 birds. Marsh Harrier	Population size	5 nesting females (citation), 14 nesting females (SPA review)	
Breeding Annex 1 birds. Mediterranean Gull	Population size	2 pairs (SPA review)	
Breeding Annex 1 birds. Roseate Tern	Population size	2 pairs (SPA review)	
Breeding Annex 1 birds. Sandwich Tern	Population size	Up to 4,500 pairs (citation), 3,457 pairs (SPA review)	
Breeding Annex 1 birds. Montagu's Harrier	Population size	Breeding' (citation)	
	Habitat extent	Losses >5% of habitat that are not caused by natural change are not acceptable	