



HABITATS REGULATIONS ASSESSMENT – VOLUME 3 - APPENDIX 5

Air Quality Sensitivity of European Sites in the Zol

Drax Bioenergy with Carbon Capture and Storage

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations, 2009 - Regulation 5(2)(g)

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Appendix 5 (part a) - European Site Air Quality Sensitivity

Site	Designation	Recommended NH3 Critical Level	Justification NH3	Source NH3	Recommended Critical Load N Dep (KgN/ha/yr)	Recommended Critical Load Habitat	Justification NDep	Source NDep	Recommended Critical Load acid deposition	Recommended Critical Load (acid) Habitat	Justification acidification	Source acidification
River Derwent	SAC	3	APIS - site not identified as important for bryophytes/lichens. Critical Level for qualifying species identified as 3ug/m ³	(Air Pollution Information System, 2022a)	None	Rivers And Streams	No recognised critical load for rivers and streams. Sensitivity dependent on N vs P limitation	(Air Pollution Information System, 2022a).	None	None	No acid deposition critical load available on APIS. Environment Agency monitoring data indicates River Derwent and River Ouse have high acid buffering capacity.	(Air Pollution Information System, 2022a) (Environment Agency, 2022)
Thorne Moor	SAC	1	APIS - site is important for lichens and bryophytes, with critical level of 1ug/m ³ identified.	(Air Pollution Information System, 2022b) (Natural England, 2022)	5	raised and blanket bogs	Taken from APIS, habitat covers majority of site as confirmed on MAGIC.	(Air Pollution Information System, 2022b) (Natural England, 2022)	Maximum: CLminN:.32 1 CLmaxN:.467 CLmaxS:.146 Minimum: CLminN:.321 CLmaxN:.462 CLmaxS:.141	Bogs	Taken from APIS, broad habitat type covers majority of site as confirmed on MAGIC.	(Air Pollution Information System, 2022b); (Natural England, 2022)
Thorne and Hatfield Moors	SPA	3	APIS - nightjar sole feature of SPA not reliant on bryophytes as a sensitive feature.	(Air Pollution Information System, 2022c)	10 (nightjar on dry heaths) Modelling of woodland not required.	Dry heaths	As identified on APIS. Woodland not modelled for nightjar, as APIS identifies that <i>Is species sensitive due to nutrient nitrogen</i>	(Air Pollution Information System, 2022c)	no modelling of acid deposition required.	None	For nightjar, APIS states that ' <i>Is species sensitive due to acidity impacts on broad habitat?</i> ' = NO	(Air Pollution Information System, 2022c)

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							<i>impacts on broad habitat? =</i> NO Air quality modelling has focussed on most impacted location supporting dry shrub heath.					
Lower Derwent Valley	SAC	3	APIS and priority habitat mapping on MAGIC. No alluvial forest indicated present within site within 15 km air quality study area (this habitat has critical level of 1).	(Air Pollution Information System, 2022d) (Natural England, 2022)	20	low and medium altitude hay meadows	As identified on APIS. MAGIC Priority habitat mapping identifies habitat type present at closest point to Proposed Scheme. Other qualifying interest features absent within 15 km air quality study area.	(Air Pollution Information System, 2022d) (Natural England, 2022)	MinCLminN: 0.223 MaxCLminN : 0.438 MinCLMaxS : 0.42 MaxCLMaxS: 1.57 MinCLMaxN : 0.643 MaxCLMaxN: 2.008	MG4 Acid Grassland	APIS. Cannot rule out presence of more sensitive 'acid grassland' community on basis of APIS/MAGIC and NE monitoring data.	(Air Pollution Information System, 2022d) (Natural England, 2022) (Natural England, 2018)
Lower Derwent Valley	SPA	3	As per SAC - some bird species identified as susceptible to effects on	(Air Pollution Information System, 2022e)	20	low and medium altitude hay meadows	As identified on APIS. MAGIC Priority habitat mapping	(Air Pollution Information System, 2022e) (Natural	None - all Qualifying Interest Features have the following	N/A	N/A	(Air Pollution Information System, 2022e)

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			species broad habitat on APIS.				identifies habitat type present and dominant within air quality study area. This is the relevant habitat type for the qualifying interest species (where sensitive).	England, 2022)	statements made against them on APIS acidification data for the Site: ' <i>No expected negative impact on the species due to impacts on the species' broad habitat</i> '.			
Lower Derwent Valley Ramsar	Ramsar	3	As per SPA and SAC	(Air Pollution Information System, 2022d)_(Air Pollution Information System, 2022e)	20	low and medium altitude hay meadows	As per SPA	(Air Pollution Information System, 2022d)_(Air Pollution Information System, 2022e)	MinCLminN: 0.223 MaxCLminN : 0.438 MinCLMaxS : 0.42 MaxCLMaxS: 1.57 MinCLMaxN : 0.643 MaxCLMaxN: 2.008	MG4 Acid Grassland	APIS. Cannot rule out presence of more sensitive 'acid grassland' community on basis of APIS/MAGIC and NE monitoring data.	(Air Pollution Information System, 2022d) (Air Pollution Information System, 2022e)
Skipwith Common	SAC	1	APIS - lower plants important component of qualifying interest habitats	(Air Pollution Information System, 2022f)	10	Northern wet heath: <i>Erica tetralix</i> dominated wet heath; and Dry heaths	As per APIS. Qualifying interest habitats make up most of the Site.	(Air Pollution Information System, 2022f) (Natural England, 2022)	Dwarf shrub heath MinCLminN: 0.642 MaxCLminN : 1.035 MinCLMaxS : 0.16 MaxCLMaxS: 0.81	Dwarf shrub heath	APIS. Both qualifying interest habitats have the same acidity critical load class.	(Air Pollution Information System, 2022f) (Natural England, 2022)

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						<i>Both qualifying interest habitats have the same critical load range.</i>			MinCLMaxN : 0.802 MaxCLMax N: 1.524			
Humber Estuary	SAC	3	APIS states 'site specific advice should be sought'. Lower plants do not form a key component of any of the SAC habitats within the 15 km air quality study area. As such, the higher plants Critical Level of 3ug/m ³ has been used.	(Air Pollution Information System, 2022g)	20	Salicornia and other annuals colonising mud and sand	As per APIS. Most relevant habitat type with a Critical Load, dominant within SAC within air quality study area.	(Air Pollution Information System, 2022g) (Natural England, 2022)	Not sensitive to acidification	No sensitive habitats to acidification.	Habitats within air quality study area are dominated by mudflats. APIS states: <i>Habitat not sensitive to acidification</i> , also states this in relation to Estuaries and other habitats present in the upper reaches of the Humber. APIS identifies that lampreys may be sensitive to changes in pH in the river. EA monitoring data from Long Drax (the Drax Jetty), identifies the River Ouse to have a 'High' acid buffering capacity in this location. As such, no significant acidification effects on lamprey are expected.	(Air Pollution Information System, 2022g) (Environment Agency, 2022) (Natural England, 2022)

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Humber Estuary	SPA	3	Relevant to wigeon, golden plover, Eurasian curlew, black-tailed godwit, and Dark-bellied brent goose on littoral sediments.	(Air Pollution Information System, 2022h)_(Air Pollution Information System, 2022g)	20	Shelduck (Pioneer, low-mid, mid-upper saltmarshes)	As per APIS. Most relevant habitat type present within 15 km air quality study area. Rivers and Streams habitats not considered susceptible to deposition of nitrogen from air, on basis of phosphate-limited nature of River Ouse.	(Air Pollution Information System, 2022h) see N/P Limitation Note in Appendix 6 of HRA Report (document reference 6.8.3.6).	None	N/A	For all SPA bird species, APIS identifies: 'No expected negative impact on the species due to impacts on the species' broad habitat'.	(Air Pollution Information System, 2022h)

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Humber Estuary	Ramsar	3	As per SAC/SPA	(Air Pollution Information System, 2022h)	20	Salicornia and other annuals colonising mud and sand (as per SAC)	As per APIS. Most relevant habitat type with a Critical Load for SAC / SPA which is also a Ramsar criterion.	(Air Pollution Information System, 2022h)_see N/P Limitation Note in Appendix 6 of HRA Report (document reference 6.8.3.6). (Air Pollution Information System, 2022g) (Natural England, 2022)	As per SAC / SPA - screened out from LSE	N/A	<p>For all SPA bird species, APIS identifies: 'No expected negative impact on the species due to impacts on the species' broad habitat'. All Ramsar species are also listed as SPA species.</p> <p>As per SAC: closest habitats (where impacts are greatest) are dominated by mudflats. APIS states: Habitat not sensitive to acidification, also states this in relation to Estuaries and other habitats present in the upper reaches of the Humber.</p> <p>APIS identifies that lampreys may be sensitive to changes in pH in the river. EA monitoring data from Long Drax (the Drax Jetty), identifies the River Ouse to have a 'High' acid buffering capacity in this location. As such, no significant acidification effects on lamprey are expected.</p>	(Air Pollution Information System, 2022h) (Air Pollution Information System, 2022g) (Environment Agency, 2022) (Natural England, 2022)

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Appendix 5 (part b) - European Site Air Quality Sensitivity

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
River Derwent SAC	None	N/A	River habitat	(Air Pollution Information System, 2022a) (Environment Agency, 2022)	None	N/A
Thorne Moor SAC	None	N/A	None	N/A	None	N/A
Thorne and Hatfield Moors SPA	Woodland for nightjar	Woodland not modelled for nightjar, as APIS identifies that Is species sensitive due to nutrient nitrogen impacts on broad habitat? = NO (Air Pollution Information System, 2022c)	Woodland for nightjar	For nightjar, APIS states that ' <i>Is species sensitive due to acidity impacts on broad habitat?</i> ' = NO (Air Pollution Information System, 2022c)	Woodland for nightjar	APIS - nightjar sole feature of SPA not reliant on bryophytes as a sensitive feature. (Air Pollution Information System, 2022c)
Lower Derwent Valley SPA	Eurasian Wigeon	Key habitat for Lower Derwent Valley is rivers and flooded grasslands. Based on ecology of the species including it's use of agricultural land for foraging and that APIS includes only 'salt marsh' and 'rivers and streams' as it's habitats, considered this feature can be scoped out. In addition, water-borne inputs likely to be dominant over atmospheric sources. (Air Pollution Information System, 2022c)	Northern Shoveler	APIS states ' <i>No expected negative impact on the species due to impacts on the species' broad habitat</i> '. (Air Pollution Information System, 2022c)	Bewick's Swan	APIS identifies that ' <i>No expected negative impact on species due to impacts on the species' broad habitat</i> .' in relation to 'arable and horticulture' and 'improved grassland'. APIS states ' <i>Decision to be taken at a site specific level since habitat sensitivity depends on N or P limitation</i> ' in relation to 'standing open water and canals'. The River Derwent and River Ouse are heavily phosphate-limited, with this being the limiting macronutrient rather than nitrogen. (Air Pollution Information System, 2022c). See Appendix 6 of the HRA Report (document reference 6.8.3.6).
	Eurasian Teal	Key habitat for Lower Derwent Valley is rivers and flooded grasslands. APIS identifies no detrimental effects from NDep on the species habitat ('saltmarshes'). In addition, water-borne inputs likely to be	European Golden Plover	APIS states ' <i>No expected negative impact on the species due to impacts on the species' broad habitat</i> '. (Air Pollution	Eurasian Teal	APIS states ' <i>No expected negative impact on species due to impacts on the species' broad habitat</i> ' in relation to 'littoral sediment'. APIS states 'Decision to be taken at a site specific level since habitat sensitivity depends on N or P limitation.' in relation to 'standing open

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
		dominant over atmospheric sources. Standing open water and canals are other associated habitat identified for this species on APIS, which are likely to be P-limited rather than N-limited. (Air Pollution Information System, 2022c). See Appendix 6 of the HRA Report (document reference 6.8.3.6).		Information System, 2022c)		water and canals'. N/P limitation note is therefore relevant. (Air Pollution Information System, 2022c). See Appendix 6 of the HRA Report (document reference 6.8.3.6).
	Northern Shoveler	APIS states <i>No expected negative impact on species due to impacts on the species' broad habitat</i> , in relation to this species use of 'low and medium altitude hay meadows'. (Air Pollution Information System, 2022c).	Ruff	APIS states ' <i>No expected negative impact on the species due to impacts on the species' broad habitat</i> '. (Air Pollution Information System, 2022c)	Northern Shoveler	APIS states 'No expected negative impact on species due to impacts on the species' broad habitat' in relation to 'Neutral grassland'. (Air Pollution Information System, 2022c)
	Ruff	APIS states <i>No expected negative impact on species due to impacts on the species' broad habitat</i> , in relation to this species use of 'low and medium altitude hay meadows'. (Air Pollution Information System, 2022c).	Bewick's swan	APIS states ' <i>No expected negative impact on the species due to impacts on the species' broad habitat</i> '. (Air Pollution Information System, 2022c)	Ruff	APIS states 'No expected negative impact on species due to impacts on the species' broad habitat' in relation to 'Neutral grassland' and 'littoral sediment'. (Air Pollution Information System, 2022c)
	Bewick's swan	APIS states <i>No expected negative impact on species due to impacts on the species' broad habitat</i> , in relation to this species use of 'arable and horticulture' and 'improved grassland'. Also uses 'standing open water and canals' - APIS states ' <i>Decision to be taken at a site-specific level since habitat sensitivity depends on N or P limitation</i> .' (Air Pollution Information System, 2022c). See	Eurasian wigeon	APIS states ' <i>No expected negative impact on the species due to impacts on the species' broad habitat</i> '. (Air Pollution Information System, 2022c)		

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
		Appendix 6 of the HRA Report (document reference 6.8.3.6).				
			Eurasian Teal	APIS states ' <i>No expected negative impact on the species due to impacts on the species' broad habitat</i> '. (Air Pollution Information System, 2022c)		
Lower Derwent Valley Ramsar	Teal and Ruff as per SPA	As per SPA. (Air Pollution Information System, 2022c)	All bird features screened out as per SPA, habitats remain screened in.	As per SPA. (Air Pollution Information System, 2022c)	As per SPA	As per SPA (Air Pollution Information System, 2022c)
Skipwith Common SAC	None	N/A	None	N/A	None	N/A
Humber Estuary SAC	All habitats except for Salicornia and other annuals colonising mud and sand	Other habitats are either not sensitive (as per APIS) or not present within 15 km air quality study area (as per MAGIC Priority Habitat Mapping). Salicornia colonising mud and sand considered best available habitat fit for areas of habitat within air quality study area. (Air Pollution Information System, 2022f)	All habitats Grey seal	Closest habitats (where impacts are greatest) are dominated by mudflats. APIS states: <i>Habitat not sensitive to acidification</i> , also states this in relation to Estuaries and other habitats present in the upper reaches of the Humber. For grey seal, APIS states: <i>No expected negative impact on the species due to impacts on the species' broad habitat</i> . (Air Pollution Information System, 2022f)	All habitats apart from rivers and streams (in their supporting role for lamprey) and mudflats are screened out. Lampreys are screened out Grey seal is screened out Sandbanks which are slightly covered by sea water at all times are screened out.	Mudflats are most proximate habitat to SAC. There are limited extents of other habitats in the upper sections of the Humber Estuary, within the 15 km air quality study area for the Proposed Scheme. River and sea lamprey screened out on basis that APIS states the following: <i>Decision to be taken at a site specific level since habitat sensitivity depends on N or P limitation</i> . N/P limitation note is therefore relevant, which identifies that

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
						<p>River Ouse and Derwent are phosphate-limited rather than nitrate-limited.</p> <p>Grey seal scoped out as APIS states: <i>No expected negative impact on species due to impacts on the species' broad habitat.</i></p> <p>Sandbanks screened out as APIS states the following in relation to this habitat and ammonia: <i>The feature is not sensitive.</i></p> <p>(Air Pollution Information System, 2022f). See Appendix 6 of the HRA Report (N/P Limitation Note) (document reference 6.8.3.6).</p>
Humber Estuary SPA	Little tern (breeding)	sand dune habitats used by this species do not occur in Zol of air quality impacts from BECCS. (Air Pollution Information System, 2022f) (Natural England, 2022)	European golden plover (Breeding and wintering)	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)	Bittern	MAGIC priority habitat mapping indicates suitable extents of 'fen marsh and swamp' habitats for the species are absent from the SPA within the 15km air quality study area of the Proposed Scheme. (Natural England, 2022)
	Hen harrier (wintering)	APIS states <i>Is species sensitive due to nutrient nitrogen impacts on broad habitat?</i> = NO , for all habitats with which species is associated. (Air Pollution Information System, 2022f)	Ruff	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)	Common shelduck	APIS states: <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> (Air Pollution Information System, 2022f)
	Hen Harrier (breeding)	Habitats with which species is associated (reed beds/fen marsh and swamp) are not present within 15km air quality study area, based on analysis of MAGIC Priority Habitat Mapping. They are therefore outside the Zol of air quality effects. (Air Pollution Information System, 2022f) (Natural England, 2022)	Eurasian curlew	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. . (Air Pollution Information System, 2022f)	Eurasian teal	APIS states: <i>No expected negative impact on species due to impacts on the species' broad habitat'</i> in relation to littoral sediment. In relation to 'Standing open water and canals' APIS states ' <i>Decision to be taken at a site specific level since habitat sensitivity depends on N or P limitation</i> '. As such, the N/P limitation note is relevant, which identifies River Derwent and River Ouse

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
						phosphate-limited rather than nitrate-limited. (Air Pollution Information System, 2022f). See Appendix 6 of the HRA Report (N/P Limitation Note) (document reference 6.8.3.6).
	Great bittern (breeding and wintering)	Habitats with which species is associated (reed beds/fen marsh and swamp) are not present within 15km of The Proposed Scheme, based on analysis of MAGIC Priority Habitat Mapping. They are therefore outside the ZoI of air quality effects. (Air Pollution Information System, 2022f) (Natural England, 2022)	Little tern	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)	Mallard	APIS states: <i>No expected negative impact on species due to impacts on the species' broad habitat</i> ' in relation to littoral sediment. In relation to 'Standing open water and canals' APIS states ' <i>Decision to be taken at a site specific level since habitat sensitivity depends on N or P limitation</i> '. As such, the N/P limitation note is relevant, which identifies River Derwent and River Ouse phosphate-limited rather than nitrate-limited. (Air Pollution Information System, 2022f). See Appendix 6 of the HRA Report (N/P Limitation Note) (document reference 6.8.3.6).

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
	Mallard	APIS states <i>Is species sensitive due to nutrient nitrogen impacts on broad habitat?</i> = NO , for saltmarsh habitats with which species is associated. For rivers and streams habitat, the N/P limitation note is relevant, which identifies River Derwent and River Ouse phosphate-limited rather than nitrate-limited. (Air Pollution Information System, 2022f). See Appendix 6 of the HRA Report (N/P Limitation Note) (document reference 6.8.3.6).	Hen harrier	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Common pochard	APIS states: <i>No expected negative impact on species due to impacts on the species' broad habitat'</i> in relation to littoral sediment. In relation to 'Standing open water and canals' APIS states ' <i>Decision to be taken at a site specific level since habitat sensitivity depends on N or P limitation</i> '. As such, the N/P limitation note is relevant, which identifies River Derwent and River Ouse phosphate-limited rather than nitrate-limited. (Air Pollution Information System, 2022f). See Appendix 6 of the HRA Report (N/P Limitation Note) (document reference 6.8.3.6).
	Ringed plover	APIS states: <i>1. No expected negative impact on species due to impacts on the species' broad habitat.2. Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).	Eurasian curlew	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Common goldeneye	APIS states: <i>No expected negative impact on species due to impacts on the species' broad habitat'</i> in relation to littoral sediment. In relation to 'Standing open water and canals' APIS states ' <i>Decision to be taken at a site specific level since habitat sensitivity depends on N or P limitation</i> '. As such, the N/P limitation note is relevant, which identifies River Derwent and River Ouse phosphate-limited rather than nitrate-limited. (Air Pollution Information System, 2022f). See Appendix 6 of the HRA Report (N/P Limitation Note) (document reference 6.8.3.6).
	Grey plover	APIS states: <i>1. No expected negative impact on species due to impacts on the species' broad habitat.2. Potential positive</i>	Bittern	APIS states: <i>No expected negative impact on the species due to impacts on</i>	Eurasian marsh harrier	MAGIC priority habitat mapping indicates suitable extents of 'fen marsh and swamp' habitats for the species are absent from the SPA within the 15km study area for air quality. (Natural England, 2022)

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
		<i>impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).		<i>the species' broad habitat.</i> (Air Pollution Information System, 2022f).		
	Northern Lapwing	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply in relation to salt marsh habitats.</i> (Air Pollution Information System, 2022f).	Common shelduck	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Hen harrier	APIS states: ' <i>No expected negative impact on species due to impacts on the species' broad habitat</i> ' for all habitats referenced in relation to the species (Dwarf shrub heath, Fen, marsh and swamp, Littoral sediment). (Air Pollution Information System, 2022f).
	Red knot	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).	Eurasian wigeon	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Eurasian oystercatcher	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).
	Sanderling	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).	Eurasian teal	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Pied avocet	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).
	Ruff	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air	Mallard	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Ringed plover	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
		Pollution Information System, 2022f).				
	Bar-tailed godwit	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).	Common pochard	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Grey plover	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).
	Whimbrel	APIS states: <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> (Air Pollution Information System, 2022f).	Greater scaup	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Northern lapwing	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).
	Common redshank	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).	Common goldeneye	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Red knot	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).
	Common greenshank	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).	Eurasian Marsh Harrier	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Sanderling	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f).
	Ruddy turnstone	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad</i>	Eurasian oystercatcher	APIS states: No expected negative impact on the species due to impacts on	Ruff	APIS states: <i>'No expected negative impact on species due to impacts on the</i>

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
		<i>habitat.2. Potential positive impact on species due to impacts on the species' food supply. (Air Pollution Information System, 2022f).</i>		the species' broad habitat. (Air Pollution Information System, 2022f).		<i>species' broad habitat'. (Air Pollution Information System, 2022f).</i>
	Black-tailed godwit	APIS states: 1. No expected negative impact on species due to impacts on the species' broad habitat.2. Potential positive impact on species due to impacts on the species' food supply. (Air Pollution Information System, 2022f).	Pied avocet	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Bar-tailed godwit	APIS states: 1. No expected negative impact on species due to impacts on the species' broad habitat. 2. Potential positive impact on species due to impacts on the species' food supply. (Air Pollution Information System, 2022f).
	Dunlin	APIS states: 1. No expected negative impact on species due to impacts on the species' broad habitat.2. Potential positive impact on species due to impacts on the species' food supply. (Air Pollution Information System, 2022f).	Ringed plover	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Common redshank	APIS states: 1. No expected negative impact on species due to impacts on the species' broad habitat. 2. Potential positive impact on species due to impacts on the species' food supply. (Air Pollution Information System, 2022f).
	Greater scaup	APIS states: 1. No expected negative impact on species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Grey plover	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Common greenshank	APIS states: 1. No expected negative impact on species due to impacts on the species' broad habitat. 2. Potential positive impact on species due to impacts on the species' food supply. (Air Pollution Information System, 2022f).
			Northern lapwing	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Ruddy turnstone	APIS states: 1. No expected negative impact on species due to impacts on the species' broad habitat. 2. Potential positive impact on species due to impacts on the species' food supply. (Air Pollution Information System, 2022f).

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
			Red knot	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f).	Little tern	MAGIC priority habitat mapping indicates suitable extents of 'supralittoral sediment' habitats for the species are absent from the SPA within the 15km Zol of the Proposed Scheme - little tern associated with dune habitats outside 15km air quality study area. (Natural England, 2022)
			Sandlerring	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)	Dunlin	APIS states: 1. <i>No expected negative impact on species due to impacts on the species' broad habitat.</i> 2. <i>Potential positive impact on species due to impacts on the species' food supply.</i> (Air Pollution Information System, 2022f)
			Ruff	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)	Greater scaup	APIS states: 1. No expected negative impact on species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)
			Bar-tailed godwit	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)		
			Whimbrel	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)		

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
			Common redshank	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)		
			Common greenshank	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)		
			Ruddy turnstone	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)		
			Black-tailed godwit	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)		
			Dunlin	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)		

Site	Qualifying Interests screened out of NDep assessment	Justification	Qualifying Interests screened out of acidity assessment	Justification	Qualifying Interests screened out of NH3 assessment	Justification
			Dark-bellied brent goose	APIS states: No expected negative impact on the species due to impacts on the species' broad habitat. (Air Pollution Information System, 2022f)		
Humber Estuary Ramsar	<p>As per SAC and SPA with differences as follows:</p> <p>Natterjack toads are screened out as the population is located at the southern extremity of the Ramsar Site, more than 15km from the Proposed Scheme. As such the population is outside the study area for air quality impacts.</p>	<p>As per SAC / SPA. Ramsar Information Sheet confirms location of Natterjack Toad population. (Air Pollution Information System, 2022g) See Humber Estuary Ramsar citation in Appendix 1 of the HRA Report (document reference 6.8.3.1).</p>	All qualifying interests.	<p>Justification as per SAC and SPA, with addition that natterjack toad populations are located outside the Zol of the Proposed Scheme. (Air Pollution Information System, 2022g). See Humber Estuary Ramsar citation in Appendix 1 of the HRA Report (document reference 6.8.3.1).</p>	<p>All habitats apart from rivers and streams (in their supporting role for lamprey) and mudflats are screened out.</p> <p>Lampreys are screened out</p> <p>Grey seal is screened out</p> <p>Sandbanks which are slightly covered by sea water at all times are screened out.</p> <p>Natterjack toads screened out</p>	<p>Mudflats are most proximate habitat to SAC. There are limited extents of other habitats in the upper sections of the Humber Estuary, where BECCS has the greatest effects.</p> <p>River and sea lamprey using river/estuary screened out on basis that APIS states the following: <i>Decision to be taken at a site specific level since habitat sensitivity depends on N or P limitation.</i> As such, the N/P limitation note is relevant, which identifies River Derwent and River Ouse phosphate-limited rather than nitrate-limited.</p> <p>Grey seal scoped out as APIS states: <i>No expected negative impact on species due to impacts on the species' broad habitat.</i></p> <p>sandbanks screened out as APIS states the following in relation to this habitat and ammonia: <i>The feature is not sensitive.</i></p> <p>Natterjacks screened out as they occur in the south of the Ramsar Site, >15km from the Proposed Scheme and outside the study area for air quality impacts.</p> <p>(Air Pollution Information System, 2022f). See Appendix 6 of the HRA Report (N/P Limitation Note) (document reference 6.8.3.6).</p>

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