

Yorkshire GREEN Project

Environmental Impact Assessment

Preliminary Environmental Information Report
Habitats Regulations Assessment Screening
Report (Draft No Significant Effects Report)

October 2021

nationalgrid

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1. Introduction

Regulations require competent authorities, before granting consent for a plan or project, to carry out an Appropriate Assessment (AA) in circumstances where the plan or project is likely to have a significant effect on a European site (either alone or in combination with other plans or projects).

- 1.2.3 As a precursor to the production of an anticipated final No Significant Effects Report (NSER), this draft HRA Screening has been undertaken and in accordance with the Planning Inspectorate's Advice Note 10², the screening has initially determined whether the Project would have Likely Significant Effects (LSEs) on any European sites. If LSE had been identified the NSER would be replaced by a HRA Report which would provide sufficient information to allow the competent authority to undertake the AA to determine whether there would be a resulting adverse effect on the integrity of European sites. This draft NSER is being made available during non-statutory consultation [as part of the PEIR] to enable all consultees, particularly Natural England, to comment on the approach to HRA screening and on the preliminary screening conclusions reached prior to submission of the DCO application. The final NSER (or HRA Report where effects cannot be screened out) will be submitted with the DCO application. The HRA would include all relevant European sites as agreed during the screening stage.

2. Habitats Regulations Assessment Process

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2.1 Background

- 2.1.1 Council Directives 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (“the Habitats Directive”) and 2009/147/EC on the conservation of wild birds (“the Birds Directive”) provide for the designation of sites for the protection of certain species and habitats. The sites designated under these Directives are collectively termed European sites and form part of a network of protected sites across Europe, known as the Natura 2000 network
- 2.1.2 The Habitats Regulations) are one of the pieces of domestic law that transposed the land and marine aspects of the Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC) (known as the Nature Directives). One of the changes made by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019³ is that Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in the UK no longer form part of the EU’s Natura 2000 ecological network. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019³ have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes existing SACs and SPAs, as well as new SACs and SPAs designated under these Regulations.
- 2.1.3 Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network. The UK Government is also a signatory to the Convention on Wetlands of International Importance 1972 (“the Ramsar Convention”). The Ramsar Convention provides for the listing of wetlands of international importance. UK Government policy is to give sites listed under this convention (“Ramsar Sites”) the same protection as European sites and the new national site network.
- 2.1.4 For the purposes of this HRA Screening Report (Draft NSER), in line with the Habitats Regulations and relevant Government policy, the term “European sites” and new national site network includes SACs, candidate SACs (“cSAC”), possible SACs (“pSAC”), Special Protection Areas (“SPA”), potential SPAs (“pSPA”), Sites of Community Importance (“SCI”), listed and proposed Ramsar Sites and sites identified or required as compensatory measures for adverse effects on any of these sites.
- 2.1.5 Amongst other things, the Habitats Regulations define the process for the assessment of the implications of plans or projects on European sites. This process is termed the HRA.
- 2.1.6 HRA can involve up to four stages, as detailed in Box 1.

³ UK Government. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. 2019. (Online) Available from: <https://www.legislation.gov.uk/uksi/2019/579/contents/made> (Accessed August 2021).

Box 1 Stages of Habitats Regulations Assessment

Stage 1 – Screening:

This stage identifies the likely impacts upon a European Site of a project or Plan, either alone or 'in combination' with other projects or plans, and considers whether these impacts are likely to be significant.

Stage 2 – Appropriate Assessment:

Where there are likely significant impacts, this stage considers the impacts of the Plan or project on the integrity of the relevant European Sites, either alone or 'in combination' with other projects or plans, with respect to the sites' structure and function and their conservation objectives. Where there are adverse impacts, it also includes an assessment of the potential mitigation for those impacts.

Stage 3 – Assessment of Alternative Solutions:

Where adverse impacts [on the integrity of the site] are predicted, this stage examines [whether or not there are] alternative ways of achieving the objectives of the project or Plan that avoid adverse impacts on the integrity of European Sites.

Stage 4 – Assessment Where No Alternative Solutions Exist and Where Adverse Impacts Remain:

This stage assesses compensatory measures where it is deemed that the project or Plan should proceed for imperative reasons of overriding public interest (IROPI).

- 2.1.7 Stages 1 and 2 are covered by Regulation 63 and Stages 3 and 4 are covered by Regulation 64 and 68 of the Habitats Regulations.
- 2.1.8 With respect to Stage 2, the integrity of a European Site relates to the site's conservation objectives and has been defined in guidance as "the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated"⁴. An adverse effect on integrity, therefore, is likely to be one which prevents the site from making the same contribution to favourable conservation status for the relevant feature as it did at the time of designation. The HRA screening process uses the threshold of LSE to determine whether effects on European sites should be the subject of further assessment. The Habitats Regulations do not define the term LSE. However, in the Waddenzee case (Case C-127/02)⁵ the European Court of Justice found that an LSE should be presumed, and an Appropriate Assessment (AA) carried out if it cannot be excluded on the basis of objective information that the plan or project will not have significant effects on the conservation objectives of the site concerned, whether alone or in-combination with any other project.

⁴ Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, at section 4.6.3 (Updated Version, November 2018)

⁵ Judgment of the Court (Grand Chamber) of 7 September 2004. Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij. Reference for a preliminary ruling: Raad van State - Netherlands. Case C-127/02

The Advocate General's opinion of the Sweetman case (Case C-258/11)⁶ further clarifies the position by noting that for a conclusion of an LSE to be made "there is no need to **establish** such an effect...it is merely necessary to determine that there **may** be such an effect" (original emphasis).

- 2.1.9 For the reasons highlighted above the assessment process follows the precautionary principle throughout and the word 'likely' is regarded as a description of a risk (or possibility) rather than in a legal sense an expression of probability.
- 2.1.10 Screening can be used to screen-out European sites and elements of works from further assessment, if it is possible to determine that significant effects are unlikely (e.g., if sites or interest features are clearly not vulnerable (exposed and / or sensitive) to the outcomes of the Project due to the absence of any reasonable impact pathways).
- 2.1.11 The screening process has two potential conclusions, namely that the Project, alone or in combination with other developments, could result in:
- No LSE on any of the qualifying features of the site; or
 - LSE identified, or cannot be ruled out, on one or more of the qualifying features of the site.
- 2.1.12 Only the second of these outcomes will trigger an AA. If one or more LSE are identified, or cannot be ruled out, it is then necessary to proceed to Stage 2 and produce an AA.
- 2.1.13 On 12 April 2018, the Court of Justice of the European Union (CJEU) issued a judgment on Case C323/17 (People over Wind, Peter Sweetman v Coillte Teoranta) which stated (at paragraph 41):
- 2.1.14 "Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects [mitigation] of the plan or project on that site."
- 2.1.15 This means that any mitigation relating to protected sites under Regulation 63(1) of the Habitats Regulations will no longer be considered at the screening stage but taken forward and considered at the appropriate assessment stage to inform a decision on whether no adverse effects on site integrity can be demonstrated.
- 2.1.16 The assessment provided within this HRA takes into account the CJEU ruling on 'People over Wind'. It has also adopted a strong precautionary principle; if a pathway of effect is established between the Project and a European Site, then that site is taken through to appropriate assessment. This ensures all effects are captured, including *de minimis* effects.
- 2.1.17 The Project is not connected with or necessary to the management of any European sites. Accordingly, the Secretary of State as the competent authority will undertake an assessment in line with the requirements of the Habitats Regulations. This Habitats Regulations Assessment Screening Report (Draft No Significant Effects Report) is the record of the Applicant's assessment of likely significant effects to determine whether an appropriate assessment is required.

⁶ Judgment of the Court (Third Chamber), 11 April 2013 Peter Sweetman and Others v An Bord Pleanála. Request for a preliminary ruling from the Supreme Court (Ireland) Case C-258/11

2.2 HRA screening steps

- 2.2.1 This report is intended to cover HRA ‘Stage 1 – Screening’ only.
- 2.2.2 Screening aims to determine whether the Project will have any LSE on any European site as a result of its implementation. It is intended to be a coarse filter for identifying effects (positive and negative) that may occur, to allow the assessment stage to focus on the most important aspects.
- 2.2.3 This report follows the procedures for screening described by the European Commission in the guidance document ‘*Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*’. These steps are:
- Step 1: Determining whether the project or plan is directly connected with or necessary for the management of the site;
 - Step 2: Describing the project (or plan);
 - Step 3: Identifying the potential effects on European sites; and
 - Step 4: Assessing the significance of any effects on European sites.
- 2.2.4 **Sections 3 - 6** of this report deal in turn with Steps 1 – 4 of the screening process. **Section 7** contains a summary of the outcome of the screening process.

3. HRA Screening

Step 1: Identification of the Project's Relevance to the Conservation Management of European Sites

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- 3.1.1 Regulation 63 of the Habitats Regulations applies only to those plans or projects that are not directly related to the conservation management of a Natura 2000 site. This first step of the screening process is therefore to identify whether the plan or project in question is related to the conservation management of any European sites.
- 3.1.2 The European Communities (EC, 2001) guidance makes it clear that, for a project or plan to be 'directly' connected with or necessary to the management of a European site, the management must refer to measures that are for conservation purposes, with the 'directly' element referring to measures that are solely conceived for the conservation management of a site and not direct or indirect consequences of other activities.
- 3.1.3 The Project is a 'plan or project', for the purpose of the Habitat Regulations, but is not directly connected with or necessary for the management of any European site. An Appropriate Assessment may, therefore, still be required and so it is necessary to proceed to Step 2 of the Screening Process.

4. HRA Screening Step 2: Description of the Project and the Potential for Effects on European Sites

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4.1 Introduction

- 4.1.1 This step requires an understanding of the location and description of the elements of the Project that could result in effects on a European Site. The description identifies the elements of the Project that may directly affect a European site (e.g. land-take), those that may indirectly affect a European site (e.g. emissions to air) and those that may act in-combination with other plans or projects.

4.2 The Project

- 4.2.1 The Project will comprise both new infrastructure and works to existing transmission infrastructure and facilities. The new elements of the Project would include a new substation (Overton Substation) approximately 1km south of Shipton by Beningbrough. Three new overhead lines would connect into this substation. To the north a new 400kV overhead line, approximately 2.8km in length, would connect the substation with an existing overhead line to the north. To the south two new 275kV overhead lines (1.5km to 2.1km in length) would connect the substation with an existing overhead line further south. Cable sealing end compounds would be installed to help facilitate the connection of the new overhead lines with the existing overhead lines in the wider area, with two installed approximately 1.5km north-east of Shipton by Beningbrough and two installed approximately 3km south-west of Tadcaster and north-east of the A64/A659 junction. A new substation would also be constructed adjacent to the existing substation at Monk Fryston approximately 2km south-west of Monk Fryston village and located off Rawfield Lane, south of the A63.
- 4.2.2 Works proposed to existing overhead lines in the wider area include replacing existing overhead line conductors, replacement of pylon fittings, strengthening of steelwork and works to pylon foundations. Two overhead lines which currently connect into the existing Monk Fryston substation would be partially realigned to connect into the proposed Monk Fryston Substation. In addition, a number of pylons on the existing overhead line running between Monk Fryston and Poppleton to the north-west of York would be replaced and the overhead line realigned as follows:
- a 1.5km section of overhead line to the south and south-east of Moor Monkton would be realigned up to 230m south from the current overhead line and the closest pylon to Moor Monkton (340m south-east) removed; and
 - a 1.45km section of overhead line to the west of the existing Monk Fryston substation and south of South Pollums Farm would be realigned to connect to the new Monk Fryston Substation.
- 4.2.3 A 2.35km section of this overhead line would also be permanently removed.
- 4.2.4 The Project also includes minor works at Osbaldwick Substation. Further detail about the Project is provided in **PEIR Chapter 3: Description of the Project**.

4.3 Initial baseline

- 4.3.1 As detailed within **PEIR Chapter 8 Biodiversity Section 8.4**, an initial desk study was carried out in February/March 2021 to inform the scoping process, when the Study Area was based on the Scoping red line boundary. The Project design has been developed and refined since scoping with the red line boundary used for scoping replaced by the draft Order Limits (**PEIR Section 3.3**). An updated data gathering exercise was undertaken in June 2021 to inform the PEIR, and involved obtaining information relating to relevant statutory and non-statutory biodiversity sites, habitats and species of principal importance, legally protected and controlled species and other conservation notable habitats or species that have been recorded over the previous ten years (2011 to 2021) within the relevant areas of search. **PEIR Chapter 8 Table 8.6** lists the data compiled within each area of search within the overall Study Area.
- 4.3.2 Partial survey data is available from field surveys (undertaken between May and mid-July 2021) to inform the PEIR and this screening report. Field surveys are continuing throughout 2021 and 2022. The proposed field survey programme outlined in **PEIR Chapter 8 Table 8.8** is based on the results of the desk study, industry guidance and comments received in the Scoping Opinion. Dates of field surveys are dependent on the availability of land access; however, all surveys will be undertaken in the appropriate season according to respective best practice guidelines. Further engagement and consultation regarding the survey programme will take place as it progresses with those organisations named in **PEIR Chapter 8 Section 8.3**.
- 4.3.3 For the winter bird walkover surveys, the survey methods involved walked transect surveys to record field use, distribution and abundance of wintering birds via public highways and public rights of way (PRoWs). Surveys to date/future surveys have been/will be undertaken in two key areas within the draft Order Limits near Monk Fryston Substation and to the north-west of York which are partially complete. February to March 2021 surveys have been completed and further surveys will be undertaken during the period October 2021 to March 2022.
- 4.3.4 Interim results from the winter bird surveys undertaken in February and March 2021 near the existing Monk Fryston Substation and to the north-west of York indicate the following target species were recorded:
- Seventeen target species of waterfowl were recorded to the north-west of York, with mallard (*Anas platyrhynchos*) and lapwing (*Vanellus vanellus*) being recorded on every visit. Golden plover (*Pluvialis apricaria*) was the only species recorded that was also a qualifying species from the Lower Derwent Valley SPA, with a single flock of 29 individuals observed in late February.
 - Seven target species were recorded in flight to the north-west of York, consisting of five waterbird species (curlew (*Numenius arquata*), goosander (*Mergus merganser*), greylag goose (*Anser anser*), oystercatcher (*Haematopus ostralegus*) and teal (*Anas crecca*)) and two raptor species (red kite (*Milvus milvus*) and kestrel (*Falco tinnunculus*)). Greylag goose was recorded in flight on eight occasions, with a maximum count of 14 birds. All other waterbird species observations consisted of a single flight. Single red kite flights were recorded on each visit, each of a single bird. Kestrel was recorded three times across two of the visits.
 - Species of Principal Importance (SPI) species recorded to the north-west of York consisted of grey partridge, herring gull (*Larus argentatus*), lapwing, reed bunting (*Emberiza schoeniclus*), skylark (*Alauda arvensis*), song thrush (*Turdus philomelos*), starling (*Sturnus vulgaris*), tree sparrow (*Passer montanus*) and

yellowhammer (*Emberiza citrinella*). Lapwing (peak count 116), starling (250) and yellowhammer (30) were recorded on all four visits. Curlew, fieldfare (*Turdus pilaris*), grey partridge (*Perdix perdix*), herring gull (*Larus argentatus*), lapwing, redwing (*Turdus iliacus*), skylark, song thrush, starling, tree sparrow and yellowhammer, all BoCC red listed species were also recorded. In addition to lapwing, starling and yellowhammer, fieldfare (250) and redwing (100) were recorded on all four visits.

- Six species of waterfowl were recorded during surveys near the existing Monk Fryston Substation, with mallard, the only species also cited from the Fairburn and Newton Ings SSSI, the most frequent (recorded on three out of four visits) with a maximum of four birds being recorded in late March.
- Two target species were recorded in flight near the existing Monk Fryston Substation, a single flight of two unidentified swans and two flights of peregrine falcon (*Falco peregrinus*).
- SPI species recorded in surveys near the existing Monk Fryston Substation consisted of bullfinch (*Pyrrhula Pyrrhula*), herring gull and skylark. Herring gull and skylark are also BoCC red listed species. Redwing and fieldfare were the only other BoCC red listed species recorded. All species were recorded infrequently, with skylark (peak count of three) and redwing (30) the most frequent species, being recorded on two visits each.

5. HRA Screening Step 3: Identification of Potential Effects on European Sites

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5.1 European designated sites included for assessment

Approach

- 5.1.1 With respect to European sites featuring qualifying habitats that could be affected by the Project, sites were included if they fell within 2 km of the Project.
- 5.1.2 With respect to European sites featuring qualifying ornithological interests, linkages were determined based on an understanding of potential connectivity with foraging range and movement between nesting colonies or roosting sites and foraging sites. Sites were automatically included if they fell within 500 m of the Project order limits, but links to European designated sites whose qualifying interest species have a potential foraging range in potential functionally linked habitat that overlaps with the Project, nominally within 20 km were also considered (location of European Sites are illustrated in **PEIR Figure 8.1.**)
- 5.1.3 For any European site where a qualifying feature was present in one or more of the same site types (SPA, SAC or Ramsar), and their reasons for inclusion were the same (i.e. two SPA sites both supporting more than 1% of the Great British breeding population) only the site closest to the Project was initially included for screening assessment. If LSE were present for the first site, then assessment extended to the next furthest away site. If LSE are found for any mobile qualifying features on the nearest site, then all sites within that qualifying features foraging ranges will be taken forward for further assessment.
- 5.1.4 Each European site is designated as a SAC, classified as a SPA, or listed as a Ramsar site in respect of specific 'qualifying features'. These 'qualifying features' (habitats, mosaics of habitats, species or assemblage of species, and combinations of these) are the reasons for which the site is to be protected and managed for conservation purposes.
- 5.1.5 For SPAs, the qualifying features are the birds for which the SPA is classified, under either:
- Article 4(1) rare and vulnerable species, species in danger of extinction or requiring particular attention because of their habitat needs, listed in Annex I of the Birds Directive; or
 - Article 4(2) regularly occurring migratory species (e.g. on passage or over-wintering or an internationally important assemblage of birds) not listed in Annex I.
- 5.1.6 The qualifying features of SACs are the habitats listed in Annex I of the Habitats Directive and the species listed in Annex II of the Directive. The 'qualifying features' of Ramsar sites are the list of Criteria as set out in the Convention on Wetlands of International Importance (Ramsar Convention). All receptors that are qualifying features of European sites (Natura 2000/Ramsar sites) (or support such features), and which may potentially be affected by the Project have been considered within this screening process.

- 5.1.7 The desk study has identified one Ramsar Site and one SPA within the Study Area, as outlined in **PEIR Chapter 8 Biodiversity Table 8.9**. None of the sites identified fall within the draft Order Limits.
- 5.1.8 It should be noted that the River Derwent is designated as a SAC which has been scoped out of the assessment process as it lies outside any Zone of Influence (Zol) (i.e. it is a European site which is located more than 2km from the draft Order Limits and does not include bat or ornithological interest features). Furthermore, the draft Order Limits lie outside the River Derwent catchment, which negates any risk of pollution/disturbance effects on the Annex 1 habitat for which the SAC is designated.
- 5.1.9 Details of the sites considered for assessment and their qualifying features are listed in **Table 5.1**.

Table 5.1 European sites included for assessment

Site Name	Approximate Distance from the Project order limits	Site Description	Qualifying features
Lower Derwent Valley Ramsar Site	~6.12km southeast	A seasonally inundated river floodplain between two villages. Dominant vegetation is grassland that is determined by the extent of winter flooding. The site includes one of the most important examples of traditionally managed species-rich alluvial flood meadow habitat remaining in the UK. The site is of particular importance for several species of breeding waders, and nationally important numbers of ducks and swans breed or winter at the site.	<p>Criterion 1: Species-rich alluvial flood meadow habitat which plays a substantial role in the hydrological and ecological functioning of the Humber Basin.</p> <p>Criterion 2: A rich assemblage of wetland invertebrates including 16 species of dragonfly and damselfly, 15 British Red Data Book wetland invertebrates and a leafhopper, <i>Cicadula ornata</i> for which Lower Derwent Valley is the only known site in Great Britain.</p> <p>Criterion 4: The site qualifies as a staging post for passage birds in spring, with nationally important numbers of ruff (<i>Philomachus pugnax</i>) and whimbrel (<i>Numenius phaeopus</i>).</p> <p>Criterion 5: Winter waterfowl assemblage of international importance.</p>

Site Name	Approximate Distance from the Project order limits	Site Description	Qualifying features
Lower Derwent Valley SPA	~6.12km southeast	<p>Situated to the south of York, the Lower Derwent Valley is one of the largest areas of traditionally managed flood plain meadows in England. The Valley, running north-south along the course of the River Derwent for approximately 10 miles falls within both the Vale of York and Humberhead Levels National Character Areas.</p> <p>The meadows are known locally as lngs (a word of Nordic origin referring to low lying wet meadow or pasture) and support a wealth of wildflowers in the spring and early summer. They also support a rich breeding bird community together with important populations of dragonflies and other invertebrates and otter. During the winter months these same grasslands are partially flooded and support internationally important populations of waterfowl. The site includes both the river itself and adjacent floodplain habitat.</p>	<p>Criterion 6: Peak winter counts of: wigeon (<i>Anas penelope</i>); and teal (<i>Anas crecca</i>).</p> <p>The site qualifies under Article 4.1 by regularly supporting nationally important numbers during the non-breeding season for:</p> <p>Bewick's swan (<i>Cygnus columbianus bewickii</i>); Ruff; golden plover (<i>Pluvialis apricaria</i>); teal; and wigeon.</p> <p>The site also qualifies under Article 4.2 by regularly supporting a breeding population of: shoveler (<i>Anas clypeata</i>).</p> <p>The site also qualifies under Article 4.2 by regularly supporting a waterfowl assemblage including: Bewick's swan, wigeon, teal, golden plover and ruff.</p>

5.2 Potential impact pathways

5.2.1 This step identifies whether the proposed works described in Step 2 and (**Section 4**) have the potential to cause effects on the qualifying features of these European designated sites.

Zone of Influence

5.2.2 The spatial scope of any HRA should be based on the likely environmental outcomes of the scheme and its ZoI and the interest features of the European sites that may be affected and their potential vulnerabilities. Many European site interest features (particularly animal species) may use or be reliant on non-designated habitats outside of a European site during their life-cycle. Developments some way from a European site can therefore have an effect if its interest features are reliant on the habitats being affected by the development.

5.2.3 The Zols for each broad environmental change are specified below. Due to the level of information currently available for this preliminary assessment, the Zols have been applied broadly to be precautionary:

- Permanent or temporary land take/land use change – ZoI within the draft Order Limits for habitats and sedentary species; mobile species may be affected beyond that if land within the draft Order Limits overlaps their typical home-ranges;
- Fragmentation of habitats – ZoI within the draft Order Limits for habitats and sedentary species; mobile species may be affected beyond that if land within the draft Order Limits overlaps their typical home-ranges;
- Increased noise, vibration, light and movement levels – ZoI for sensitive species is up to 500m from the construction works, noting that for mobile features of designated sites this is related to the species' habitat use and associated foraging home range distance, as opposed to designation boundary;
- Changes in hydrology – ZoI for sensitive habitats and/or species is within the sensitive surface and ground water features described within **PEIR Chapter 9 Hydrology** and **PEIR Chapter 10 Geology and hydrogeology**;
- Changes in air quality – ZoI for sensitive habitats is up to 350m from the construction works;
- Pollution events – ZoI for habitats and species is up to 500m from the draft Order Limits, or further if the source and the ecological feature are directly linked via the river system.

Potential effects

5.2.4 The construction and operation phases of the Project may result in the following potential effect pathways that could result in LSEs:

- **Permanent or temporary land take/land use change** (resulting in habitat loss or degradation and/or loss of fauna);
- **Fragmentation of habitats** (resulting in a reduction in connectivity);
- **Increased noise, vibration, light and movement levels** (resulting in disturbance/displacement);

- **Changes in hydrology** (resulting in the effects of habitat loss or degradation and/or loss of fauna);
- **Changes in air quality** (e.g. dust or vehicle emissions resulting in habitat degradation); and,
- **Pollution events** (including the liberation of sediments and chemicals resulting in habitat loss or degradation and/or loss of fauna).

5.2.5 As fully detailed within the **PEIR**, the following environmental changes are scoped out for all sites and features:

- **Changes in hydrology – PEIR Chapter 9: Hydrology and PIER Chapter 10: Geology and Hydrogeology** do not identify any notable changes and thus resulting potential significant effects on the hydrological regimes across designated biodiversity sites or water-dependent habitats due to construction or operational activities associated with the Project. Therefore, the ecological features that these designated biodiversity sites and supporting habitats support would also not be subject to LSEs.
- **Changes in air quality – PEIR Chapter 12 Traffic and Transport** does not identify any potential significant effects as a result of emissions associated with traffic and plant during construction or operational activities.

5.3 In combination effects

5.3.1 As part of the HRA screening process, information on other projects and plans that have been subject to a HRA in relation to the European designated sites being assessed is required to allow an assessment of any 'in-combination' effects of the Project with other schemes that may affect the European sites. This screening assessment has adopted a strong precautionary principle; if a pathway of effect is established between the Project and any European Site, then that site is taken through to appropriate assessment. This ensures all effects are captured, including the potential for in combination effects and including de *minimis* effects.

6. HRA Screening Step 4: Assessing Significance of Effects on European Sites

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- 6.1.1 This step identifies whether the proposed works described in Step 2 (**Section 4**) and potential effects described in Step 3 (**Section 5**) have the potential to cause LSE on the qualifying features of those European sites identified in Step 3. Each site, qualifying features and screening rational are detailed in **Table 6.1**.

Table 6.1 European sites, qualifying features and potential for LSE

Site	Qualifying Features	Environmental change and potential effect	Zone of Influence	European Site overlap with Zol	Screening rationale	Potential for LSE
Lower Derwent Valley Ramsar Site	<p>Criterion 1: Species-rich alluvial flood meadow habitat</p> <p>Criterion 2: A rich assemblage of wetland invertebrates</p> <p>Criterion 4: Staging post for passage birds in spring,</p> <p>Criterion 5: Winter waterfowl assemblage of international importance.</p>	<p>Permanent or temporary land take/land use change (resulting in habitat loss or degradation and/or loss of fauna).</p> <p>Fragmentation of habitats (resulting in a reduction in connectivity)</p> <p>Increased noise, vibration, light and movement levels (resulting in</p>	<p>Within the footprint of the construction/operational works</p> <p>Within the footprint of the construction/operational works</p> <p>Up to 500m from the construction works for sensitive species</p>	<p>Neither the Ramsar Site nor any functionally linked land (FLL) lie within this Zol</p> <p>Neither the Ramsar Site nor any FLL lie within this Zol</p> <p>Neither the Ramsar Site nor any FLL lie within this Zol</p>	<p>Surveys in February and March 2021 indicated that a single species which is also a qualifying feature of the Ramsar Site, (wintering teal, a single bird recorded in flight), had been recorded within the draft Order Limits to the north-west of York approximately 15km to the north-west of the Ramsar Site.</p> <p>It is unlikely that this individual originates from the Ramsar Site given that there is no published evidence that indicates the distance between the Ramsar Site and the draft Order Limits is within that home range distance associated with typical daily commuting distances for this species and it would be unlikely to travel across such</p>	<p>There is no published evidence</p>

Site	Qualifying Features	Environmental change and potential effect	Zone of Influence	European Site overlap with Zol	Screening rationale	Potential for LSE
	Criterion 6: Peak winter counts of: and teal.	disturbance and/or displacement) Pollution events (including the liberation of sediments and chemicals resulting in habitat loss or degradation and/or loss of fauna)	Up to 500m from the draft Order Limits, or further if the source and the ecological feature are directly linked via the river system	Neither the Ramsar Site nor any FLL lie within this Zol	a distance whilst suitable habitats are available within the Ramsar Site and any functionally linked land. It is considered that there is no connectivity between the Ramsar Site and land within the draft Order Limits and as such land within the draft Order Limits does not represent any functionally linked habitat to the Ramsar Site. Consequently, the Project is considered to be of negligible importance for the qualifying criterion features of the Lower Derwent Valley Ramsar Site and therefore no pathways for LSE exist	
Lower Derwent Valley SPA:	Article 4.1- regularly supporting nationally	Permanent or temporary land take/land use change	Within the footprint of the construction/ operational works	Neither the SPA or any functionally linked land (FLL) lie within this Zol	Neither the SPA, or any FLL lie within any Zol. Furthermore, surveys in February and March 2021	NO

Site	Qualifying Features	Environmental change and potential effect	Zone of Influence	European Site overlap with Zol	Screening rationale	Potential for LSE
	important numbers during the non-breeding season for: Bewick's swan, Ruff golden plover, teal and wigeon.	(resulting in habitat loss or degradation and/or loss of fauna). Fragmentation of habitats (resulting in a reduction in connectivity)	Within the footprint of the construction/operational works	Neither the SPA or any FLL lie within this Zol	indicated that two species which are also qualifying features of Lower Derwent Valley SPA, wintering golden plover (single flock of 29) and teal (single bird recorded in flight), were recorded within the draft Order Limits to the north-west of York approximately 15km to the north-west of the SPA. However, it is unlikely that these individuals originated from the SPA given that there is no published evidence that indicates the distance between the SPA and the draft Order Limits is within that home range distance associated with typical daily commuting distances for these species. This is further supported by the presence of a major urban area (York) which these species would be unlikely to regularly and	
	Article 4.2: regularly supporting a breeding population of shoveler.	Increased noise, vibration, light and movement levels (resulting in disturbance and/or displacement)	Up to 500m from the construction works for sensitive species	Neither the SPA or any FLL lie within this Zol.		
	Article 4.2: regularly supporting a waterfowl assemblage including:	Pollution events	Up to 500m from the draft Order Limits, or further if the source and the ecological feature are directly	Neither the SPA or any FLL lie within this Zol		

Site	Qualifying Features	Environmental change and potential effect	Zone of Influence	European Site overlap with Zol	Screening rationale	Potential for LSE
	Bewick's swan, wigeon, teal, golden plover and ruff.	(including the liberation of sediments and chemicals resulting in habitat loss or degradation and/or loss of fauna)	linked via the river system		preferentially cross whilst suitable habitats are available within the SPA and its FLL. It is therefore considered that there is no connectivity between the SPA and land within the draft Order Limits, and as such land within the draft Order Limits does not represent any SPA FLL. Therefore, the Project is considered to be of negligible importance for the qualifying features of the SPA and no pathways exist for any potential LSE.	

7. Potential LSE on European Sites

7. Potential LSE on European Sites

- 7.1.1 Stage 1 of the HRA process, the four part screening, identifies the likely impacts upon a European site of a project or Plan, either alone or 'in combination' with other projects or plans, and considers whether these impacts are likely to be significant.
- 7.1.2 Based on **Section 5** and **Table 6.1**, there is no potential for LSEs to occur in relation to any potential effect pathways on the qualifying features of the following European sites:
- Lower Derwent Valley Ramsar Site
 - Lower Derwent Valley SPA
- 7.1.3 As there are no pathways for LSEs (including de *minimis*) there is no potential for any in-combination LSEs for any features of any European sites, and therefore there is no requirement for Stage 2 of HRA, Appropriate Assessment, to be undertaken.

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