Appendix G: NORTH EAST ENGLAND, European and Internationally Designated sites and key Environmental Sensitivities.

Information taken from:

(i) Appropriate Assessment of the Regional Spatial Strategy & Secretary of State's Proposed Changes for the North East. Finalised followed consultation on Proposed Changes May 2007.

(ii) Appropriate Assessment of the Regional Spatial Strategy for the North East: Addendum – Assessment of Further Proposed Changes (February 2008) and Final Conclusions

(iii) % figure in last column taken from Natural England's designations list and condition data of sites (data for 31 March 2012)

SPECIAL AREAS OF CONSERVATION (SACs)

SAC	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site	% of site in favourable condition 31/3/12
Berwickshire and North Northumberland Coast	Significant effects on site integrity are possible from disturbance from water-				Significant effects on site integrity are possible from: increase in nutrients	High risk of adverse effects on the integrity of the site due to future loss of intertidal habitat		49%

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	based recreational users which may affect the seal population.				discharged in waste water treatment or from diffuse pollution from agricultural land which will have a localised impact on the coast.	due to predicted sea level rise, existing heavily modified coastal and estuarine areas; housing and business development in areas close to the coast; and growth in region's ports and harbours.		
Border Mires, Kielder-Butterburn	Potential for physical damage to sensitive habitat through construction of wind farm access routes and turbine bases. Increased tourism and		Air pollution is an existing threat to the condition of the site as the site receives acid deposition, nitrogen deposition or both above their critical load.	Increase in renewable energy production in area could disrupt local hydrology (wind power) or water supply (possible hydro-power proposals).				54%

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	recreation to the site is likely to increase site damage, particularly through erosion and trampling.							
Castle Eden Dene			Increased development and housing may contribute to increased air quality impacts as well as through increasing levels of traffic. Air pollution is an existing threat to the condition of the site as the site is receiving acid deposition, nitrogen		Changes in rural land use leading to increased nutrient inputs, and nutrient input through agricultural runoff.			7%

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			deposition or both above their critical load.					
Durham Coast	Future growth at the regions ports could have a significant adverse effect on the integrity of the site.				Changes in land use of areas bordering the cliffs may increase nutrient runoff.	High risk of adverse effects on the integrity of the site due to future loss of intertidal habitat due to predicted sea level rise, existing heavily modified coastal and estuarine areas; housing and business development in areas close to the coast; and growth in region's ports and harbours.		62%
Ford Moss			Increased development and housing	Risk from drainage due to forestry, and/or				0%

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			may contribute to increased air quality impacts as well as through increasing levels of traffic. Air pollution is an existing threat to the condition of the site as the site is receiving acid deposition, nitrogen deposition or both above their critical load.	agricultural use. Increased abstraction for development and housing.				
Harbottle Moors	Increased recreational use of the site may increase damage from trampling and soil erosion as		Increased development and housing may contribute to increased air quality impacts as well as					0%

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	well as increased levels of traffic and localized disturbance to wildlife.		through increasing levels of traffic. Air pollution is an existing threat to the condition of the site as the site is receiving acid deposition, nitrogen deposition or both above their critical load.					
Moor House – Upper Teesdale	Increased levels of recreational use are also associated with increased levels of traffic and localized disturbance to wildlife		Increased development and housing may contribute to increased air quality impacts as well as through increasing levels of traffic. Air pollution is	At risk from forest drainage. Hydro-power proposals could damage site integrity, through local alterations in hydrology.	Increased rural access may lead to trampling and erosion around tracks and paths, damaging or altering vegetation structure and			6%

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			an existing threat to the condition of the site as the site is receiving acid deposition, nitrogen deposition or both above their critical load.		composition, and affecting water quality.			
Newham Fen				Risk from encroaching woodland and past drainage management.	Nutrient enrichment from surrounding farmland or upstream sources.			100%
North Northumberland Dunes	Increase in local population likely to lead to increased recreational damage of habitats on site.		Increased development and housing may contribute to increased air quality impacts as well as through increasing			Growth of a number of smaller ports may increase effects of coastal squeeze on the site by restricting or altering		35%

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			levels of traffic. Air pollution is an existing threat to the condition of the site as the site is receiving acid deposition, nitrogen deposition or both above their critical load.			sediment supply and distribution of dune habitat		
North Pennine Dales Meadows	Increased levels of recreational use are associated with localized soil erosion, increased levels of traffic and localized disturbance to wildlife.		Increased development and housing may contribute to increased air quality impacts as well as through increasing levels of traffic. Air pollution is an existing threat to the					73%

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			condition of the site as the site is receiving acid deposition, nitrogen deposition or both above their critical load.					
North Pennine Moors	Increased recreational use of site through promotion of the region as a tourist destination is likely to increase localised damage to habitats.		Increased development and housing may contribute to increased air quality impacts as well as through increasing levels of traffic. Air pollution is an existing threat to the condition of the site as the site is receiving acid deposition,	Risk from altered water supply due to upland wind farm development, which may affect the extent and quality of waterside and aquatic habitats as well as potentially causing drying of bog and fen habitats				14%

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			nitrogen deposition or both above their critical load.					
North York Moors	Recreational use of the site is likely to increase leading to increased trampling and erosion.		Increased development and housing may contribute to increased air quality impacts as well as through increasing levels of traffic. Air pollution is an existing threat to the condition of the site as the site is receiving acid deposition, nitrogen deposition and ozone above their critical	Risk from drainage due to forestry, development or agricultural use.	Increased localised damage to habitats and potentially damage water quality through increased sedimentation due to increase in recreational use.			7%

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			load.					
River Tweed					Nutrient enrichment from surrounding farmland or upstream sources.			7%
Roman Walls Loughs	Promotion of tourism may lead to an increase in trampling and erosion around the site.				Nutrient enrichment from surrounding farmland or upstream sources.			55%
Simonside Hills	Promotion of tourism may lead to an increase in trampling and erosion around the site.		Increased development and housing may contribute to increased air quality impacts as well as through increasing levels of traffic. Air pollution is	Wind-power generation projects could affect site if hydrology is altered by construction of turbine bases or access routes.				15%

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			an existing threat to the condition of the site as the site is receiving acid and nitrogen deposition above their critical load.					
Thrislington			Increases in population, the amount of traffic and development are likely to exacerbate air quality impacts.					100%
Tweed Estuary	Increased recreational use of the site may lead to localised damage to mud- and sand-flats, particularly through				Nutrient enrichment from surrounding farmland or upstream sources. Site could be affected in this	Growth of a number of smaller ports may affect its ability to cope with sea level rise. Alterations to the sediment		55%

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	motorboat use. Potential for increased disturbance of habitats through increased shipping levels, particularly if this results in more intensive dredging of the estuary channels.				way by small developments which may not benefit from better waste water treatment.	supply may occur, which could lead to erosion of mud- and sand flats. Rail improvements to the East Coast Main Line could also constrain the estuary form.		
Tyne and Allen River Gravels	The encouragement of wider use of the countryside, particularly through the Tourism Strategy could bring disturbance to the site, particularly		Increased development and housing may contribute to increased air quality impacts as well as through increasing levels of traffic. Air pollution is an existing		The integrity of the metalliferous Tyne and Allen River Gravels SAC is at particular risk of being compromised by encroachment of invasive plant species as mining activities			

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	through trampling.		threat to the condition of the site as the site is receiving acid and nitrogen deposition above their critical load.		upstream have virtually stopped, thus reducing the amount of metals carried by the rivers.			

SPECIAL PROTECTION AREAS (SPAs)

SPA	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site	% of site in favourable condition 31/3/12
Coquet Island	Offshore wind farms may have impacts on tern							0%

SPA	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site	% of site in favourable condition 31/3/12
	populations. Increased disturbance through recreational use of waters surrounding offshore islands may affect tern reproductive success.							
Farne Islands	Offshore wind farms may have disturbance and mortality impacts on seabird populations. Recreational use of surrounding waters or shipping levels.							100%

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Holburn Lakes and Moss							Disturbance and displacement effects from wind farms in the surrounding area.	0%
Lindisfarne	Visitor pressure leading to disturbance.				Eutrophication both from waste-water treatment effluent and diffuse sources	Risk from coastal squeeze with loss of intertidal habitat due to: predicted sea level rise; current barriers to landward migration of intertidal habitats resulting from existing heavily modified coastal and estuarine areas; housing and business development in	Wind farms in the Berwick and Alnwick areas may affect geese by both disturbance of feeding areas and disruption of migration routes.	30%

SPA	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site	% of site in favourable condition 31/3/12
						areas close to the coast; and growth at the region's ports and harbours.		
North Pennine Moors	Increased levels of recreational use are associated with localized soil erosion, increased levels of traffic and localized disturbance to wildlife.		Increased development and housing in may contribute to air quality impacts. Acid and nitrogen deposition will affect heathland and moorland vegetation with implications for the nesting and foraging of the interest features. Critical loads already exceeded.	Risk from hydrology change that may result from upland wind farm development, and drainage due to forestry, development or agricultural use.			Wind farm development may affect Hen Harriers foraging and breeding areas outside of the SPA.	14%
North York	Increased levels		Increased				Merlin may be	7%

SPA	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site	% of site in favourable condition 31/3/12
Moors	of recreational use are associated with localized soil erosion, increased levels of traffic and localized disturbance to wildlife.		development and housing in may contribute to air quality impacts. Acid and nitrogen deposition will affect heathland and moorland vegetation with implications for the nesting and foraging of the interest features. Critical loads already exceeded.				affected by disturbance and mortality, damage to habitat of foraging and breeding areas resulting from wind farm development.	
Northumbria Coast	Growth of a number of smaller ports and rail improvements to the East Coast Main Line				Eutrophication both from waste-water treatment effluent and diffuse sources.	Development along the Northumbrian coastline may exacerbate pressures from coastal squeeze	Tern may be affected by disturbance and mortality, damage to habitat of foraging and	98%

SPA	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site	% of site in favourable condition 31/3/12
	may increase levels of casual disturbance to Tern colonies, and increase the risk of marine pollution incidents affecting the birds. An increase in the local population is likely to lead to increased levels of recreational disturbance on the site.				Redevelopment of the Wear valley could reduce water quality through development works which lead to the release of minewater	by constraining landward mitigation of intertidal habitat and should be considered capable of damaging site integrity.	breeding areas resulting from wind farm development	
Teesmouth and Cleveland Coast	New housing developments sited adjacent to the SPA have		Air pollution is an existing threat to the condition of the		Chemical discharges from industrial use along the Tees	Risk from coastal squeeze with loss of intertidal habitat	Future growth at the regions ports could have a significant	34%

SPA	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site	% of site in favourable condition 31/3/12
	the potential to increase recreational disturbance to water birds using the adjacent foreshore. Increased recreational use from tourists is likely to cause greater levels of disturbance.		site as the site is receiving acid deposition, nitrogen deposition or both above their critical load. NOx resulting from increased development, housing and associated traffic in the Tees valley will add to the nitrogen deposition affecting the site.		and from nutrient enrichment from agricultural use of the Tees valley. The increase in runoff from hard standing surfaces due to housing development in the Tees Valley has potential to reduce water quality.	due to: predicted sea level rise; current barriers to landward migration of intertidal habitats resulting from existing heavily modified coastal and estuarine areas; housing and business development in areas close to the coast; and growth at the region's ports and harbours.	adverse effect on the integrity of the site.	

RAMSAR SITES

Ramsar Site	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site
Holburn Lakes and Moss				Broad land use changes may affect site integrity if the hydrology is altered and drying occurs through drainage or increased water abstraction.			Risk from disturbance and displacement effects from wind farms in the surrounding area, particularly if this reduces the feeding areas available to wintering geese.
Irthinghead Mires	Recreational pressure from increased tourist numbers causing erosion and trampling.			Risk from altered water supply due to upland wind farm development.			
Lindisfarne	Visitor pressure leading to disturbance.				Eutrophication both from waste-water treatment effluent and diffuse sources	Risk from coastal squeeze with loss of intertidal habitat due to: predicted sea level rise; current	Wind farms in the Berwick and Alnwick areas may affect geese by both disturbance of

Ramsar Site	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site
						barriers to landward migration of intertidal habitats resulting from existing heavily modified coastal and estuarine areas; housing and business development in areas close to the coast; and growth at the region's ports and harbours.	feeding areas and disruption of migration routes.
Northumbria Coast	An increased local population is likely to lead to increased levels of recreational disturbance on the site.						Offshore wind farms may affect the Little Tern population: the birds may be at risk of disturbance and/ or mortality.
Teesmouth and	Effects of		NOx resulting		The site is		Offshore wind

Ramsar Site	Excessive recreational pressure and other types of disturbance	Other effects of increasing urbanisation (e.g. increased incidence of fires and numbers of cats predating vulnerable chicks)	Deterioration in air quality (both local and diffuse)	Increased abstraction leading to a decline in water levels and freshwater inputs to hydrologically sensitive European sites	Deterioration in water quality	Increased 'coastal squeeze'	Loss of important supporting habitat outside the boundary of the European site
Cleveland Coast	recreational disturbance of both tern populations and wintering waders. increased shipping levels, if port use is promoted.		from increased development, housing and associated traffic in the Tees valley will add to the nitrogen deposition affecting the site.		influenced by chemical discharges from industrial use along the Tees and from nutrient enrichment from agricultural use of the Tees valley. The increase in runoff from hard standing surfaces due to housing development in the Tees Valley has the potential to reduce water quality.		farms may have disturbance and mortality impacts on tern populations.