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Revised Publication Selby Local Plan 2024

Habitats Regulations Assessment

North Yorkshire Council (formerly Selby District Council)

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Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
0	December 2020	Draft Habitats Regulations Assessment Report	JR	Dr James Riley	Technical Director
1	January 2021	Revision in response to client comments	JR	Dr James Riley	Technical Director
2	August 2022	Revision in response to Regulation19 Publication Plan document	JR	Dr James Riley	Technical Director
3	September 2022	Further updates to take account of air quality data	JR	Dr James Riley	Technical Director
4	January 2024	Updates following amendments to the Local Plan and consultation with Natural England	JR	Dr James Riley	Technical Director

Distribution List

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1. Introduction

1.1 AECOM was appointed by Selby District Council (SDC) to undertake a Habitats Regulations Assessment (HRA) of its Revised Publication Selby Local Plan (SLP). The objective of this assessment is to identify any aspects of the SLP that would cause Likely Significant Effects (LSEs) and adverse effects on the integrity of sites designated for their international nature conservation interest, otherwise known as European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), candidate Special Areas of Conservation (cSACs), potential Special Protection Areas (pSPAs) and, as a matter of Government policy, Ramsar sites, either alone or in-combination with other plans and projects. Under the Conservation of Habitats and Species Regulations 2017 (as amended), an Appropriate Assessment is required, where a plan or project is likely to have a significant effect upon a European site, either individually or in combination with other projects. Should the HRA identify potential adverse effects, appropriate policy mechanisms for delivering mitigation should be recommended.

1.2 An initial HRA was undertaken on the Publication Selby Local Plan in 2022, but that Local Plan has been substantially revised and a new HRA is therefore required.

1.3 The former Selby district is primarily rural with three main settlements, Selby town, Tadcaster and Sherburn in Elmet. Furthermore, it comprises over 60 villages that vary considerably in size and facilities available. The district covers an area of 6,190km^2 in north-east England and lies adjacent to the authorities of East Riding of Yorkshire, Doncaster, Wakefield, the Cities of Leeds and York, and Harrogate. Much of the SLP's housing growth is directed towards sustainable locations with a good range of services and accessibility. However, some growth is allocated in the district's smaller villages in order to help sustain their local services. Urban growth allocated in the eastern part of he former Selby district in particular may have implications for nature conservation sites because this is where the district's European sites are located. The Revised Publication SLP sets out a minimum requirement of 7,728 residential dwellings and 91.2 hectares of employment land to be delivered in the district between 2022 and 2040 based on evidence of need (Policy SG2). The SLP allocates sufficient land to deliver 6,452 dwellings (Policy HG1) and 130.95 hectares of employment land (Policy EM1). It is to be noted that of the overall housing quantum provided, only 5,314 dwellings are currently allocated in the SLP. The rest is to be delivered as completions of implemented planning permissions, unimplemented planning permissions and windfall development (Policy HG1).

1.4 There is only one European site that lies wholly within the former Selby district boundary, Skipwith Common SAC designated for its heathland habitats. Four further European sites straddle the boundary between the former Selby district and the East Riding of Yorkshire, namely the Lower Derwent Valley SPA / Ramsar / SAC and the River Derwent SAC. Together these sites are interdependent, encompassing one hydrological system and being sensitive to similar impact pathways. Further European sites (e.g., the Humber Estuary SPA / Ramsar / SAC, the Kirk Deighton SAC, the Thorne & Hatfield Moors SPA and the Thorne Moors SAC) lie outside the district's boundary but are relevant to the HRA process because they lie within the potential distance for specific impact pathways (e.g., impacts on water quality and water quantity / flow), particularly when considering the SLP in-combination with other plans and projects.

Legislation

1.5 The UK left the EU on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 ("the Withdrawal Act"). This established a transition period, which ended on 31 December 2020. However, the most recent amendments to the Habitats Regulations – the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 – make it clear that the need for HRA continues after Brexit. The need for Appropriate Assessment is summarised in Box 1.

1.6 The HRA process applies the 'Precautionary Principle'[1] to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the European site(s) in

[1] The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: *"When human activities may lead to morally unacceptable harm [to the environment] that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis".*

question. Plans and projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

1.7 In order to ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the plan or project in question:

Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

"*A competent authority, before deciding to … give any consent for a plan or project which is likely to have a significant effect on a European site … shall make an appropriate assessment of the implications for the site in view of that sites conservation objectives… The authority shall agree to the plan or project only after having ascertained that it willnot adversely affect the integrity of the European site*".

Box 1: The legislative basis for Habitats Regulations Assessment

1.8 The competent authority that carries out the HRA (in this case the former Selby District Council, now North Yorkshire Council) is required to apply the precautionary principle to European sites and can only adopt a plan once it has been ascertained that it will not adversely affect the integrity of the site concerned. However, even if significant adverse effects on the designated site are predicted, and in the absence of a suitable alternative solution, the plan can still be adopted in exceptional circumstances where there are deemed sufficient imperative reasons of over-riding public interest (IROPI). In such cases, however, compensatory measures must be implemented.

1.9 In spring 2018 the 'Sweetman' European Court of Justice ruling[2] clarified that 'mitigation' (i.e., measures that are specifically introduced to avoid or reduce a harmful effect on a European site that would otherwise arise) should **not** be taken into account when forming a view on likely significant effects. Mitigation should instead only be considered at the Appropriate Assessment stage. This HRA has been cognisant of that ruling.

Relevant case law

1.10 As a consequence of the UK's exit from the EU, it was necessary for various amendments to be made to the Habitats Regulations. These changes were required to ensure that England and Wales (and Scotland through separate regulations) continue to maintain the same standard of protection afforded to European sites. The Habitats Regulations remain in force, including the general provisions for the protection of European sites and the procedural requirements to undertake HRA. The changes made were only those necessary to ensure that they remain operable following the UK's exit from the EU.

1.11 Although the UK is no longer part of the EU, a series of prior rulings of the Court of Justice of the European Union (CJEU) are relevant and have been considered when preparing this document. These rulings and their implications for this HRA are summarised in Table 1.

Table 1. Case Law Relevant to the HRA of the Local Plan

Case	Ruling	Relevance to the HRA of the Local Plan
People Over Wind and Sweetman v Coillte Teoranta (C-323/17)	The ruling of the CJEU in this case requires that any conclusion of 'no likely significant effect' on a European site must be made prior to any consideration of measures to avoid or reduce harm to the European site. The determination of likely significant effects should not, in the opinion of the CJEU, constitute an attempt at detailed technical analyses. This should be conducted as part of the appropriate	NatureScot has published guidance on the implications of this ruling for HRA (SNH, 2019). It will be necessary to distinguish between those measures which are intended to avoid or reduce harmful effects on a European site and those elements of the flood management plan that may incidentally provide some degree of mitigation, but which are intrinsic or essential parts of the plan itself. SNH advises that intrinsic parts of a plan can be considered at the screening stage of HRA. If it can be concluded that the Flood management plan area will have no adverse effect on any European site, in the absence

[2] People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

Case	Ruling	Relevance to the HRA of the Local Plan
	assessment.should be conducted as part of the appropriate assessment.	of mitigation, it will be possible to conclude 'no likely significant effects', and the need for further detailed appropriate assessment will be 'screened out'.
Waddenzee (C-127/02)	The ruling in this case clarified that appropriate assessment must be conducted using best scientific knowledge, and that there must be no reasonable scientific doubt in the conclusions drawn. The Waddenzee ruling also provided clarity on the definition of 'significant effect', which would be any effect from a plan or project which is likely to undermine the conservation objectives of any European site.	Adopting the precautionary principle, a 'likely' effect in this HRA is interpreted as one which is 'possible' and cannot be objectively ruled out. The test of significance of effects has been conducted with reference to the conservation objectives of relevant European sites.
Holohan and Others v An Bord Pleanála (C-461/17)	The conclusions of the Court in this case were that consideration must be given during appropriate assessment to: • effects on qualifying habitats and/or species of a SAC or SPA, even when occurring outside of the boundary of a European site, if these are relevant to the site meeting its conservation objectives, and • effects on non-qualifying habitats and/or species on which the qualifying habitats and/or species depend and which could result in adverse effects on the integrity of the European site.	This relates to the concept of 'functionally-linked habitat', i.e., areas outside of the boundary of a European site which supports its qualifying feature(s). In addition, consideration must be given to non-qualifying features upon which qualifying habitats and/or species rely.
T.C Briels and Others v Minister van Infrastructuur en Milieu (C-521/12)	The ruling of the CJEU in this case determined that compensatory measures cannot be used to support a conclusion of no adverse effect on site integrity.	Compensation can only be considered at the relevant stage of HRA and not during appropriate assessment. Compensation must be delivered when appropriate assessment concludes that there will be adverse effects on site integrity.

Scope of the Project

1.12 There is no guidance that dictates the physical scope of an HRA of a Plan document in all circumstances. Therefore, in considering the physical scope of the assessment, AECOM was guided primarily by the identified impact pathways (called the source-pathway-receptor model) rather than by arbitrary 'zones'. Current guidance suggests that the following European sites be included in the scope of assessment:

- All sites within the boundary of Selby District; and,
- Other sites shown to be linked to development within the authority boundary through a known impact 'pathway' (discussed below); generally, to a distance of 10km.

1.13 Briefly defined, impact pathways are routes by which the implementation of a policy within a Local Plan document can lead to an effect upon a European designated site. An example of this would be new residential development resulting in an increased population and thus increased recreational pressure, which could then affect European sites through, for example, disturbance of wintering or breeding birds.

1.14 Guidance from the Ministry of Housing, Communities and Local Government (MHCLG) states that the HRA should be '*proportionate to the geographical scope of the* [plan policy]' and that '*an AA need not be done in any more detail, or using more resources, than is useful for its purpose'* (MHCLG, 2006, p.6). More recently, the Court of Appeal ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be 'achieved in practice' to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to a planning permission (rather than a Local Plan document). In this case the High Court ruled that for 'a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully

resolved before a decision maker is able to conclude that a development will satisfy the requirements of Reg 61 of the Habitats Regulations'.

1.15 In order to fully inform the screening process and / or Appropriate Assessment, a number of documents and studies have been consulted to form the evidence base for this HRA. These include:

- Future development proposed in the Local Plans and Core Strategies for adjoining authorities and their accompanying HRAs (where available);
- Bespoke visitor surveys undertaken by Footprint Ecology in Selby District covering the Skipwith Common SAC and the Lower Derwent Valley SPA / Ramsar / SAC, as well as the Humber Estuary SPA / Ramsar / SAC;
- Water Resources Management Plan (WRMP) published by Yorkshire Water and its HRA;
- The UK Air Pollution Information System (www.apis.ac.uk);
- Multi Agency Geographic Information for the Countryside (MAGIC) and its links to SSSI citations and the JNCC website (www.magic.gov.uk); and
- Impact-specific information sources such as the Environment Agency's Catchment Data Explorer, the CAMS.

1.16 Other ecological reports were provided for some allocations but they are only referenced above if they were of direct use in the Local Plan HRA.

The Layout of this Report

1.17 Chapter 2 of this report explains the methodology by which this HRA has been carried out, including the three essential tasks that form part of the HRA process. Chapter 3 provides detail on the European sites relevant to Selby District, including an introduction to the sites, a summary of their qualifying habitats / species, Natural England Conservation Objectives and the current threats and pressures relevant for these sites. Detailed background on the main impact pathways identified in relation to the SLP and European Sites is provided in Chapter 4. Chapter 5 undertakes the screening for Likely Significant Effects (LSEs) of the Plan's policies and site allocations (see Appendix B screening tables). Chapter 6 undertakes the Appropriate Assessment of the impact pathways and Plan policies for which LSEs could not be excluded. The conclusions and recommendations arising from the HRA are set out in Chapter 7.

Quality Assurance

1.18 This report was undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our certification to the international standards BS EN ISO 9001:2015 and 14001:2015, ISO 44001:2017 and ISO 45001:2018. In addition, our IMS requires careful selection and monitoring of the performance of all sub-consultants and contractors.

1.19 All AECOM Ecologists working on this project are members (at the appropriate level) of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct (CIEEM, 2017).

2. Methodology

2.1 Project-related HRA often requires bespoke survey work and novel data generation in order to accurately determine the significance of effects. In other words, to look beyond the risk of an effect to a justified prediction of the actual likely effect and to the development of avoidance or mitigation measures.

2.2 However, there is a tacit acceptance that HRA can be tiered and that all impacts are not necessarily appropriate for consideration to the same degree of detail at all tiers as illustrated in Figure 1 below.

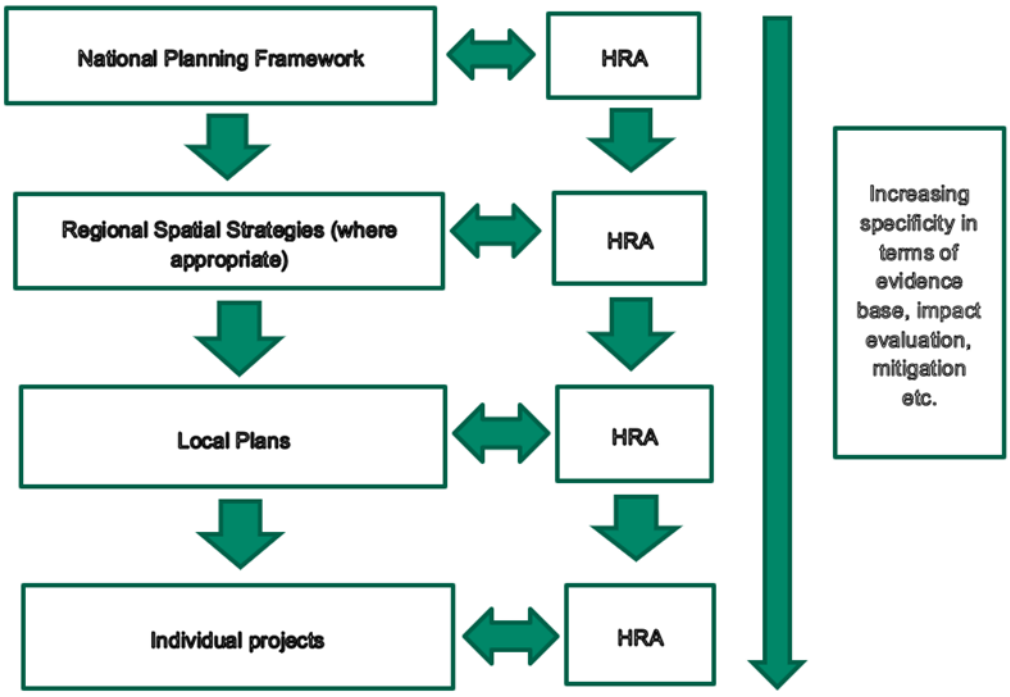

Figure 1. Tiering in HRA of Land Use Plans

2.3 The HRA has been carried out with reference to the general EC guidance on HRA[3] and that produced in July 2019 by the UK government[4]; Natural England has produced its own internal guidance[5]. These have been referred to in undertaking this HRA.

2.4 Figure 2 below outlines the stages of HRA according to current EC guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

[3] European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.
[4] https://www.gov.uk/guidance/appropriate-assessment
[5] http://www.ukmpas.org/pdf/practical_guidance/HRGN1.pdf

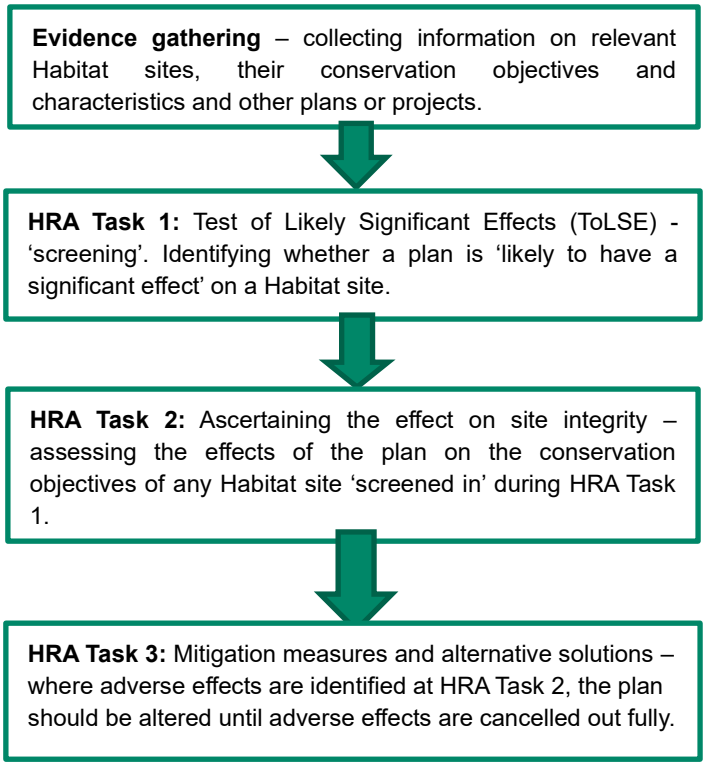

Image 2. Four Stage Approach to Habitats Regulations Assessment. Source EC, 2011.

Description of HRA Tasks

HRA Task 1 – Test of Likely Significant Effects (ToLSE)

2.5 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Likely Significant Effect (LSE) test - essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

"Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

2.6 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be concluded to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction. This stage is undertaken in Chapter 5 of this report and in Appendix B.

HRA Task 2 – Appropriate Assessment (AA)

2.7 Where it is determined that a conclusion of 'no Likely Significant Effect' cannot be drawn, the analysis has proceeded to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'Appropriate Assessment' is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to appropriate assessment rather than determination of likely significant effects.

2.8 By virtue of the fact that it follows the screening process, there is a clear implication that the analysis will be more detailed than undertaken at the previous stage. One of the key considerations during Appropriate Assessment is whether there is available mitigation that would entirely address the potential effect. In practice, the Appropriate Assessment would take any policies or allocations that could not be dismissed following the high-level screening analysis and assess the potential for an effect in more detail, with a view to concluding whether there would actually be an adverse effect on site integrity (in other words, disruption of the coherent structure and function of the European site(s)).

2.9 Also, in 2018 the Holohan ruling[6] was handed down by the European Court of Justice. Among other provisions paragraph 39 of the ruling states that '*As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, … typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area*' [emphasis added]. This has been considered in relation to the Lower Derwent Valley SPA / Ramsar, the Humber Estuary SPA / Ramsar and the Kirk Deighton SAC, which support mobile wildlife including waterfowl and great-crested newts.

HRA Task 3 – Avoidance and Mitigation

2.10 Where necessary, measures are recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on European sites. For example, there is considerable precedent concerning the level of detail that a Local Plan document needs to contain regarding mitigation for recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.

2.11 In evaluating significance, AECOM has relied on professional judgement as well as the results of previous stakeholder consultation regarding impacts of development on the European sites considered within this assessment.

2.12 When discussing 'mitigation' for a Local Plan document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since the Local Plan document is a high-level policy document.

Assessment in Combination

2.1 It is a requirement of the Regulations that the impacts and effects of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.

2.2 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation, i.e., to ensure that those projects or plans which in themselves have minor impacts are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, 'in combination assessment' is of greatest importance when the policy would otherwise be screened out because the individual contribution is inconsequential. The overall approach is to exclude the risk of there being unassessed likely significant effects in accordance with the precautionary principle. This was first established in the seminal Waddenzee[7] case.

2.3 Where housing and employment is being delivered in surrounding authorities this is captured in the 'in combination' assessment through consideration of the relevant Local Plan that sets out the total amount of housing and employment growth that will be delivered across that authority during its plan period.

2.4 The only policies or site allocations that can be screened out entirely are those which have no impact pathway at all to any European sites. 'In combination' effects are taken into account in the screening decisions and determine which policies or site allocations are screened in for appropriate assessment.

…Geographical Scope of the HRA

2.5 There are no standard criteria for determining the ultimate physical scope of an HRA. Rather, the source-pathway-receptor model should be used to determine whether there is any potential pathway connecting development to any European sites. For Selby District, an initial search flagged the following European sites for consideration:

- Lower Derwent Valley SPA / Ramsar
- Lower Derwent Valley SAC (overlaps with SPA / Ramsar);

[6] Case C-461/17
[7] Waddenzee case (Case C-127/02, [2004] ECR-I 7405)

- River Derwent SAC (partly overlaps with the above SPA / Ramsar / SAC);
- Skipwith Common SAC;
- Humber Estuary SPA / Ramsar;
- Humber Estuary SAC (overlaps with SPA / Ramsar);
- Kirk Deighton SAC;
- Thorne & Hatfield Moors SPA/ Ramsar; and
- Thorne Moors SAC.

2.6 This was based upon a search within the former Selby district and up to 10km surrounding the authority boundary. All above sites were subjected to an initial screening exercise. It should be noted that the presence of a conceivable impact pathway linking the emerging SLP to a European site does not mean that Likely Significant Effects (LSEs) will occur. The locations of the sites in relation to the former Selby district is shown on Appendix A.

3. European Sites

Lower Derwent Valley SPA / Ramsar

Introduction

3.1 The Lower Derwent Valley SPA / Ramsar lies to the north-east of Selby town and is one of the largest areas of extensively managed floodplains in England. The site runs for approx. 10 miles along the north-south trajectory of the River Derwent. These meadows support a highly diverse assemblage of wildflowers and a rich community of breeding birds, otters and invertebrates, such as dragonflies. In the overwintering period, much of the grassland is flooded and provides roosting and foraging habitat for internationally important populations of birds.

3.2 The grassland is traditionally managed as hay meadows, with any remaining sward being grazed by cattle and sheep. In addition to the open wet grassland, the SPA / Ramsar also comprises pockets of alder woodland. The site boundary contains the R. Derwent and its adjacent floodplain. Approx. 50% of the site is managed as a National Nature Reserve by Natural England and partner organisations (e.g. the Carstairs Countryside Trust and the Yorkshire Wildlife Trust).

SPA Qualifying Species[8]

3.3 Qualifying individual species listed in Annex I of the Wild Birds Directive (Article 4.1)

During the non-breeding season the SPA regularly supports:

- Bewick's swan *Cygnus columbianus bewickii*;
- European golden plover *Pluvialis apricaria*;
- Ruff *Philomachus pugnax*;

3.4 Qualifying individual species not listed in Annex I of the Wild Birds Directive (Article 4.2)

During the breeding season the SPA regularly supports:

- Northern shoveler *Anas clypeata*;
- Eurasian wigeon *Anas Penelope*;
- Eurasian teal *Anas crecca*;

3.5 Qualifying assemblage of species (Article 4.2)

Waterbird assemblage

The site qualifies under Article 4.2 by regularly supporting over 20,000 wintering waterfowl. In the five year period 1986/87-1990/91 the site held a mean peak of 27,580 birds comprising 17,415 wildfowl and 10,165 waders (English Nature 1993). These large numbers of birds being supported by the rich food resources of the floodplain meadows associated with the site. Since designation, wintering numbers have increased with mean peak counts for the period 2012/13-2016/17 being 33,885 (Frost et al. 2018). The site remains one of the most important inland sites for wintering waterfowl in the United Kingdom. Birds are widely distributed across the site, the relative distribution of wildfowl and waders being dependent upon the flood conditions present in any given winter.

Ramsar Qualifying Species[9]

3.6 The Lower Derwent Valley qualifies as a Ramsar site under the following criteria:

[8] Available in the Site Conservation Objectives Supplementary Advice Note at: http://publications.naturalengland.org.uk/publication/6223883187257344 [Accessed on the 10/11/2020]
[9] Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11037.pdf [Accessed on the 10/11/2020]

Ramsar criterion 1

The site represents one of the most important examples of traditionally managed species-rich alluvial flood meadow habitat remaining in the UK. The river and flood meadows play a substantial role in the hydrological and ecological functioning of the Humber Basin.

Ramsar criterion 2

The site has a rich assemblage of wetland invertebrates including 16 species of dragonfly and damselfly, 15 British Red Data Book wetland invertebrates as well as a leafhopper, *Cicadula ornata* for which Lower Derwent Valley is the only known site in Great Britain.

Ramsar criterion 4

The site qualifies as a staging post for passage birds in spring. Of particular note are the nationally important numbers of Ruff, *Philomachus pugnax* and Whimbrel, *Numenius phaeopus*.

Ramsar criterion 5

Species / populations occurring at levels of international importance

Qualifying species / populations with peak counts in winter:

- Eurasian wigeon *Anas Penelope*;
- Eurasian teal *Anas crecca*;

Ramsar criterion 6

Assemblages of international importance

Species with peak counts in winter:

31,942 waterfowl (5 year peak mean 1998/99-2002/03)

SPA Conservation Objectives[10]

3.7 With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

3.8 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Threats / Pressures to Site Integrity[11]

3.9 The following threats and pressures to the integrity of the Lower Derwent Valley SPA have been identified in Natural England's Site Improvement Plan:

- Hydrological changes
- Drainage
- Public access / disturbance

[10] Available at: http://publications.naturalengland.org.uk/publication/6223883187257344 [Accessed on the 10/11/2020]
[11] Available at: http://publications.naturalengland.org.uk/publication/5916047525806080 [Accessed on the 10/11/2020]

- Invasive species
- Undergrazing
- Inappropriate scrub control
- Air pollution: Impact of atmospheric nitrogen deposition

Lower Derwent Valley SAC

Introduction

3.10 The Lower Derwent Valley SAC is a 921.26ha large site comprising humid grassland (64%), bogs and marshes (30%), inland water bodies (3%), broad-leaved deciduous woodland (2%) and dry grassland (1%). It overlaps with other conservation designations, including the Lower Derwent Valley SPA / Ramsar and the River Derwent SAC.

3.11 The primary feature for which the site is designated are the lowland hay meadows, which are larger than in any other sites comprising this habitat. Notable is the high abundance of the rare narrow-leaved water dropwort *Oenanthe silaifolia*. Continued traditional forms of management have conserved the high biodiversity in the SAC, particularly at the interface of dry and wet grassland. The plant community is made up if species-rich swards, including red fescue *Festuca rubra*, crested dog's tail *Cynosurus cristatus*, meadow foxtail *Alopecurus pratensis* and great burnet *Sanguisorba officinalis*.

3.12 Another habitat of conservation concern are the alluvial forests with alder *Alnus glutinosa* and willow *Salix* spp. This wood type is dynamic and interdependent with open communities (such as fen and swamp) of earlier successional stages. Clearance of riverine woodland has led to a significant decline in alluvial forests, leaving only fragmented portions of these woods intact.

Qualifying Features[12]

3.13 Annex I habitats that are a primary reason for selection of this site:

- Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

3.14 Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

3.15 Annex II species present as a qualifying feature, but not a primary reason for site selection

- Otter *Lutra lutra*

Conservation Objectives[13]

3.16 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.17 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species

[12] Available at: https://sac.jncc.gov.uk/site/UK0012844 [Accessed on the 10/11/2020]
[13] Available at: http://publications.naturalengland.org.uk/publication/5660734323163136 [Accessed on the 10/11/2020]

- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Threats / Pressures to Site Integrity[14]

3.18 The following threats and pressures to the integrity of the Lower Derwent Valley SAC have been identified in Natural England's Site Improvement Plan:

- Hydrological changes
- Drainage
- Public access / disturbance
- Invasive species
- Undergrazing
- Inappropriate scrub control
- Air pollution: Impact of atmospheric nitrogen deposition

River Derwent SAC

Introduction

3.19 The River Derwent SAC is a 411.23ha large site, mainly comprising an inland water body (95%), some humid grassland (3%) and bogs and marshes (2%). The river has a flow length of 86.2km, passing four National Character Areas within Yorkshire before reaching its confluence with the River Ouse.

3.20 The SAC represents one of the best examples of a classic river profile in Britain. Its source is in the high-energy upland valleys of the North York Moors and the energy dissipates as the river channel widens and reaches its wide lowland floodplain near its confluence with the Ouse.

3.21 The river supports a diverse array of aquatic flora uncommon in northern Britain, including river water-dropwort *Oenanthe fluviatilis*, flowering rush *Botumus umbellatus*, shining pondweed *Potamogeton lucens* and others. The river is also known for supporting diverse native fish communities, including Annex II species river lamprey *Lampetra* fluviatilis, sea lamprey *Petromyzon* marinus and bullhead *Cottus* gobio. The spawning ground for river lamprey *Lampetra fluviatilis* is found in lower reaches, an area which is in connectivity with the Humber estuary. The river supports a healthy population of otters.

Qualifying Features[15]

3.22 Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

3.23 Annex II species that are a primary reason for selection of this site

- River lamprey *Lampetra fluviatilis*

3.24 Annex II species present as a qualifying feature, but not a primary reason for site selection:

- Sea lamprey *Petromyzon marinus*

[14] Available at: http://publications.naturalengland.org.uk/publication/5916047525806080 [Accessed on the 10/11/2020]
[15] Available at: https://sac.jncc.gov.uk/site/UK0030253 [Accessed on the 10/11/2020]

- Bullhead *Cottus gobio*
- Otter *Lutra lutra*

Conservation Objectives[16]

3.25 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.26 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Threats / Pressures to Site Integrity[17]

3.27 The following threats and pressures to the integrity of the River Derwent SAC have been identified in Natural England's Site Improvement Plan:

- Physical modification
- Water pollution
- Invasive species
- Change in land management
- Water abstraction

Skipwith Common SAC

Introduction

3.28 The Skipwith Common SAC is a 294.6ha large site, comprising heath and scrub (55%), broad-leaved deciduous woodland (27%), bogs and marshes (5%), dry grassland (5%) and inland water bodies (5%). The SAC lies approx. 10 miles south of York and is one of only two remaining extensive area of heathland in the Vale of York. The site lies on glacial sands that forms the watershed between the valleys of the River Derwent to the east and the River Ouse to the west.

3.29 Skipwith Common has long been recognised for its conservation importance due to it being the largest single tract of wet heathland in northern England. A smaller portion of dry heath is also present, forming a habitat mosaic with areas of mire, rush pasture, reed bed and woodland. The common has significant ornithological interest, including (among more common woodland birds) woodland specialists such as tree pipits, green woodpeckers, woodlarks and nightjars. The water parts of the site support assemblages of ducks and water rail, diverse moth communities and 16 species of dragon - and damselflies. The site is managed as a National Nature Reserve by Natural England and the site owner.

[16] Available at: http://publications.naturalengland.org.uk/publication/4824082210095104 [Accessed on the 10/11/2020]
[17] Available at: http://publications.naturalengland.org.uk/publication/6242242071101440 [Accessed on the 10/11/2020]

Qualifying Features[18]

3.30 Annex I habitats that are a primary reason for selection of this site:

- Northern Atlantic wet heaths with *Erica tetralix*
- European dry heaths

Conservation Objectives[19]

3.31 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.32 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of the qualifying natural habitats
- The structure and function (including typical species) of the qualifying natural habitats and,
- The supporting processes on which the qualifying natural habitats rely

Threats / Pressures to Site Integrity[20]

3.33 The following threats and pressures to the integrity of the Skipwith Common SAC have been identified in Natural England's Site Improvement Plan:

- Public access / disturbance
- Inappropriate scrub control
- Drainage
- Air pollution: Impact of atmospheric nitrogen deposition

Humber Estuary SPA / Ramsar

Introduction

3.34 The Humber Estuary is a large macro-tidal estuary with high suspended sediment loads, leading to the rapid accreting and eroding of intertidal mudflats, sandflats, saltmarsh and reedbeds. With declining salinity upstream, tidal reedbeds and brackish saltmarsh lie on the fringes of the estuary. Notable fish species include river and sea lamprey, which migrate up the estuary to breed in upstream freshwater bodies. The south bank of the estuary (Donna Nook) provides habitat for breeding grey seal colonies from autumn onwards.

3.35 The diverse array of habitats supports many wintering and passage waterfowl. Sandy sediments of the outer estuary attract knot and grey plover, while waterfowl preferentially forage in the upper zones of the estuary dominated by freshwater input. At high tide, mixed-species flocks congregate on key roost sites, which have become scarce due to combined impacts of land claim, coastal squeeze and disappearance of supporting habitats. In summer the SPA / Ramsar supports breeding populations of bittern, marsh harrier, avocet and little tern. Some developing managed realignment sites on the estuary now provide replacement habitats for SPA / Ramsar birds.

[18] Available at: https://sac.jncc.gov.uk/site/UK0030276 [Accessed on the 10/11/2020]
[19] Available at: http://publications.naturalengland.org.uk/publication/5391567648980992 [Accessed on the 10/11/2020]
[20] Available at: http://publications.naturalengland.org.uk/publication/6301721630343168 [Accessed on the 10/11/2020]

SPA Qualifying Species[21]

3.36 Qualifying individual species listed in Annex I of the Wild Birds Directive (Article 4.1)

During the non-breeding season, the SPA regularly supports:

- Great bittern *Botaurus stellaris*
- Common shelduck *Tadorna tadorna*
- Hen harrier *Circus cyaneus*
- Pied avocet *Recurvirostra avosetta*
- European golden plover *Pluvialis apricaria*
- Red knot *Calidris canutus*
- Dunlin *Calidris alpina alpina*
- Ruff *Philomachus pugnax*
- Black-tailed godwit *Limosa limosa islandica*
- Bar-tailed godwit *Limosa lapponica*
- Common redshank *Tringa totanus*

3.37 Qualifying individual species not listed in Annex I of the Wild Birds Directive (Article 4.2)

During the breeding season the SPA regularly supports:

- Great bittern *Botaurus stellaris*
- Eurasian marsh harrier *Circus aeruginosus*
- Pied avocet *Recurvirostra avosetta*
- Little tern *Sterna albifrons*

3.38 Qualifying assemblage of species (Article 4.2)

Waterbird assemblage

Ramsar Qualifying Species[22]

3.39 The Humber Estuary qualifies as a Ramsar site under the following criteria:

Ramsar criterion 1

The site is a representative example of a near-natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons. It is a large macro-tidal coastal plain estuary with high suspended sediment loads, which feed a dynamic and rapidly changing system of accreting and eroding intertidal and subtidal mudflats, sandflats, saltmarsh and reedbeds. Examples of both strandline, foredune, mobile, semi-fixed dunes, fixed dunes and dune grassland occur on both banks of the estuary and along the coast.

The estuary supports a full range of saline conditions from the open coast to the limit of saline intrusion on the tidal rivers of the Ouse and Trent. Wave exposed sandy shores are found in the outer/open coast areas of the estuary. These change to the more moderately exposed sandy shores and then to sheltered muddy shores within the main body of the estuary and up into the tidal rivers. The lower saltmarsh of the Humber

[21] Available in the marine sites Supplementary Advice on Conservation Objectives available at: https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9006111&SiteName=humber&SiteNameDisplay=Humber+Estuary+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=15 [Accessed on the 10/11/2020]
[22] Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11031.pdf [Accessed on the 10/11/2020]

is dominated by common cordgrass *Spartina anglica* and annual glasswort *Salicornia* communities. Low to mid marsh communities are mostly represented by sea aster *Aster tripolium*, common saltmarsh grass *Puccinellia maritima* and sea purslane *Atriplex portulacoides* communities. The upper portion of the saltmarsh community is atypical, dominated by sea couch *Elytrigia atherica* (*Elymus pycnanthus*) saltmarsh community. In the upper reaches of the estuary, the tidal marsh community is dominated by the common reed *Phragmites australis* fen and sea club rush *Bolboschoenus maritimus* swamp with the couch grass *Elytrigia repens* (*Elymus repens*) saltmarsh community. Within the Humber Estuary Ramsar site there are good examples of four of the five physiographic types of saline lagoon.

Ramsar criterion 3

The Humber Estuary Ramsar site supports a breeding colony of grey seals *Halichoerus grypus* at Donna Nook. It is the second largest grey seal colony in England and the furthest south regular breeding site on the east coast. The dune slacks at Saltfleetby-Theddlethorpe on the southern extremity of the Ramsar site are the most north-easterly breeding site in Great Britain of the natterjack toad *Bufo calamita*.

Ramsar criterion 5

Waterbird assemblage of international importance: 153,934 waterfowl, non-breeding season (5 year peak mean 1996/97-2000/2001).

Ramsar criterion 6

Species / populations occurring at levels of international importance

Qualifying species with peak counts in spring / autumn:

- Eurasian golden plover *Pluvialis apricaria*;
- Red knot *Calidris canutus islandica*;
- Dunlin *Calidris alpina alpina*;
- Black-tailed godwit *Limosa limosa islandica*;
- Common redshank *Tringa totanus totanus*;

Qualifying species with peak counts in winter:

- Common shelduck *Tadorna tadorna*;
- European golden plover *Pluvialis apricaria*;
- Red knot *Calidris canutus islandica*;
- Dunlin *Calidris alpina alpina*;
- Black-tailed godwit *Limosa limosa islandica*;
- Bar-tailed godwit *Limosa lapponica lapponica*;

Ramsar criterion 8

The Humber Estuary acts as an important migration route for both river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus* between coastal waters and their spawning areas.

Conservation Objectives[23]

3.40 With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

3.41 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

[23] Available at: http://publications.naturalengland.org.uk/publication/5382184353398784 [Accessed on the 10/11/2020]

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Threats / Pressures to Site Integrity[24]

3.42 The following threats and pressures to the integrity of the Humber Estuary SPA have been identified in Natural England's Site Improvement Plan:

- Water pollution
- Coastal squeeze
- Changes in species distributions
- Undergrazing
- Invasive species
- Natural changes to site conditions
- Public access / disturbance
- Fisheries: Fish stocking
- Fisheries: Commercial marine and estuarine
- Direct land take from development
- Air pollution: Impact of atmospheric nitrogen deposition
- Shooting / scaring
- Direct impact from third party
- Inappropriate scrub control

Humber Estuary SAC

Introduction

3.43 The Humber Estuary SAC is designated for a range of different habitats, providing important roosting and foraging areas for SPA / Ramsar birds. The SAC covers a large area of approx. 36,657.15ha, comprising tidal rivers / estuaries (94.9%), salt marshes (4.4%), coastal sand dunes (0.4%) and bogs / marshes (0.4%). The SAC's key interest feature is its estuary, the second largest coastal plain estuary in the UK. The SAC's high content of suspended sediments is derived from a number of sources, such as marine sediments and eroding boulder clay. In turn, the estuary comprises several other habitats, including Atlantic salt meadows, sand dunes, subtidal sandbanks, mudflats and glasswort beds. Upstream from the Humber Bridge, the estuary is noteworthy for extensive mud and sand bars, forming semi-permanent islands. The SAC supports a range of important fish species, including river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus*.

Qualifying Features[25]

3.44 Annex I habitats that are a primary reason for selection of this site:

[24] Available at: http://publications.naturalengland.org.uk/publication/5427891407945728 [Accessed on the 10/11/2020]
[25] Available at: https://sac.jncc.gov.uk/site/UK0030170 [Accessed on the 10/11/2020]

- Estuaries
- Mudflats and sandflats not covered by seawater at low tide

3.45 Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- Sandbanks which are slightly covered by sea water all the time
- Coastal lagoons
- *Salicornia* and other annuals colonizing mud and sand
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Embryonic shifting dunes
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")
- Fixed coastal dunes with herbaceous vegetation ("grey dunes")
- Dunes with *Hippopha rhamnoides*

3.46 Annex II species present as a qualifying feature, but not a primary reason for site selection:

- Sea lamprey *Petromyzon marinus*
- River lamprey *Lampetra fluviatilis*
- Grey seal *Halichoerus grypus*

Conservation Objectives[26]

3.47 With regard to the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.48 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Threats / Pressures to Site Integrity[27]

3.49 The following threats and pressures to the integrity of the Humber Estuary SAC have been identified in Natural England's Site Improvement Plan:

- Water pollution
- Coastal squeeze
- Changes in species distributions

[26] Available at: http://publications.naturalengland.org.uk/publication/5009545743040512 [Accessed on the 10/11/2020]
[27] Available at: http://publications.naturalengland.org.uk/publication/5427891407945728 [Accessed on the 10/11/2020]

- Undergrazing
- Invasive species
- Natural changes to site conditions
- Public access / disturbance
- Fisheries: Fish stocking
- Fisheries: Commercial marine and estuarine
- Direct land take from development
- Air pollution: Impact of atmospheric nitrogen deposition
- Shooting / scaring
- Direct impact from third party
- Inappropriate scrub control

Thorne & Hatfield Moors SPA

Introduction

3.50 The Thorne and Hatfield Moors SPA is a 2,449.2ha site that was established in 2000. It is located within an agricultural landscape in the wider Humberhead Levels National Character Area. Thorne Moor is England's largest expanse of raised bogs and lies within the floodplain of rivers draining into the Humber estuary. The SPA is managed as a National Nature Reserve by Natural England.

3.51 The smaller Hatfield Moors have been included in the SPA more recently and are generally in degraded condition. The restored secondary surface is rich in bog mosses *Sphagnum* spp., heather *Calluna vulgaris*, cross-leaved heath *Erica tetralix* and round-leaved sundew *Drosera rotundifolia*. While breeding nightjars are the SPA's sole qualifying species, the SPA also supports numerous other species at non-qualifying abundances, including hen harrier *Circus cyaneus*, merlin *Falco columbianus* and short-eared owl *Asio flammeus*. Hobbies *Falco subbuteo* feed over the site in summer and the most northerly breeding location for nightingales *Luscinia megarhynchos* is located here.

Qualifying Species[28]

3.52 Qualifying individual species listed in Annex I of the Wild Birds Directive

During the breeding season the SPA regularly supports:

- Nightjar *Caprimulgus europaeus*; at the time of designation, the SPA supported 66 pairs of nightjar, representing at least 1.9% of the GB breeding population

Conservation Objectives[29]

3.53 With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

3.54 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features

[28] Available in the Conservation Objectives Supplementary Advice Note at: http://publications.naturalengland.org.uk/publication/6503407711944704 [Accessed on the 10/11/2020]
[29] Available at: http://publications.naturalengland.org.uk/publication/6503407711944704 [Accessed on the 10/11/2020]

- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Threats / Pressures to Site Integrity[30]

3.55 The following threats and pressures to the site integrity of the Thorne & Hatfield Moors SPA are provided in Natural England's Site Improvement Plan:

- Drainage
- Inappropriate scrub control
- Air pollution: Impact of atmospheric nitrogen deposition
- Public access / disturbance
- Planning permission: General
- Peat extraction
- Invasive species

Thorne Moor SAC

Introduction

3.56 The Thorne Moors SAC is a 1,911.02ha expanse of bog, comprising bogs and marshes (28%), heath and scrub (19%), broad-leaved deciduous woodland (13%) and inland water bodies (8%). The site designation also encompasses a significant amount of development, such as towns and villages, mines and industrial sites (32%). The SAC overlaps with parts of the Thorne & Hatfield Moors SPA.

3.57 As mentioned in relation to the SPA, recent management successes have increased the proportion of active raised bog in the Thorne Moors. However, recent inclusion of the Hatfield Moors, means that the SAC is now predominantly classified as degraded raised bog. Degraded raised bogs are still capable of natural regeneration, however disturbances to the hydrology or vegetation (typically through human activities) mean that peat is not currently forming in such habitat.

3.58 Drainage, land reclamation for agriculture and peat extraction over the last 500 years have resulted in the loss of this habitat type, leaving the Thorne and Hatfield Moors the only large-scale type of this wetland. The SAC retains a significant wildlife and biodiversity interest, although this has been damaged by peat extraction.

Qualifying Features[31]

3.59 Annex I habitats that are a primary reason for selection of this site:

- Degraded raised bogs still capable of natural regeneration

Conservation Objectives[32]

3.60 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.61 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

[30] Available at: http://publications.naturalengland.org.uk/publication/6489780632158208 [Accessed on the 10/11/2020]
[31] Available at: https://sac.jncc.gov.uk/site/UK0012915 [Accessed on the 10/11/2020]
[32] Available at: http://publications.naturalengland.org.uk/publication/6566028335120384 [Accessed on the 10/11/2020]

- The extent and distribution of qualifying natural habitats
- The structure and function (including typical species) of qualifying natural habitats, and
- The supporting processes on which qualifying natural habitats rely

Threats / Pressures to Site Integrity[33]

3.62 The following threats and pressures to the site integrity of the Thorne Moors SAC are provided in Natural England's Site Improvement Plan:

- Drainage
- Inappropriate scrub control
- Air pollution: Impact of atmospheric nitrogen deposition
- Public access / disturbance
- Planning permission: General
- Peat extraction
- Invasive species

Kirk Deighton SAC

Introduction

3.63 The Kirk Deighton SAC is 3.99ha in size, comprising improved grassland (95%), an inland water body (3%) and woody plant cultivations (2%). The SAC lies on the outskirts of the village of Kirk Deighton. It is a lowland site on neutral clay soils within a wider agricultural and pasture-led landscape.

3.64 Despite its relatively small size, the site supports an exceptionally large population of great-crested newts *Triturus cristatus* concentrated in a shallow breeding pond. The pond lies amidst pasture and mature hedgerows, which provide essential feeding and hibernation habitats for the newts. Other amphibian interest in the SAC includes smooth newt *Triturus vulgaris* and common frog *Rana temporaria*.

Qualifying Features[34]

3.65 Annex II species that are a primary reason for selection of this site:

- Great-crested newt *Triturus cristatus*

Conservation Objectives[35]

3.66 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.67 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of the habitats of qualifying species
- The structure and function of the habitats of qualifying species
- The supporting processes on which the habitats of qualifying species rely
- The populations of qualifying species, and,

[33] Available at: http://publications.naturalengland.org.uk/publication/6489780632158208 [Accessed on the 10/11/2020]
[34] Available at: https://sac.jncc.gov.uk/site/UK0030178 [Accessed on the 10/11/2020]
[35] Available at: http://publications.naturalengland.org.uk/publication/4695122595807232 [Accessed on the 10/11/2020]

- The distribution of qualifying species within the site.

Threats / Pressures to Site Integrity[36]

3.68 Natural England's Site Improvement Plan highlights the following threats and pressures to the site integrity of the Kirk Deighton SAC:

- Change in land management
- Habitat fragmentation

[36] Available at: http://publications.naturalengland.org.uk/publication/5267982863302656 [Accessed on the 10/11/2020]

4. Background to Relevant Impact Pathways

Recreational Pressure

Bird Disturbance

4.1 There is concern over the cumulative impacts of recreation on key nature conservation sites in the UK, as most sites must meet conservation objectives while also providing recreational opportunity. Various research reports have provided compelling links between changes in housing and access levels[37] and impacts on European protected sites[38] [39]. While these impacts are relevant to any habitat, recreational pressure is particularly significant for European sites designated for bird species. Different European sites are subject to different types of recreational pressures and have different sensitivities. HRAs of planning documents tend to focus on recreational sources of disturbance as a result of new residents[40].

4.2 Studies across a range of species have shown that the effects from recreation can be complex. Human activity can affect birds either directly (e.g. by eliciting flight responses) or indirectly (e.g. through damaging their habitat or reducing their fitness in less obvious ways e.g. stress). The most obvious direct effect is that of immediate mortality such as death by shooting, but human activity can also lead to much subtler behavioural (e.g. alterations in feeding behaviour, avoidance of certain areas and use of sub optimal areas etc.) and physiological changes (e.g. an increase in heart rate). While these are less noticeable, they might result in major population-level changes by altering the balance between immigration / birth and emigration / death[41].

4.3 Concern regarding the effects of disturbance on birds stems from the fact that they are expending energy unnecessarily and the time they spend responding to disturbance is time that is not spent feeding[42]. Disturbance therefore risks increasing energetic expenditure of birds while reducing their energetic intake, which can adversely affect the 'condition' and ultimately survival of the birds. Additionally, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites, as they then must sustain a greater number of birds[43]. Moreover, the higher proportion of time a breeding bird spends away from its nest, the more likely it is that eggs will cool and the more vulnerable they, or any nestlings, are to predators. Recreational effects on ground-nesting birds are particularly severe, with many studies concluding that urban sites support lower densities of key species, such as stone curlew and nightjar[44] [45].

4.4 Several factors (e.g. seasonality, type of recreational activity) may have pronounced impacts on the nature of bird disturbance. Recreation disturbance in winter can be more impactful because food shortages make birds more vulnerable at this time of the year. In contrast, there are often fewer recreational users in the winter months and some effects of disturbance may be reduced because birds are not breeding. Evidence

[37] Weitowitz D.C., Panter C., Hoskin R. & Liley D. 2019. The effect of urban development on visitor numbers to nearby protected nature conservation sites. *Journal of Urban Ecology* **5**. https://doi.org/10.1093/jue/juz019
[38] Liley D, Clarke R.T., Mallord J.W., Bullock J.M. 2006a. The effect of urban development and human. disturbance on the distribution and abundance of nightjars on the Thames Basin and Dorset Heaths. Report by Footprint Ecology for Natural England.
[39] Liley D., Clarke R.T., Underhill-Day J., Tyldesley D.T. 2006b. Evidence to support the appropriate Assessment of development plans and projects in south-east Dorset. Report by Footprint Ecology for Dorset County Council.
[40] The RTPI report 'Planning for an Ageing Population' (2004) which states that 'From being a marginalised group in society, the elderly are now a force to be reckoned with and increasingly seen as a market to be wooed by the leisure and tourist industries. There are more of them and generally they have more time and more money.' It also states that 'Participation in most physical activities shows a significant decline after the age of 50. The exceptions to this are walking, golf, bowls and sailing, where participation rates hold up well into the 70s'.
[41] Riley, J. 2003. Review of Recreational Disturbance Research on Selected Wildlife in Scotland. *Scottish Natural Heritage*.
[42] Riddington, R. et al. 1996. The impact of disturbance on the behaviour and energy budgets of Brent geese. *Bird Study* **43**:269-279
[43] Gill, J.A., Sutherland, W.J. & Norris, K. 1998. The consequences of human disturbance for estuarine birds. *RSPB Conservation Review* **12**: 67-72
[44] Clarke R.T., Liley D., Sharp J.M., Green R.E. 2013. Building development and roads: Implications for the distribution of stone curlews across the Brecks. *PLOS ONE*. https://doi:10.1371/journal.pone.0072984.
[45] Liley D., Clarke R.T. 2003. The impact of urban development and human disturbance on the numbers of nightjar *Caprimulgus europaeus* on heathlands in Dorset, England. *Biological Conservation* **114**: 219-230.

in the literature suggests that the magnitude of disturbance clearly differs between different types of recreational activities. For example, dog walking leads to a significantly higher reduction in bird diversity and abundance compared to hiking[46]. Scientific evidence also suggests that key disturbance parameters, such as areas of influence and flush distance, are significantly greater for dog walkers than hikers[47]. Furthermore, differences in on-site route lengths and usage patterns likely imply that key spatial and temporal parameters (such as the area of a site potentially impacted and the frequency of disturbance) will also differ between recreational activities. This suggests that activity type is a factor that should be taken into account in HRAs.

Non-breeding Birds (October – March)

4.5 The Lower Derwent Valley SPA / Ramsar (which straddles the eastern boundary of Selby District) is designated for sensitive overwintering birds, including waterfowl such as Bewick's swan, wigeon, teal and Northern shoveler. The Humber Estuary SPA / Ramsar also comprises a complex assemblage of species, including bittern, shelduck, avocet and redshank. Therefore, this section focusses on academic research relating to waterfowl and waders.

4.6 Evans & Warrington[48] found that on Sundays total water bird numbers (including shoveler and gadwall) were 19% higher on Stocker's Lake LNR in Hertfordshire and attributed this to observed greater recreational activity on surrounding water bodies at weekends relative to weekdays displacing birds into the LNR. However, in this study, recreational activity was not quantified in detail, nor were individual recreational activities evaluated separately.

4.7 Tuite et al[49] used a large (379 sites), long-term (10-year) dataset (September – March species counts) to correlate seasonal changes in wildfowl abundance with the presence of various recreational activities. They determined that shoveler was one of the most sensitive species to recreational activities, such as sailing, windsurfing and rowing. Studies on recreation in the Solent have established that human leisure activities cause direct disturbance to wintering waterfowl populations[50] [51].

4.8 The degree of impact that varying levels of noise will have on different species of bird is poorly understood except that a number of studies have found that an increase in traffic levels on roads leads to a reduction in the bird abundance within adjacent hedgerows. Reijnen et al (1995) examined the distribution of 43 passerine species (i.e. 'songbirds'), of which 60% had a lower density closer to the roadside than further away. By controlling for vehicle usage, they also found that bird density was significantly lower along busier roads than quieter roads[52]. A study on Holt Heath noted reduced levels of fitness due to occupation of sub optimal habitats alongside roads amongst heathland species.

4.9 A study on recreational disturbance on the Humber[53] assesses different types of noise disturbance on waterfowl referring to previous research relating to aircraft (see Drewitt 1999[54]), traffic (Reijnen, Foppen, & Veenbaas 1997)[55], dogs (Lord, Waas, & Innes 1997[56]; Banks & Bryant 2007[57]) and machinery (Delaney et al. 1999; Tempel & Gutierrez 2003). It identifies that there is still relatively little work on the effects of different types of water-based craft and the impacts from jet skis, kite surfers, windsurfers etc (see Kirby et al. 2004[58] for a review). In general terms, both distance from the source of disturbance and the scale of the disturbance

[46] Banks P.B., Bryant J.Y. 2007. Four-legged friend or foe? Dog walking displaces native birds from natural areas. *Biology Letters* **3**: 14pp.
[47] Miller S.G., Knight R.L., Miller C.K. 2001. Wildlife responses to pedestrians and dogs. **29**: 124-132.
[48] Evans, D.M. & Warrington, S. 1997. The effects of recreational disturbance on wintering waterbirds on a mature gravel pitlake near London. *International Journal of Environmental Studies* **53**: 167-182
[49] Tuite, C.H., Hanson, P.R. & Owen, M. 1984. Some ecological factors affecting winter wildfowl distribution on inland waters in England and Wales and the influence of water-based recreation. *Journal of Applied Ecology* **21**: 41-62
[50] Footprint Ecology. 2010. Recreational Disturbance to Birds on the Humber Estuary
[51] Footprint Ecology, Jonathan Cox Associates & Bournemouth University. 2010. Solent Disturbance and Mitigation Project – various reports.
[52] Reijnen, R. et al. 1995. The effects of car traffic on breeding bird populations in woodland. III. Reduction of density in relation to the proximity of main roads. *Journal of Applied Ecology* **32**: 187-202
[53] Fearnley H., Liley D. & Cruickshanks K. (2012) Results of Recreational Visitor Survey across the Humber Estuary produced by Footprint Ecology
[54] Drewitt, A. (1999) Disturbance effects of aircraft on birds. *English Nature*, Peterborough.
[55] Reijnen, R., Foppen, R. & Veenbaas, G. (1997) Disturbance by traffic of breeding birds: evaluation of the effect and considerations in planning and managing road corridors. *Biodiversity and Conservation* **6**: 567-581.
[56] Lord, A., Waas, J.R. & Innes, J. (1997) Effects of human activity on the behaviour of northern New Zealand dotterel Charadrius obscurus aquilonius chicks. *Biological Conservation* **82**: 15-20.
[57] Banks, P.B. & Bryant, J.V. (2007) Four-legged friend of foe? Dog-walking displaces native birds from natural areas. *Biology Letters* **3**: 611-613.
[58] Kirby, J.S., Clee, C. & Seager, V. (1993) Impact and extent of recreational disturbance to wader roosts on the Dee estuary: some preliminary results. *Wader Study Group Bulletin* **68**: 53-58.

(noise level, group size) is likely to influence the response (Delaney et al. 1999[59]; Beale & Monaghan 2005[60]). On UK estuaries and coastal sites, a review of WeBS data showed that, among the volunteer WeBS surveyors, driving of motor vehicles and shooting were the two activities most perceived to cause disturbance (Robinson & Pollitt 2002)[61].

4.10 Disturbing activities present themselves on a continuum. Generally, activities that involve irregular, infrequent and loud noise events, movements or vibrations are likely to be the most disturbing. For example, the presence of dogs around waterbodies generates substantial disturbance due the habitat accessed (e.g. intertidal mudflats), the areas affected and dogs' impacts on bird behaviour. Birds are least likely to be disturbed by activities that involve regular, frequent, predictable and quiet patterns of sound, movement or vibration. The further any activity is from the birds, the less likely it is to result in disturbance. Overall, the factors that determine species responses to disturbance include species sensitivity, timing/duration of the recreational activity and the distance between source and receptor of disturbance.

4.11 The specific distance at which a species takes flight when disturbed is known as the 'tolerance distance' (also called the 'escape flight distance') and greatly differs between species. Tolerance distances from various literature sources are summarised in Table 2. It is reasonable to assume from this evidence that disturbance is unlikely to be relevant at distances of beyond 400m. Generally, tolerance distances are known for only few species and should not be extrapolated to other species.

Table 2: Tolerance distances in metres of 21 species of waterfowl to various forms of recreational disturbance, as described in the literature. Where the mean is not available, distances are provided as a range.[62]

Species	Type of disturbance. [1] Tydeman (1978), [2] Keller (1989), [3] Van der Meer (1985), [4] Wolff et al (1982), [5] Blankestijn et al (1986)		
	Rowing boats/kayak	Sailing boats	Walking
Little grebe		60 – 100 [1]	
Great crested grebe	50 – 100 [2]	20 – 400 [1]	
Mute swan		3 – 30 [1]	
Teal		0 – 400 [1]	
Mallard		10 – 100 [1]	
Shoveler		200 – 400 [1]	
Pochard		60 – 400 [1]	
Tufted duck		60 – 400 [1]	
Goldeneye		100 – 400 [1]	
Smew		0 – 400 [1]	
Moorhen		100 – 400 [1]	
Coot		5 – 50 [1]	
Curlew			211 [3]; 339 [4]; 213 [5]
Shelduck			148 [3]; 250 [4]

[59] Delaney, D.K., Grubb, T.G., Beier, P., Pater, L.L.M. & Reiser, H. (1999) Effects of Helicopter Noise on Mexican Spotted Owls. *The Journal of Wildlife Management* **63**: 60-76.
[60] Beale, C.M. & Monaghan, P. (2005) Modeling the Effects of Limiting the Number of Visitors on Failure Rates of Seabird Nests. *Conservation Biology* **19**: 2015-2019.
[61] Robinson, J.A. & Pollitt, M.S. (2002) Sources and extent of human disturbance to waterbirds in the UK: an analysis of Wetland Bird Survey data, 1995/96 to 1998/99: Less than 32% of counters record disturbance at their site, with differences in causes between coastal and inland sites. *Bird Study* **49**: 205.
[62] Tydeman, C.F. 1978. Gravel Pits as conservation areas for breeding bird communities. PhD thesis. Bedford College
Keller, V. 1989. Variations in the response of Great Crested Grebes *Podiceps cristatus* to human disturbance - a sign of adaptation? *Biological Conservation* **49**: 31-45
Van der Meer, J. 1985. *De verstoring van vogels op de slikken van de Oosterschelde*. Report 85.09 Deltadienst Milieu en Inrichting, Middelburg. 37 pp.
Wolf, W.J., Reijenders, P.J.H. & Smit, C.J. 1982. The effects of recreation on the Wadden Sea ecosystem: many questions but few answers. In: G. Luck & H. Michaelis (Eds.), *Schriftenreihe M.E.L.F., Reihe A: Agnew. Wissensch* **275**: 85-107.
Blankestijn, S. et al. 1986. Seizoensverbreding in de recreatie en verstoring van Wulp en Scholkester op hoogwatervluchplaatsen op Terschelling. Report Projectgroep Wadden, L.H. Wageningen. 261pp.

Grey plover	124 [3]
Ringed plover	121 [3]
Bar-tailed godwit	107 [3]; 219 [4]
Brent goose	105 [3]
Oystercatcher	85 [3]; 136 [4]; 82 [5]
Dunlin	71 [3]; 163 [2]

4.12 Mitigation measures to avoid recreational pressure effects usually involve a combination of access and habitat management, and the provision of alternative recreational space. Typically, Local Authorities (in their role as Competent Authorities) can set out frameworks for improved habitat and access management, in collaboration with other adjoining Local Planning Authorities. Provision of alternative recreational space can help to attract recreational users away from sensitive European sites and reduce pressure on the sites. However, the location and habitat type of such alternative destinations must be carefully selected to be effective.

Breeding Birds (March – September)

4.13 In addition to its population of overwintering non-breeding birds, the Humber Estuary SPA / Ramsar is also designated for breeding bird species, including bittern, marsh harrier, little tern and avocet. Disturbance to birds during the pre-incubation, incubation and chick provisioning stages may lead to the abandonment of potential nesting sites, eggs or chicks, resulting in failure to reproduce or in reduced calorific intake by chicks. If disturbance is significant or persistent, the failure to produce viable offspring across multiple individuals may result in reduced fitness at the population level. Disturbance from dog walkers is a particular threat to ground-nesting birds, which tend to have lower disturbance tolerances because their nests are at higher risk from predators.

4.14 This is supported in the literature. For example, recreational disturbance (and especially dog walking) results in a higher incidence of escape flights, reduced incubation times and reduced chick guarding in golden plovers[63]. A study assessing the breeding success of little tern (qualifying species of the Humber Estuary SPA / Ramsar) and least tern found that nest success was significantly higher (82%) in artificial habitats than on natural sandy beaches (58%)[64]. This was primarily due to recreational disturbance on the beaches (which was absent in artificial habitats). Furthermore, even in successful nests, the number of unhatched eggs was twice as high in the natural habitat, most likely due to disturbance leading to the cooling of eggs.

4.15 Recreational impacts on little terns are well documented in other parts of the country (see a review of disturbance on little terns in the Great Yarmouth North Denes SPA[65]) and represent significant threats to the viability of tern populations. Tern colonies often lie on popular tourist beaches and are under intense urban pressures, including from vandalism, trampling and human-associated pest species (e.g. foxes). In contrast, recreational disturbance is considered to be less of a factor for bittern and marsh harrier, which tend to nest within dense reedbeds that are not easily accessible to the public. Notwithstanding this, recreational boating may bring visitors in close proximity with bittern and marsh harrier breeding sites in reedbeds.

Trampling Damage and Nutrient Enrichment

4.16 Most terrestrial habitats (especially dune systems, heathland and woodland) can be affected by trampling and other mechanical damage, which in turn dislodges individual plants, leads to soil compaction and erosion. The following studies have assessed the impact of trampling associated with different recreational activities in different habitats:

- Wilson & Seney)[66] examined the degree of track erosion caused by hikers, motorcycles, horses and cyclists from 108 plots along tracks in the Gallatin National Forest, Montana. Although the

[63] Yalden P.E. & Yalden D.W. (1990). Recreational disturbance of breeding golden plovers *Pluvialis apricarius*. *Biological Conservation* **51**: 243-262.
[64] Pakanen V-M., Hongeli H., Aikio S. & Koivula K. (2014). Little tern breeding success in artificial and natural habitats: Modelling population growth under uncertain vital rates. *Population Ecology* **56**: 581-591.
[65] Liley D. (2008). Little terns at Great Yarmouth. Disturbance to birds and implications for strategic planning and development control. Unpublished report by Footprint Ecology, commissioned by Great Yarmouth Borough Council and the RSPB. 14pp.
[66] Wilson, J.P. & J.P. Seney. 1994. Erosional impact of hikers, horses, motorcycles and off-road bicycles on mountain trails in Montana. *Mountain Research and Development* **14**:77-88.

results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.

- Cole et al[67] conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow & grassland communities (each trampled between 0 – 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this relationship was weaker after one year than two weeks indicating some recovery of the vegetation. Differences in plant morphological characteristics were found to explain more variation in response between different vegetation types than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered least resistant. The cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks but had recovered well after one year and as such these were considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were least resilient to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.

- Cole [68] conducted a follow-up study (in 4 vegetation types) in which shoe type (trainers or walking boots) and trampling weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier tramplers caused a greater reduction in vegetation height than lighter tramplers, but there was no difference in the effect on cover.

- Cole & Spildie[69] experimentally compared the effects of off-track trampling by hiker and horse (at two intensities – 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Horse trampling was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance but recovered rapidly. Generally, it was shown that higher trampling intensities caused more disturbance.

- In heathland sites, trampling damage can affect the value of a site to wildlife. For example, heavy use of sandy tracks loosens and continuously disturbs sand particles, reducing the habitat's suitability for invertebrates[70]. Species that burrow into flat surfaces such as the centres of paths, are likely to be particularly vulnerable, as the loose sediment can no longer maintain their burrow. In some instances, nature conservation bodies and local authorities resort to hardening paths to prevent further erosion. However, this is concomitant with the loss of habitat used by wildlife, such as sand lizards and burrowing invertebrates.

4.17 Sand dunes are dynamic systems that are shaped by factors such as the supply of sand and prevailing wind direction. 80% of dunes in the UK are currently subject to coastal erosion, diminishing the dune itself and creating bare ground. Natural England's Access and Nature Conservation Reconciliation guidance note states that light levels of trampling can increase plant diversity, but medium to high levels of trampling promote bare ground, increase soil compaction, reduce plant diversity and change vegetation height. The type of dune habitat also influences its response to recreational pressure. For example, in fixed decalcified dunes the relationship between levels of access and impact is linear (i.e. proportionate relationship). In other dune types (e.g. embryonic shifting dunes), the relationship is curvilinear, suggesting that a small increase in trampling has a disproportionately strong effect, with a flattening of the impact curve at higher trampling damage[71].

[67] Cole, D.N. 1995a. Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. *Journal of Applied Ecology* **32**: 203-214.
Cole, D.N. 1995b. Experimental trampling of vegetation. II. Predictors of resistance and resilience. *Journal of Applied Ecology* **32**: 215-224.
[68] Cole, D.N. 1995c. Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.
[69] Cole, D.N., Spildie, D.R. 1998. Hiker, horse and llama trampling effects on native vegetation in Montana, USA. *Journal of Environmental Management* **53**: 61-71.
[70] Taylor K., Anderson P., Liley D. & Underhill-Day J.C. 2006. Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.
[71] Coombes E.G. (2007). The effects of climate change on coastal recreation and biodiversity. School of Environmental Sciences. University of East Anglia, Norwich.

4.18 A major concern for nutrient-poor terrestrial habitats (e.g. heathlands and sand dunes) is nutrient enrichment associated through dog fouling, which has been addressed in various reviews (e.g.[72]). It is estimated that dogs will defecate within 10 minutes of starting a walk and therefore most nutrient enrichment arising from dog faeces will occur within 400m of a site entrance. In contrast, dogs will urinate at frequent intervals during a walk, resulting in a more spread out distribution of urine. For example, in Burnham Beeches National Nature Reserve it is estimated that 30,000 litres of urine and 60 tonnes of dog faeces are deposited annually[73]. While there is little information on the chemical constituents of dog faeces, nitrogen is one of the main components[74]. Nutrient levels are the major determinant of plant community composition and the effect of dog defecation in sensitive habitats is comparable to a high-level application of fertiliser, potentially resulting in the shift to plant communities that are more typical of improved grasslands. Nutrient enrichment is likely to be of primary concern for the Skipwith Common SAC, designated for European dry heaths and wet heaths with *Erica tetralix*.

Conclusion

4.19 The available baseline information suggests that the following European sites relevant to The former Selby districtare sensitive to recreational pressure due to the presence of waterfowl, waders and birds of prey throughout the year and trampling damage respectively (**the sites in bold are taken forward into the following chapters**):

- **Lower Derwent Valley SPA / Ramsar**
- **Skipwith Common SAC**
- **Humber Estuary SPA / Ramsar**
- **Thorne & Hatfield Moors SPA**

Loss of Functionally Linked Habitat

4.20 While most European sites have been geographically defined to encompass the key features that are necessary for coherence of their structure and function, and the support of their qualifying features, this is not necessarily the case. A diverse array of qualifying species including birds, bats and amphibians are not always confined to the boundary of designated sites.

4.21 For example, the highly mobile nature of both wader and waterfowl species implies that areas of habitat of crucial importance to the integrity of their populations lie outside the physical limits of European sites. Despite not being part of the formal designation, these habitats are integral to the maintenance of the structure and function of the designated site, for example by encompassing important foraging grounds. Therefore, land use plans that may affect such functionally linked habitat require further assessment.

4.22 There is now an abundance of authoritative examples of HRA cases on plans affecting bird populations, where Natural England recognised the potential importance of functionally linked land[75]. For example, bird surveys in relation to a previous HRA established that approximately 25% of the golden plover population in the Somerset Levels and Moors SPA were affected while on functionally linked land, and this required the inclusion of mitigation measures in the relevant plan policy wording. Another important case study originates from the Mersey Estuary SPA / Ramsar, where adjacently located functionally linked land had a peak survey count of 108% of the 5 year mean peak population of golden plover. This finding led to considerable amendments in the planning proposal to ensure that the site integrity was not adversely affected.

[72] Taylor K., Anderson P., Taylor R.P., Longden K. & Fisher P. 2005. Dogs, access and nature conservation. English Nature Research Report, Peterborough.
[73] Barnard A. 2003. Getting the facts – Dog walking and visitor number surveys at Burnham Beeches and their implications for the management process. *Countryside Recreation* **11**:16-19.
[74] Taylor K., Anderson P., Liley D. & Underhill-Day J.C. 2006. Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.
[75] Chapman C & Tyldesley D. 2016. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects – A review of authoritative decisions. *Natural England Commissioned Reports* **207**. 73pp

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4.24 With regards to birds, areas of functionally linked land typically provide habitat for foraging or other ecological functions essential for the maintenance of the designated population e.g., high tide roost on coastal populations. Functionally linked land may extend up to the maximum foraging distance for the designated bird species. However, the number of birds foraging will tend to decrease further away from the protected site and thus the importance of the land to the maintenance of the designated population will decrease.

4.25 A study carried out by Natural England[77] identifies the typical distances that wintering waterfowl will travel from their SPAs to forage. Relevant Impact Risk Zones are identified as shown in Table 3.

Table 3. Natural England Impact Risk Zones for designated bird features

Assemblage	Impact Risk Zone (foraging distance)
Wintering birds (except wintering waders and grazing wildfowl; wigeon (*Anas penelope*) and geese)	Up to 500 m
Dabbling ducks such as teal, mallard and gadwall	Home ranges could extend beyond site boundaries at coastal sites, but less likely to do so at inland water bodies.
Wintering waders (except golden plover and lapwing), brent goose (*Branta bernicla*) & wigeon	Maximum foraging distance is 500 m
Wintering lapwing and golden plover	Maximum foraging distance is 15-20 km. Golden plover can forage up to 15 km from a roost site within a protected site. Lapwing can also forage similar distances. Both species use lowland farmland in winter, and it is difficult to distinguish between designated populations and those present within the wider environment. Developments affecting functionally linked land more than 10 km from the site are unlikely to impact significantly on designated populations.
Wintering white-fronted goose (*Anser albifrons),* greylag goose (*Anser answer*), Bewick's swan (*Cygnus columbianus bewickii*), whooper swan, pink-footed goose & wintering bean goose (*Anser fabalis*)	Maximum foraging distance is 10 km although studies have shown that pink-footed geese will fly 20 km from their roosting site to feed[78]. A bespoke functional land IRZ has replaced the individual Birds 6/7 IRZs for sites supporting the following goose and swan species: pink-footed geese, barnacle goose, Bewick's swan, white-fronted goose and whooper swan. The IRZ is based on GIS distribution records of feeding pink-footed geese from a study undertaken for Natural England by the Wildfowl & Wetlands Trust (Ibid) and the results of work undertaken by the British Trust for Ornithology to identify functionally connected habitat used by barnacle goose, Bewick's swan, white-fronted goose and whooper swan based on WeBS site and BirdTrack data and focuses on only the areas of land that we know are being used as functional habitat by designated populations.

[76] Chapman C & Tyldesley D. 2016. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects – A review of authoritative decisions. Natural England Commissioned Reports 207. 73pp
[77] Natural England (2019). Impact Risk Zones Guidance Summary Sites of Special Scientific Interest Notified for Birds. Version 1.1
[78] Natural England & Manchester Metropolitan University (2015) Mapping and assessing pink-footed goose Anser brachyrhynchus usage of land beyond SPA boundaries in northwest England. Available at: http://publications.naturalengland.org.uk/publication/5691873914519552

Source: Natural England (2019). Impact Risk Zones Guidance Summary Sites of Special Scientific Interest Notified for Birds. Version 1.1

4.26 The aforementioned Natural England document further identifies that for SSSIs designated for wintering waterfowl and waders (other than golden plover and lapwing) a maximum of 2km is appropriate for the identification of potential functionally-linked land for development with the exception of wind energy (3km) and airports (10km).

4.27 Generally, the identification of an area as functionally linked land is now a relatively straightforward process and it is reasonable to assume that a site <2 ha in size is unlikely to support a large enough population of birds (taking sightlines etc., into account) to constitute 1% of an SPA population. However, the importance of non-designated land parcels may not be apparent and could require the analysis of existing data sources to be firmly established. In some instances, data may not be available at all, requiring some further survey work.

4.28 Overall, the available baseline information suggests that the following European Sites are sensitive to the loss of functionally linked habitat due to the presence of mobile waterfowl, waders and birds of prey (**the sites in bold are taken forward into the following chapters**):

- **Lower Derwent Valley SPA / Ramsar**
- **Humber Estuary SPA / Ramsar**
- **Thorne & Hatfield Moors SPA.**

Water Quality

4.29 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:

- At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour.
- Eutrophication, the enrichment of water with nutrients, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing bioavailable nitrogen.
- Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.

4.30 The most notable issue in relation to the SLP is the discharge of treated sewage effluent, which is likely to increase the concentration of nutrients in European sites that are dependent on the input of high-quality water. The discharge of nutrients (primarily phosphorus in freshwater habitats such as those in the River Derwent SAC and the Lower Derwent Valley SPA / Ramsar; a combination of phosphorus and nitrogen in the Humber Estuary SPA / Ramsar / SAC) will increase the overall nutrient loading and could change the plant community composition in these European sites. Given that parts of the SPA / Ramsar lie close to development proposed in the SLP, impacts of surface water runoff from hardstanding on water quality also need consideration.

4.31 The viability of the Kirk Deighton SAC's great-crested newt population depends on sufficient water quality. Poor water quality can affect great-crested newts by blocking gills, impeding display behaviour and reducing invertebrate numbers. The breeding ponds in the SAC have been noted for poor water quality previously. The Thorne Moor SAC, designated for degraded raised bogs, is also sensitive to water quality changes, in particular because these habitats are naturally nutrient-poor. The potential ecological implications of SLP development on the discussed European sites are outlined in Table 4.

Table 4: Wastewater Treatment Works (WwTWs) serving development in the former Selby district that are in potential hydrological continuity with European Sites within or adjacent to the Parish.

WwTW Catchment	Residential and employment development quantum allocated in the Selby Local Plan	Potential HRA implications
Barlby WwTW, Selby WwTW, Hemingbrough WwTW, Wheldrake WwTW (operated by Yorkshire Water)	At least 7,728 new residential dwellings and 91.2ha of employment land	Potential discharge of treated sewage effluent into local watercourses (such as the Rivers Derwent and Ouse) that are hydrologically connected with the River Derwent SAC, the Lower Derwent Valley SPA / Ramsar, the Humber Estuary SPA / Ramsar, the Kirk Deighton SAC or the Thorne Moor SAC.

4.32 The following European sites within 10km of the former Selby district are sensitive to changes in water quality as a result of urban growth (the sites in bold are taken forward into the following chapters):

- **River Derwent SAC**
- **Lower Derwent Valley SPA / Ramsar / SAC**
- **Humber Estuary SPA / Ramsar / SAC**
- **Kirk Deighton SAC**
- **Thorne Moor SAC**

Water Quantity, Level and Flow

4.33 The water level, its flow rates and the mixing conditions are important determinants of the condition of European sites and their qualifying features. Hydrological processes are critical in influencing habitat characteristics in wetlands and coastal waters, including current velocity, water depth, dissolved oxygen levels, salinity and water temperature. In turn these parameters determine the short- and long-term viability of plant and animal species, as well as overall ecosystem composition. Changes to the water flow rate within an estuary can be associated with a multitude of further impact pathways, including substratum loss, smothering and changes in wave exposure, and often interact with coastal squeeze.

4.34 A highly cited review paper summarised the ecological effects of reduced flow in rivers. Droughts (ranging in their magnitude from flow reduction to a complete loss of surface water) have both direct and indirect effects on stream communities. For example, a marked direct effect is the loss of water and habitat for aquatic organisms. Indirect effects include a deterioration in water quality, changes to the food resources and alterations in interspecific interactions. An increased stability of baseflow and a reduction in the natural flow variability of rivers has been linked to the excessive growth of macrophytes and a reduction in fish populations in rivers and recipient waterbodies.

4.35 The unique nature of wetlands combines shallow water and conditions that are ideal for the growth of organisms at the basal level of food webs, which feed many species of birds, mammals, fish and amphibians. Overwintering, migrating and breeding wetland bird species are particularly reliant on these food sources, as they need to build up enough nutritional reserves to sustain their long migration routes or feed their hatched chicks.

4.36 Maintaining a steady water supply is of critical importance for many hydrologically dependent SPAs, SACs and Ramsars. For example, in many wetlands winter flooding is essential for sustaining a variety of foraging habitats for SPA / Ramsar wader and waterbird species. However, different species vary in their requirements for specific water levels. Splash and / or shallow flooding is required to provide suitable feeding areas and roosting sites for ducks and waders. In contrast, deeper flooding is essential to provide foraging and loafing habitats for Bewick's swans and whooper swans.

4.37 Wetland habitats rely on hydrological connections with other surface waters, such as rivers, streams and lakes. A constant supply of water is fundamental to maintaining the ecological integrity of sites. However, while the natural fluctuation of water levels within narrow limits is desirable, excess or too little water supply

might cause the water level to be outside of the required range of qualifying birds, invertebrate or plant species. This might lead to the loss of the structure and functioning of wetland habitats. There are two mechanisms through which urban development might negatively affect the water level in European Sites:

- The supply of new housing with potable water will require increased abstraction of water from surface water and groundwater bodies. Depending on the level of water stress in the geographic region, this may reduce the water levels in European Sites sharing the same catchment.
- The proliferation of impermeable surfaces in urban areas increases the volume and speed of surface water runoff. As traditional drainage systems often cannot cope with the volume of stormwater, sewer overflows are designed to discharge excess water directly into watercourses. Often this pluvial flooding results in downstream inundation of watercourses and the potential flooding of wetland habitats.

4.38 Increases to the quantity and rate of water delivery, such as through accelerated urban runoff, can result in summer flooding and prolonged / deeper winter flooding. This in turn results in the reduction of feeding and roosting sites for birds. For example, in areas where water is too deep, most waders will be unable to reach their food sources close to the ground.

4.39 The former Selby district lies within 10km of several European Sites that are sensitive to changes in their hydrological regimes. For example, the River Derwent SAC (designated for anadromous fish) straddles the north-eastern boundary of the district and a significant drop in flow could affect the ability of sea lamprey to navigate upstream. Maintaining the water flow rate and / or level is also integral in supporting the qualifying bird species of the Humber Estuary SPA / Ramsar.

4.40 The wet heaths component of the Skipwith Common SAC relies on a naturally fluctuating hydrological regime to ensure that an appropriate level of wetted area is maintained in the site. Similarly, breeding great-crested newts in the Kirk Deighton SAC need sufficient water levels for successful breeding. A drying out of the breeding ponds may place the long-term survival of the SAC's population at risk.

4.41 The following European sites within 10km of the former Selby district are sensitive to changes in water quantity, level and flow as a result of SLP development (the sites in bold are taken forward into the following chapters):

- **River Derwent SAC**
- **Lower Derwent Valley SPA / Ramsar**
- **Humber Estuary SPA / Ramsar**
- **Skipwith Common SAC**
- **Kirk Deighton SAC**

Atmospheric Pollution

4.42 The main pollutants of concern for European sites are oxides of nitrogen (NOx), ammonia (NH_3) and sulphur dioxide (SO_2), and are summarised in Table 5. Ammonia can have a directly toxic effect upon vegetation, particularly at close distances to the source such as near road verges[79]. NOx can also be toxic at very high concentrations (far above the annual average critical level). However, in particular, high levels of NOx and NH_3 are likely to increase the total N deposition to soils, potentially leading to deleterious knock-on effects in resident ecosystems. Increases in nitrogen deposition from the atmosphere is widely known to enhance soil fertility and to lead to eutrophication. This often has adverse effects on the community composition and quality of semi-natural, nitrogen-limited terrestrial and aquatic habitats[80] [81].

[79] http://www.apis.ac.uk/overview/pollutants/overview_NOx.htm.
[80] Wolseley, P. A.; James, P. W.; Theobald, M. R.; Sutton, M. A. **2006.** Detecting changes in epiphytic lichen communities at sites affected by atmospheric ammonia from agricultural sources. *Lichenologist* **38**: 161-176
[81] Dijk, N. **2011.** Dry deposition of ammonia gas drives species change faster than wet deposition of ammonium ions: Evidence from a long-term field manipulation. *Global Change Biology* **17**: 3589-3607

Table 5: Main sources and effects of air pollutants on habitats and species[82]

Pollutant	Source	Effects on habitats and species
Sulphur Dioxide (SO_2)	The main sources of SO_2 are electricity generation, and industrial and domestic fuel combustion. However, total SO_2 emissions in the UK have decreased substantially since the 1980's. Another origin of sulphur dioxide is the shipping industry and high atmospheric concentrations of SO_2 have been documented in busy ports. In future years shipping is likely to become one of the most important contributors to SO_2 emissions in the UK.	Wet and dry deposition of SO_2 acidifies soils and freshwater and may alter the composition of plant and animal communities. The magnitude of effects depends on levels of deposition, the buffering capacity of soils and the sensitivity of impacted species. However, SO_2 background levels have fallen considerably since the 1970's and are now not regarded a threat to plant communities. For example, decreases in Sulphur dioxide concentrations have been linked to returning lichen species and improved tree health in London.
Acid deposition	Leads to acidification of soils and freshwater via atmospheric deposition of SO_2, NOx, ammonia and hydrochloric acid. Acid deposition from rain has declined by 85% in the last 20 years, which most of this contributed by lower sulphate levels. Although future trends in S emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, increased N emissions may cancel out any gains produced by reduced S levels.	Gaseous precursors (e.g. SO_2) can cause direct damage to sensitive vegetation, such as lichen, upon deposition. Can affect habitats and species through both wet (acid rain) and dry deposition. The effects of acidification include lowering of soil pH, leaf chlorosis, reduced decomposition rates, and compromised reproduction in birds / plants. Not all sites are equally susceptible to acidification. This varies depending on soil type, bed rock geology, weathering rate and buffering capacity. For example, sites with an underlying geology of granite, gneiss and quartz rich rocks tend to be more susceptible.
Ammonia (NH_3)	Ammonia is a reactive, soluble alkaline gas that is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but ammonia concentrations are directly related to the distribution of livestock. Ammonia reacts with acid pollutants such as the products of SO_2 and NO_X emissions to produce fine ammonium (NH_4+) - containing aerosol. Due to its significantly longer lifetime, NH_4+ may be transferred much longer distances (and can therefore be a significant trans-boundary issue). While ammonia deposition may be estimated from its atmospheric concentration, the deposition rates are strongly influenced by meteorology and ecosystem type.	The negative effect of NH_4+ may occur via direct toxicity, when uptake exceeds detoxification capacity and via N accumulation. Its main adverse effect is eutrophication, leading to species assemblages that are dominated by fast-growing and tall species. For example, a shift in dominance from heath species (lichens, mosses) to grasses is often seen. As emissions mostly occur at ground level in the rural environment and NH_3 is rapidly deposited, some of the most acute problems of NH_3 deposition are for small relict nature reserves located in intensive agricultural landscapes.
Nitrogen oxides (NO_x)	Nitrogen oxides are mostly produced in combustion processes. Half of NO_X emissions in the UK derive from motor vehicles, one quarter from power stations	Direct toxicity effects of gaseous nitrates are likely to be important in areas close to the source (e.g. roadside verges). A critical level of NOx for all vegetation types has been set to 30 ug/m3.

[82] Information summarised from the Air Pollution Information System (http://www.apis.ac.uk/)

Pollutant	Source	Effects on habitats and species
	and the rest from other industrial and domestic combustion processes. Nitrogen oxides have been consistently falling for decades due to a combination of coal fired power station closures, abatement of other combustion point sources and improved vehicle emissions technology. They are expected to continue to fall over the plan period.	Deposition of nitrogen compounds (nitrates (NO_3), nitrogen dioxide (NO_2) and nitric acid (HNO_3)) contributes to the total nitrogen deposition and may lead to both soil and freshwater acidification. In addition, NO_x contributes to the eutrophication of soils and water, altering the species composition of plant communities at the expense of sensitive species.
Nitrogen deposition	The pollutants that contribute to the total nitrogen deposition derive mainly from oxidized (e.g. NO_X) or reduced (e.g. NH_3) nitrogen emissions (described separately above). While oxidized nitrogen mainly originates from major conurbations or highways, reduced nitrogen mostly derives from farming practices. The N pollutants together are a large contributor to acidification (see above).	All plants require nitrogen compounds to grow, but too much overall N is regarded as the major driver of biodiversity change globally. Species-rich plant communities with high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication. This is because many semi-natural plants cannot assimilate the surplus N as well as many graminoid (grass) species. N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O_3)	A secondary pollutant generated by photochemical reactions involving NOx, volatile organic compounds (VOCs) and sunlight. These precursors are mainly released by the combustion of fossil fuels (as discussed above). Increasing anthropogenic emissions of ozone precursors in the UK have led to an increased number of days when ozone levels rise above 40ppb ('episodes' or 'smog'). Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O_3 above 40 ppb can be toxic to both humans and wildlife, and can affect buildings. High O_3 concentrations are widely documented to cause damage to vegetation, including visible leaf damage, reduction in floral biomass, reduction in crop yield (e.g. cereal grains, tomato, potato), reduction in the number of flowers, decrease in forest production and altered species composition in semi-natural plant communities.

4.43 Sulphur dioxide emissions overwhelmingly derive from power stations and industrial processes that require the combustion of coal and oil, as well as (particularly on a local scale) shipping[83]. Ammonia emissions originate from agricultural practices[84], with some chemical processes also making notable contributions. As such, it is unlikely that material increases in SO_2 or NH_3 emissions will be associated with the emerging SLP.

4.44 In contrast, NOx emissions are dominated by the output of vehicle exhausts (more than half of all emissions). A 'typical' housing development will contribute by far the largest portion to its overall NOx footprint (92%) through its associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison[85]. The emerging SLP, which will increase the population of Selby District, can therefore be reasonably expected to increase emissions of NOx through an increase in vehicular traffic.

4.45 According to the World Health Organisation, the critical NOx concentration (critical threshold) for the protection of vegetation is 30 μgm^{-3}; the threshold for sulphur dioxide is 20 μgm^{-3}. In addition, ecological

[83] http://www.apis.ac.uk/overview/pollutants/overview_SO2.htm.
[84] Pain, B.F.; Weerden, T.J.; Chambers, B.J.; Phillips, V.R.; Jarvis, S.C. 1998. A new inventory for ammonia emissions from U.K. agriculture. *Atmospheric Environment* **32**: 309-313
[85] Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. http://www.airquality.co.uk/archive/index.php

studies have determined 'critical loads'[86] of atmospheric nitrogen deposition (that is, NOx combined with ammonia NH_3).

4.46 According to the Department of Transport's Transport Analysis Guidance, beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is insignificant (Figure 3 and see reference [87]). This is therefore the distance that has been used throughout this HRA to identify major commuter routes along European Sites, which are likely to be significantly affected by development outlined in the SLP.

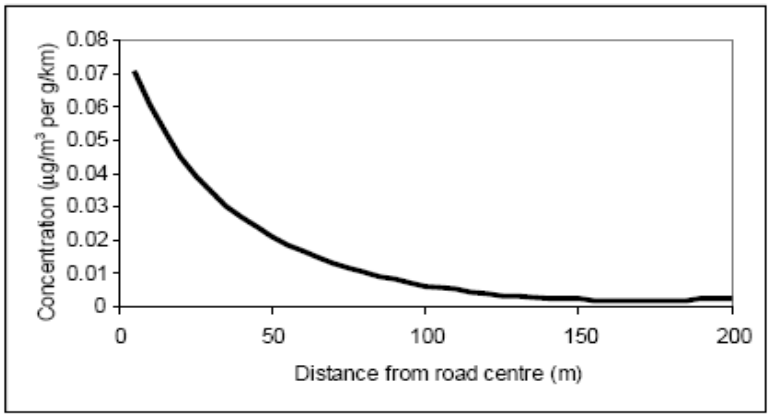

Figure 3: Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT[88])

4.47 The following European sites within 10km of the former Selby district are sensitive to atmospheric pollution arising from urban growth, primarily due to a significant increase in the number of two-way vehicle trips through or within 200m of these sites (the sites in bold are taken forward into the following chapters):

- **Lower Derwent Valley SPA / Ramsar / SAC**
- **Skipwith Common SAC**
- **River Derwent SAC**
- **Humber Estuary SPA / Ramsar / SAC**
- **Thorne & Hatfield Moors SPA**
- **Thorne Moor SAC**

4.48 The potential for air quality impacts on River Derwent SAC was considered. The only place in the district where a road likely to be a significant journey to work route lies within 200m of this SAC is the A63 east of Hemingbrough. However, the Air Pollution Information System (www.apis.ac.uk) in its 'critical load function' tool indicates that there are no critical loads available for this SAC, which means that there are no thresholds against which impacts can be assessed. While a threshold for another habitat could be used as a proxy, there are none that are truly an applicable proxy for *Ranunculus* vegetation, the habitat for which the SAC is designated. Moreover, as discussed in the submission HRA of the York Local Plan and indicated on APIS, the River Derwent is phosphate-limited rather than nitrogen-limited, meaning that phosphorus is the principal growth-limiting nutrient controlling eutrophication. This is why the Environment Agency Review of Consents process for the river focussed on the impact of phosphorus inputs. Phosphorus does not stem from atmosphere and although Natural England has recently (March 2022) identified nutrient problems with several freshwater and marine European sites in the north of England this has not extended to the River Derwent SAC. However, in their response to the Regulation 18 Local Plan Natural England asked that impacts on functionally-linked habitat within the SAC boundary should also be considered.

[86] The critical load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to occur
[87] http://www.dft.gov.uk/webtag/documents/expert/unit3.3.3.php#013; accessed 12/05/2016
[88] http://www.dft.gov.uk/ha/standards/dmrb/vol11/section3/ha20707.pdf; accessed 13/07/2018

5. Screening for Likely Significant Effects (LSEs)

Recreational Pressure

Lower Derwent Valley SPA / Ramsar

5.1 The Lower Derwent Valley SPA / Ramsar is designated for a range of overwintering and breeding waterfowl, waders and birds of prey. While inter-specific differences in sensitivity to disturbance are likely to be present, all qualifying species are potentially impacted by recreational activities. In the case of the Lower Derwent Valley SPA / Ramsar this is most likely to arise from dog walking but also other activities, such as recreational boating, walking and wildlife watching.

5.2 The SPA / Ramsar stretches along the boundary of the former Selby district on a north-south axis. The closest point of the SPA / Ramsar (the Breighton Meadows SSSI) lies approx. 5.6km from the Selby-Barlby-Osgodby agglomeration, the closest urban population centre to the site. However, the Derwent Ings SSSI, the most likely component of the SPA / Ramsar to be visited due to the convenience of access along the A163 and the presence of a car park, is slightly further away from the SPA / Ramsar (5.9km). While this is a distance beyond that observed for many inland nature conservation sites, the SPA / Ramsar is likely to be one of the recreational honeypot sites in Selby District. Furthermore, some settlements (e.g. North Duffield) in the district lie very close to the SPA / Ramsar and concentrated growth in these areas could significantly increase the recreational burden in the site. Overall, the Lower Derwent Valley SPA / Ramsar is screened in for Appropriate Assessment in relation to recreational pressure.

Lower Derwent Valley SAC

5.3 The Lower Derwent SAC is designated for lowland hay meadows and alluvial forests, as well as otters. Furthermore, the SAC entirely overlaps with the SPA / Ramsar, and a similar geographic distance to the Selby District's main population centre therefore applies. Recreational pressure could lead to trampling damage, soil compaction and erosion around the root system of the alluvial forests. However, Natural England's Site Improvement Plan (SIP) does not highlight recreational pressure as a threat to the SAC features. However, because the SIP refers to the impacts of public access along the floodbanks, it is considered that recreation might lead to disturbance on the SAC otter population.

5.4 Overall, recreational pressure effects on the SAC features are of secondary importance compared to those in the SPA / Ramsar. However, the Lower Derwent SAC is screened in for Appropriate Assessment in relation to recreational pressure as a precautionary measure **and** because the same evidence base as relevant to the SPA / Ramsar applies.

Skipwith Common SAC

5.5 The Skipwith Common SAC is designated for northern Atlantic wet heaths (with *Erica tetralix*) and European dry heaths. The main recreational pressure concerns for this site include off-trail trampling (such as through the formation of new desire lines) and nutrient enrichment from dog walkers. Studies in other nature conservation sites (e.g. the Burnham Beeches SSSI) have documented the vast amount of nitrogen deposited annually in dog faeces and urine in sensitive habitats. Heathlands are known to be depauperate ecosystems and a significant increase in nutrient concentrations could lead to a modal shift in ecological communities towards more competitive grass species. Generally, recreational pressure is considered to be a major threat to the integrity of heathlands (for reference see Thames Basin Heaths or Wealden Heaths case studies).

5.6 The Skipwith Common SAC lies in the north-east of Selby District, approx. 2km from the main population centre in the Selby-Barlby-Osgodby agglomeration. While this National Nature Reserve lies in a rural part of the district, it is therefore easily reached by car. Given its proximity to residential development and its management as a high-profile National Nature Reserve (NNR) – which is likely to increase the recreational

draw of the site – LSEs of the SLP on the site cannot be excluded and the SAC is screened in for Appropriate Assessment regarding recreational pressure.

River Derwent SAC

5.7 The River Derwent SAC is designated for its water course from plain to montane level with *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. Furthermore, the SAC supports several anadromous fish species as well as otter. One of the primary threats to riverine systems is typically recreational boating and associated anchoring activities, because these may directly damage the vegetation and / or disturb substrates required for spawning, such as silt and gravel beds. However, the SIP does not highlight boating in the River Derwent as an issue. Therefore, recreational pressure effects on these interest features are screened out.

5.8 Otters are highly mobile and depend on the habitat quality adjacent to the river. Areas with bankside vegetation are particularly important in providing otter refuges adjacent to paths / trails that are accessible to the public. Natural England's SIP highlights public access on public and non-Public Rights of Way (PRoW), particularly along floodbanks, as a cause of increasing disturbance. Limited car parking and a formal arrangement of footpaths reduces the impact of existing recreational pressure and whilst informal access along both riverbanks occurs, this is largely restricted to local residents and the simple width of the channel reduces the frequency and magnitude of direct impacts. Whilst bullhead, lamprey and the floating vegetation community can be considered unlikely to be affected by recreational pressure, otters remain vulnerable. Given that there are no allocated sites adjacent to the River Derwent SAC (the nearest being 1km distant) and limited accessibility, LSEs of the SLP on the River Derwent SAC regarding recreational pressure can be screened out from Appropriate Assessment.

Humber Estuary SPA / Ramsar

5.9 Similar to the River Derwent SPA / Ramsar, the Humber Estuary SPA / Ramsar is designated for a range of waterfowl, waders and birds of prey. These bird species have varying degrees of sensitivity to recreational pressure, most notably from dog walkers. The estuary extends on a west-east axis from Goole to Grimsby, and the closest section of the SPA / Ramsar lies approx. 1km to the east of the The former Selby districtboundary. However, it is noted that the distance from the estuary to the town of Selby, the main population centre in the district, is much greater (approx. 11.8km). Given the general rural nature of Selby, it is considered that its overall contribution to recreational pressure in the Humber Estuary SPA / Ramsar is likely to be relatively small. However, if significant residential growth in the SLP was allocated around the settlements of Drax, Carlton and Newland, this may affect the analysis.

5.10 Overall, it is considered that an assessment of the geographic distribution of residential growth is required in relation to the Humber Estuary SPA / Ramsar. LSEs of the SLP on the site cannot be excluded and the site is screened in for Appropriate Assessment.

Humber Estuary SAC

5.11 The Humber Estuary SAC is designated for several habitats, primarily estuaries and intertidal mud- and sandflats. Furthermore, other habitats such as Atlantic saltmarsh and shifting dunes are also present within the estuary. If recreational activities are carried out in the intertidal zone, this could lead to trampling or vehicular damage to the salt meadows. Furthermore, recreational access of dune systems – if excessive – can result in dune erosion or dislodgement dune-associated vegetation.

5.12 Given that the SAC overlaps with the Humber Estuary SPA / Ramsar, its location in relation to the former Selby district boundary and the town of Selby is the same. Therefore, while it is unlikely that the SLP will contribute significantly to the recreational footprint in the Humber Estuary SAC, the site is screened in for Appropriate Assessment as a precautionary measure.

Screening of SLP Policies and Site Allocations – Recreational Pressure

5.13 The following individual allocations are screened in for potential recreational pressure effects 'alone' due to their proximity to the Lower Derwent Valley SPA / Ramsar / SAC, Humber Estuary SAC/SPA/Ramsar and Skipwith Common SAC:

- Land north of A163, North Duffield (NDUF-D) – 40 dwellings within 325m from the Lower Derwent Valley SPA / Ramsar / SAC

5.14 LSEs for the following SLP policies regarding recreational pressure cannot be excluded:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM5 – Tourist, Recreation and Cultural Facilities (Strategic Policy) (supports tourism and recreation developments across the district)
- Policy EM6 – Holiday Accommodation (Strategic Policy) (supports the provision of various types of holiday accommodation, such as hotels, guest houses and holiday cottages)
- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
- Policy HG2 – Windfall Developments (Strategic Policy) (hypothetically enables the provision of further dwellings – in addition to those detailed in Policy HG1)
- Policy HG14 – Gypsy & Traveller Sites (provides for 12 Gypsy and Traveller Pitches in Newthorpe)
- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T1 - Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T2 - London Road Special Policy Area (potentially adds to the volume of housing delivered under Policy HG1).

Loss of Functionally Linked Habitat

Lower Derwent SPA / Ramsar

5.15 The Lower Derwent SPA / Ramsar is designated for several species of waterfowl, which are all mobile and are expected to routinely use habitats beyond the designated site boundary for roosting or foraging. Most notable are two bird species, Bewick's swan and European golden plover, which are known to be tightly associated with agricultural land parcels. Natural England's Site Conservation Objectives Supplementary Advice Note highlights for both species that they are frequently found in surrounding farmland. However, it is to be noted that some of the other waterfowl species e.g. Northern shoveler, Eurasian wigeon and Eurasian teal are found on seasonally flooded grasslands, which may also lie outside the designated site boundary although these tend to be around coastal sites as opposed to inland water bodies and the maximum foraging distance for wigeon is 500m (refer to Table 3).

5.16 The SPA / Ramsar also needs to be considered in the context of the surrounding landscape, which is mainly rural in nature and comprises large tracts of undeveloped greenfield land, such as intensively cultivated arable land parcels. Overall, a review of Google Maps indicates that there is a vast number of potential functionally linked feeding sites for Bewick's swans and golden plovers surrounding the SPA / Ramsar.

5.17 Given that the potential for functional linkage in the former Selby district is high, LSEs of the SLP on the Lower Derwent Valley SPA / Ramsar regarding the loss of functionally linked habitat cannot be excluded, either alone or in-combination (particularly if the recently submitted East Yorkshire Solar Farm comes forward), and the site is screened in for Appropriate Assessment.

Humber Estuary SPA / Ramsar

5.18 The Humber Estuary SPA / Ramsar qualifies as a SPA / Ramsar due to the presence of a range of waterfowl, waders and birds of prey. These species require a range of supporting habitats to complete all necessary stages of their breeding cycle and / or overwintering period. For example, marsh harriers are known to hunt in agricultural land, such as fields with herbaceous cropping (e.g. irrigated maize, cereal and alfalfa). Functional linkage of habitats outside the designated site areas for marsh harriers has been highlighted by

Natural England in relation to numerous planning applications (e.g. [89]). Usage of inland areas of wet grassland, rough grassland and agricultural land has also been documented for hen harriers, golden plovers, black-tailed godwits, redshanks and ruffs.

5.19 Where there is clearly the potential for functional linkage in relation to the Humber Estuary SPA / Ramsar, its geographic situation in relation to the former Selby district also requires consideration. The most westerly point of the SPA / Ramsar lies approx. 1km to the east of the district boundary. Generally, it is considered that most off-site land usage will be concentrated around the estuary itself. Furthermore, much of the bird interest in the SPA / Ramsar is likely to be concentrated further eastwards in the SPA / Ramsar, further away from Selby District. Notwithstanding this, LSEs of the SLP on the Humber Estuary SPA / Ramsar regarding the loss of functionally linked habitat cannot be excluded, particularly if development in the south-east of the Plan Area and the recently submitted East Yorkshire Solar Farm come forward and the site is screened in for Appropriate Assessment.

Thorne & Hatfield Moors SPA

5.20 The Thorne & Hatfield Moors SPA is designated for its significant population of breeding nightjar. Nightjars build their nests in bare patches on the ground (typically heathland) with widely scattered trees, in order to have clear sightlines for predator detection. They forage for insects in a variety of habitats up to 6km from their nests[90], including the interface between heaths and woodland, woodland clearings and rotationally managed woodland plantations. Generally, the loss of such habitats may affect the ecological functioning of the SPA population.

5.21 The former Selby district lies approx. 5.4km to the north of the closest point in the Thorne & Hatfield Moors SPA, which is close to the maximum foraging distance of nightjars (6km). A review of habitat mapping on MAGIC indicates that there is no heathland or woodland plantation in the south-eastern part of Selby District. Considering the long flight distance and the absence of habitats typically used by nightjars, it is concluded that LSEs of the SLP on the Thorne & Hatfield Moors SPA regarding the loss of functionally linked habitat can be excluded. The site is screened out from Appropriate Assessment in relation to this impact pathway.

Kirk Deighton SAC

5.22 The SAC is designated for a large great-crested newt population that inhabits its temporary pond system. While the ponds on site are integral to the breeding success of this species, great-crested newts also use a range of terrestrial habitats for foraging and hibernation. While great-crested newts have relatively limited mobility, such supporting habitats may lie up to 500m from the designated site boundary. Therefore, a loss of the supporting habitat mosaic surrounding newt breeding ponds due to development proposals should be avoided. However, the former Selby district lies approx. 6.7km to the south-east of the Kirk Deighton SAC, which is far beyond the distance that great-crested newts from the site are realistically expected to travel. Overall, it is concluded that the SLP will not affect the ecological integrity of the SAC's newt population and the site is therefore screened out from Appropriate Assessment.

Screening of SLP Policies and Site Allocations – Loss of Functionally Linked Habitat

5.23 The following individual allocations are screened in for Appropriate Assessment 'alone' because they lie within the typical foraging ranges of particular SPA / Ramsar waterfowl / waders associated with the Lower Derwent Valley SPA / Ramsar and / or the Humber Estuary SPA / Ramsar:

- Land at Turnhead Farm, Barlby (BARL-K) – 6.1km from the Lower Derwent Valley SPA / Ramsar
- Lake View Farm, Osgodby (OSGB-G) – 5.7km from the Lower Derwent Valley SPA / Ramsar
- Land east of Sand Lane (OSGB-I) – 5.5km from the Lower Derwent Valley SPA / Ramsar

[89] Cleve Hill Solar Park. (November 2018). Environmental Statement including Natural England's Discretionary Advice Service Response. Available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010085/EN010085-000400-6.4.8.8%20NE%20DAS%20Advice.pdf [Accessed on the 10/11/2020]
[90] Alexander, I. & Cresswell, B. 1990. Foraging by Nightjars Caprimulgus europaeus away from their nesting areas. Ibis 132: 568–574.,

- Land north of Mill Lane, Carlton (CARL-G) – 9km from the Lower Derwent Valley SPA / Ramsar and 8.2km from the Humber Estuary SPA / Ramsar
- Bon Accord Farm, Main Street, Cliffe (CLIF-B) – 3.7km from the Lower Derwent Valley SPA / Ramsar and 8.9km from the Humber Estuary SPA / Ramsar
- Land north of Cliffe Primary School (CLIF-O) – 3.8km from the Lower Derwent Valley SPA / Ramsar and 9km from the Humber Estuary SPA / Ramsar
- Land East of Mill Lane, Hemingbrough (HEMB-G) – 3.1km from the Lower Derwent Valley SPA / Ramsar and 6.7km from the Humber Estuary SPA / Ramsar
- Land South of School Road, Hemingbrough (HEMB-K) – 2.6km from the Lower Derwent Valley SPA / Ramsar and 6.6km from the Humber Estuary SPA / Ramsar
- Land north of A163, North Duffield (NDUF-D) – 325m from the Lower Derwent Valley SPA / Ramsar
- Cross Hills Lane, Selby (SELB-BZ) – 9.1km from the Lower Derwent Valley SPA / Ramsar
- Land on the former Rigid Paper site, Denison Road, Selby (SELB-AG) – 7.5km from the Lower Derwent Valley SPA / Ramsar
- Industrial Chemicals Ltd, Canal View, Selby (SELB-B) – 8.1km from the Lower Derwent Valley SPA / Ramsar
- Olympia Park, Barlby Road, Barlby (SELB-CA) – 6.4km from the Lower Derwent Valley SPA / Ramsar

5.24 Furthermore, for the following SLP policies LSEs regarding functionally linked habitat loss cannot be excluded:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM1 – Meeting Employment Needs (Strategic Policy) (provides for three employment allocations in Eggborough, Sherburn in Elmet and Selby, totalling an area of 130.95ha)
- Policy EM5 – Tourist, Recreation and Cultural Facilities (Strategic Policy) (supports tourism and recreation developments across the district)
- Policy EM6 – Holiday Accommodation (Strategic Policy) (supports the provision of various types of holiday accommodation, such as hotels, guest houses and holiday cottages)
- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
- Policy HG2 – Windfall Developments (Strategic Policy) (hypothetically enables the provision of further dwellings – in addition to those detailed in Policy HG1)
- Policy HG14 – Gypsy & Traveller Sites (provides for 12 Gypsy and Traveller Pitches in Newthorpe)
- Policy S2 – Selby Gateway Special Policy Area (hypothetically enables the provision of additional employment land)
- Policy T2 - London Road Special Policy Area (supports mixed use development)

Water Quality

Lower Derwent Valley SPA / Ramsar

5.25 The Lower Derwent Valley SPA's / Ramsar's qualifying species are not directly sensitive to water negative water quality changes (unless in relation to direct toxicity effects of certain chemicals). However, bird populations may be negatively impacted by water quality via cascading effects up the food chain. For example, invertebrates or aquatic macrophytes, the foraging resources of most waterfowl, may experience changes in their abundance and community structure as a result of eutrophication, mediated through spikes

in phosphorus loading (the limiting nutrient in freshwater bodies). The main source of phosphorus from Local Plans is in treated sewage effluent discharged from Wastewater Treatment Works (WwTWs). The SPA / Ramsar straddles the boundary of the former Selby district and depending on the location of new urban surfaces, there is thus also the potential for overflow from sewage systems or Package Treatment Plants (PTPs) to reach the site via surface run-off.

5.26 Depending on the condition assessment of local watercourses, the discharge location of WwTWs and the available headroom at those works, LSEs of the emerging SLP on the Lower Derwent Valley SPA / Ramsar regarding water quality cannot be excluded and the site is screened in for Appropriate Assessment.

Lower Derwent Valley SAC

5.27 In contrast to the qualifying species of the Lower Derwent Valley SPA / Ramsar, which overlaps the SAC, the habitats of the SAC are directly sensitive to negative changes in water quality. Both the lowland hay meadows and the alluvial forests have a high degree of hydrological connectivity with the River Derwent, and their plant species could be negatively impacted by phosphate-related eutrophication resulting from point-source discharges from WwTWs. Like the overlapping SPA / Ramsar, the Lower Derwent SAC straddles the boundary of the former Selby district and, depending on the location of new urban surfaces, there is the potential for overflow from sewage systems or Package Treatment Plants (PTPs) to reach the site via surface run-off.

5.28 As for the SPA / Ramsar, a more detailed assessment of the condition of SSSI components, discharge locations and available headroom of potential WwTWs is required. Overall, LSEs of the emerging SLP on the Lower Derwent Valley SAC regarding water quality cannot be excluded and the site is screened in for Appropriate Assessment.

River Derwent SAC

5.29 The water quality in the River Derwent SAC is crucial to its water course and the associated *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. The extent of this type of vegetation has been recently reduced by nutrient enrichment from sewage as well as agricultural inputs. However, the Annex II species for which this SAC is notified (river lamprey, sea lamprey, bullhead) are also sensitive to water quality changes. Nutrient enrichment from treated sewage effluent in WwTWs can lead to the loss of suitable spawning substrate as a result of benthic algal growth and associated anoxia. Furthermore, low dissolved oxygen concentration in the SAC are known to impede the upstream migration of both river and sea lampreys. The River Derwent SAC straddles the boundary of the former Selby district on a north-south axis and, depending on the location of new urban surfaces, there is the potential for overflow from sewage systems or Package Treatment Plants (PTPs) to reach the site via surface run-off.

5.30 Of all sites notified within the Lower Derwent Valley, the River Derwent SAC is considered to have the highest sensitivity to water quality impacts. Therefore, LSEs of the emerging SLP on the SAC cannot be excluded and the site is screened in for Appropriate Assessment.

Humber Estuary SPA / Ramsar

5.31 The Humber Estuary SPA's / Ramsar's waterfowl, waders and birds of prey are all indirectly sensitive to water quality changes. High nutrient concentrations (since this is an estuary both phosphorus and nitrogen are likely to be important) are likely to cause phytoplankton and macroalgal blooms. In turn, eutrophication can lead to reduced dissolved oxygen (DO) levels, with potentially lethal and sub-lethal effects on infauna, epifauna and fish. Overall, this could mean that SPA / Ramsar bird species that are reliant on these affected species as a nutritional resource, have fewer food sources available.

5.32 It is noted that the Humber Estuary SPA / Ramsar lies outside of the former Selby district and has a relatively long flow distance to the nearest WwTW located in the former Selby district (Hemingbrough WwTW). It is likely that natural attenuation processes would reduce the nutrient load in the River Ouse over this distance. However, it is also noted that the Humber Estuary receives the combined treated wastewater load from two rivers (River Ouse and River Derwent) and numerous WwTWs that serve the former Selby district (Hemingbrough, Selby, Barlby and Wheldrake WwTWs). In-combination with the wastewater contributed by adjoining authorities, it is concluded that LSEs of the SLP on the Humber Estuary SPA / Ramsar in relation to water quality cannot be excluded and the site is screened in for Appropriate Assessment.

Humber Estuary SAC

5.33 The Humber Estuary SAC comprises several habitats and fish / mammal species that are dependent on good water quality. The Environment Agency's Weight of Evidence approach assesses the risk of eutrophication across the estuary as low. Furthermore, between 2009 and 2012 the dissolved oxygen concentration in the SAC was classified as being in 'good ecological status'. However, in the years of 2013 and 2014, the Upper Humber failed its Water Framework Directive (WFD) targets due to a decline in DO concentrations. Importantly, Natural England's Site Conservation Objectives Supplementary Advice Note highlights that the Dissolved Oxygen sag (reduction) is not currently affecting any of the qualifying habitats / species. However, to be precautionary, and in line with the screening decision for the overlapping Humber Estuary SPA / Ramsar, the SAC is screened in for Appropriate Assessment.

Thorne Moor SAC

5.34 Generally, the Thorne Moors SAC depends on the input of water of sufficient quality to maintain the ecological viability of its active raised bog feature, including plants such as bog-mosses *Sphagnum* spp., heather and cross-leaved heath. This is important because many of these species are adapted to low-nutrient conditions and would be at a competitive disadvantage to other plants under higher nutrient regimes. However, the SAC lies approx. 3.5km from the Humber estuary, which would be the only realistic pathway to water-quality issues arising from the SLP. At this distance it is considered unlikely that the development in the former Selby district would materially contribute to the nutrient load in the SAC. Overall, LSEs regarding water quality can be excluded and the site is screened out from Appropriate Assessment.

Kirk Deighton SAC

5.35 The Kirk Deighton SAC is sensitive to negative changes in water quality due its great-crested newts. A significant increase in phosphorus levels (the limiting nutrient in freshwater environments) could lead to eutrophication, with concomitant low DO levels and high turbidity. High turbidity, in particular, has been observed in the SAC previously and could lead to the blocking of gills, hampering newt displaying behaviour and reducing invertebrate numbers. While the Kirk Deighton SAC is sensitive to water quality impacts in principle, it lies in a different hydrological catchment than the waterbodies receiving treated sewage from the SLP. Therefore, LSEs of the SLP on the SAC can be excluded and the site is screened out from Appropriate Assessment in relation to the impact pathway water quality.

Screening of SLP Policies and Site Allocations – Water Quality

5.36 Some allocations may have the potential for impacting the water quality in aquatic European sites through direct surface run-off (such as from overflowing sewerage systems or Package Treatment Plants; PTPs). The following individual development allocations are screened in for Appropriate Assessment 'alone' because they lie in close proximity to European sites that are dependent on good water quality:

- Land East of Mill Lane, Hemingbrough (HEMB-G) – 1.2km from the River Derwent SAC
- Land South of School Road, Hemingbrough (HEMB-K) – 1.5km from the River Derwent SAC
- Land north of A163, North Duffield (NDUF-D) – 475.9m from the Lower Derwent Valley SPA / Ramsar
- Land north of Gothic Farm, Back Lane (NDUF-O) - 400.2m from the Lower Derwent Valley SPA / Ramsar

5.37 Furthermore, for the following SLP policies LSEs regarding water quality impacts cannot be excluded, including:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM1 – Meeting Employment Needs (Strategic Policy) (provides for three employment allocations in Eggborough, Sherburn in Elmet and Selby, totalling an area of 130.95ha)
- Policy EM5 – Tourist, Recreation and Cultural Facilities (Strategic Policy) (supports tourism and recreation developments across the district)

- Policy EM6 – Holiday Accommodation (Strategic Policy) (supports the provision of various types of holiday accommodation, such as hotels, guest houses and holiday cottages)
- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
- Policy HG2 – Windfall Developments (Strategic Policy) (hypothetically enables the provision of further dwellings – in addition to those detailed in Policy HG1)
- Policy HG14 – Gypsy & Traveller Sites (provides for 12 Gypsy and Traveller Pitches in Newthorpe)
- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy S2 – Selby Gateway Special Policy Area (hypothetically enables the provision of additional employment land)
- Policy T1 Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T2 London Road Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1 and employment land)

Water quantity, level and flow

Lower Derwent Valley SPA / Ramsar

5.38 Most of the qualifying bird species in the Lower Derwent Valley SPA / Ramsar are dependent on water availability within naturally fluctuating limits. For example, golden plovers feed on a range of prey species (e.g. earthworms, leatherjackets, beetles and spiders) and thus require the maintenance of the overall area of wet / flooded grassland. Furthermore, ruff depend on an optimal water depth of between 1-3cm to roost and forage. Both the drying out (this will reduce prey abundance) and increased flooding (most birds are visual predators and will find it difficult to forage in deeper water) of land could affect the ability of this species to meet its nutritional needs. In the Site Conservation Objectives Supplementary Advice Note, Natural England identifies that water levels in the SPA / Ramsar are primarily the result of climate change and water level conditions in rivers, primarily the River Derwent. Depending on the source of potable water to meet the growing water demand in Selby District, LSEs of the SLP on the Lower Derwent Valley SPA / Ramsar regarding water quantity, level and flow cannot be excluded and the site is screened in for Appropriate Assessment.

Lower Derwent Valley SAC

5.39 The Lower Derwent Valley SAC is designated for its lowland hay meadows and alluvial forests, both of which depend on the hydrological input from the River Derwent. The hay meadows depend on seasonal flooding for its associated nutrient input. In order to guarantee this, the SAC requires near-surface water tables all year, ranging from 35cm below ground level (bgl) in winter to 70cm bgl in summer. Natural England's Site Conservation Objectives Supplementary Advice Note highlights that the SAC's ecosystem needs a cumulative flooding duration of 10 days in winter and none in the summer period. Like the overlapping SPA / Ramsar, the integrity of SAC habitats clearly depends on maintaining the hydrological regime within relatively narrow limits.

5.40 The SLP will increase the water demand in the former Selby district and, depending on whether additional water resources will have to be explored to meet this demand, could result in more freshwater being abstracted from the wider River Derwent catchment. Overall, LSEs of the SLP on the Lower Derwent Valley SPA / Ramsar regarding water quantity, level and flow cannot be excluded and the site is screened in for Appropriate Assessment.

River Derwent SAC

5.41 The River Derwent SAC is designated for its water course and several fish species. All these features depend on maintaining the hydrological integrity of the river system. For example, the sea lamprey is an anadromous species that spawns in freshwater and completes its life cycle in the sea. Low river flows can impede this species' ability to reach upstream gravel substrate needed for spawning. River flows are less

of a threat to river lamprey, as this species is less mobile and tends to remain in the lower reaches of rivers. A stable flow regime with fast flows is also integral for all aspects of the bullhead life cycle. The river flows are also important to the *Ranunculion fluitantis* and the *Callitricho-Batrachion* vegetation, as this determines bed hydraulics, wetted area, and the temperature / dissolved oxygen regimes. Natural England's SIP lists water abstraction (and resulting reduced flows) as a threat to the integrity of this riverine SAC. For example, a largely unrestricted drinking water abstraction point at Elvington is thought to impact on observed flows in the river. Overall, LSEs of the SLP on the River Derwent SAC regarding water quantity, level and flow cannot be excluded and the site is screened in for Appropriate Assessment.

Humber Estuary SPA / Ramsar

5.42 The Humber Estuary SPA's / Ramsar's wide array of qualifying species (including waterfowl, waders and bird of prey) depends on stable hydrological patterns and water areas within the estuary and its wider network of supporting habitats. For example, black-tailed godwits, golden plovers and redshanks require the maintenance of sufficient areas of grassland in wet / flooded conditions. In contrast, breeding species such as avocets and bitterns depend on water levels to be maintained below a 2cm fluctuation to avoid nests being flooded. Most SPA / Ramsar species require a water depth within relatively narrow limits for optimal foraging or roosting. While a review of Natural England's SIP does not list water abstraction or hydrology as a threat to the SPA / Ramsar, the site is screened in for Appropriate Assessment as a precautionary measure due to the sensitivity of its qualifying species to changes in water levels.

Humber Estuary SAC

5.43 The overlapping Humber Estuary SAC is designated for a diverse array of habitat types, including estuaries, mudflats and sandflats, Atlantic saltmarsh and different variants of dune habitats. Furthermore, the SAC also supports river lamprey, sea lamprey (an anadromous species) and grey seal. Natural England's Conservation Objectives Supplementary Advice Note specifies that the magnitude of freshwater input to estuaries is vital in maintaining its water circulation and salinity gradient. Therefore, an appropriate hydrological connectivity to upstream fluvial catchments needs to be maintained. Water flow rates are of primary importance for anadromous species (e.g. sea lamprey) that need to reach upstream spawning habitats (see screening section on the River Derwent SAC). Low flow rates might result in the severance of upstream migratory routes and prevent lampreys from reaching their established breeding grounds. Overall, LSEs of the emerging SLP on the Humber Estuary SAC regarding water quantity, level and flow cannot be excluded and the site is screened in for Appropriate Assessment.

Skipwith Common SAC

5.44 The SAC's qualifying wet heaths with *Erica tetralix* have some dependence on hydrological supply. Given the relatively long distance to the nearest major rivers (Rivers Derwent and Ouse) it is considered that the SAC will be primarily groundwater-fed. All WwTWs identified in The former Selby district discharge into surface waterbodies and it is extremely unlikely that the effluent discharge locations will have hydrological connectivity with the Skipwith Common SAC. Therefore, LSEs of the SLP on the SAC can be excluded and the site is screened out from Appropriate Assessment in relation to this impact pathway.

Hatfield Moor SAC

5.45 Hatfield Moors is a remnant of an extensive lowland raised bog which once occupied the Humberhead levels. Hatfield is unique in having developed directly upon nutrient deficient gravels without an initial reed-swamp phase. Much of the bog has been cut for peat yet a restricted representative flora and fauna persists within a mosaic of mire and dry heath habitats beneath birch scrub. Lowland raised bog gets all its water supply from rainfall, snow and mist, therefore, LSEs of the SLP on the SAC can be excluded and the site is screened out from Appropriate Assessment in relation to this impact pathway.

Thorne and Hatfield Moors SPA

5.46 As with Hatfield Moor SAC, the main habitat type is lowland raised bog and LSEs of the SLP on the SPA can be excluded and the site is screened out from Appropriate Assessment in relation to this impact pathway.

Kirk Deighton SAC

5.47 The ecological integrity of the Kirk Deighton SAC, which supports a large breeding population of great-crested newts in one of its ponds, is clearly dependent on water supply. The main breeding pond within the site has a highly fluctuating water level, which sometimes leads to pond desiccation. However, this is not affecting the population size of newts here. Natural England's SIP does not highlight water abstraction or hydrology as a specific threat / pressure to the site's integrity. Therefore, it is not considered that additional water abstraction for the SLP could realistically impact the water level in the Kirk Deighton SAC. The site is screened out from Appropriate Assessment in relation to this impact pathway.

Screening of SLP Policies and Site Allocations – Water Quantity, Level and Flow

5.48 Overall, LSEs of several SLP policies on the water quantity, level and flow in these European sites cannot be excluded, including:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM1 – Meeting Employment Needs (Strategic Policy) (provides for three employment allocations in Eggborough, Sherburn in Elmet and Selby, totalling an area of 130.95ha)
- Policy EM5 – Tourist, Recreation and Cultural Facilities (Strategic Policy) (supports tourism and recreation developments across the district)
- Policy EM6 – Holiday Accommodation (Strategic Policy) (supports the provision of various types of holiday accommodation, such as hotels, guest houses and holiday cottages)
- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
- Policy HG2 – Windfall Developments (Strategic Policy) (hypothetically enables the provision of further dwellings – in addition to those detailed in Policy HG1)
- Policy HG14 – Gypsy & Traveller Sites (provides for 12 Gypsy and Traveller Pitches in Newthorpe)
- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy S2 - Selby Gateway Special Policy Area (hypothetically enables the provision of additional employment land)
- Policy T1 Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T2 London Road Special Policy Area (supports mixed use development)

Atmospheric Pollution (Through Nitrogen Deposition)

River Derwent SAC

5.49 In their response to the Regulation 18 Local Plan Natural England accepted our point that the river channel of the River Derwent SAC is not being air quality sensitive and/or does not have any appropriate critical loads. However, Natural England asked the Council to consider impacts on 'supporting habitat' (e.g. fen, swamp or wet woodland) within the river corridor even though technically not SAC features. For the purposes of this iteration of the HRA, AECOM therefore modelled two transects on the roads within 200m of the SAC which are most likely to be affected by traffic growth in the Local Plan and which have functionally linked habitat within 200m. These are the A163 and the A63 Hull Road. LSEs of the SLP on the River Derwent SAC cannot be dismissed. The site is therefore screened into Appropriate Assessment in relation to this impact pathway.

Lower Derwent Valley SPA / Ramsar

5.50 The Lower Derwent Valley SPA is designated for several species of waterfowl, which require a range of food resources, such as grasses and different types of invertebrates. However, the impacts of atmospheric nitrogen deposition from road traffic on these foraging resources are not clear-cut. For example, APIS identifies that the impact of nitrogen deposition on the food of wigeons and golden plovers may be positive or negative. Teal might actually benefit from additional nutrient loadings in their habitats because the seeds or invertebrates they rely on could increase under higher nutrient regimes. Overall, given that the implications of atmospheric pollution for many of the SPA's / Ramsar's qualifying species are uncertain, LSEs of the SLP on the Lower Derwent Valley SPA / Ramsar cannot be dismissed. The site is therefore screened into Appropriate Assessment in relation to this impact pathway.

Lower Derwent Valley SAC

5.51 The Lower Derwent Valley SAC is designated for lowland hay meadows for which APIS identifies a critical nitrogen load of 10-20 kg N/ha/yr. An exceedance of this critical load could result in a transition of the SAC's ecosystem towards tall grasses and lower overall biodiversity. Review of habitat mapping on APIS indicates that qualifying meadow habitat lies directly adjacent to the A163 (and therefore within a 200m screening distance used for road traffic impacts), connecting the former Selby district with the authority of East Riding of Yorkshire. The A163 is one of the main transport arteries connecting the two authorities and is likely to be used by residents commuting to their respective workplaces in the two districts. Overall, LSEs of the emerging SLP on the Lower Derwent Valley SAC cannot be excluded and the site is screened in for Appropriate Assessment.

Skipwith Common SAC

5.52 The qualifying Northern Atlantic wet heaths with *Erica tetralix* and the European dry heaths within the SAC both have a critical nitrogen load of 5-15 kg N/ha/yr. Heathlands are nutrient-poor habitats and resident species have specifically adapted to these conditions. An exceedance of the critical load would lead to a transition from heather to more competitive grasses. Furthermore, excessive nitrogen deposition leads to a decline in lichen abundance and diversity, changes in plant biochemistry and increased susceptibility of abiotic stress (e.g. frost and drought). A review of the road infrastructure surrounding the SAC indicates that the closest major road (the A163) lies approx. 386m from the site boundary. This is beyond the distance (200m) that road traffic has been shown to materially contribute to nitrogen deposition in European sites. However, York Road, although a minor road, does lie within 200m of the SAC and could be affected by growth within Selby. For this reason Natural England requested that air quality impacts on the SAC are covered by modelling.

5.53 Therefore, LSEs of the SLP on the Skipwith Common SAC cannot be excluded and the site is taken forward to Appropriate Assessment.

Humber Estuary SPA / Ramsar

5.54 The Humber Estuary SPA / Ramsar supports populations of waterfowl, waders and birds of prey. The sensitivity of these species to nitrogen deposition varies considerably, with some species likely to benefit from higher food availability under higher nutrient loadings. Some of the SPA's / Ramsar's breeding species (e.g. little tern, marsh harrier and bittern) might be negatively impacted by an increase in atmospheric pollution because an increase in nutrient flux would lead to reduced breeding opportunities for the species. Other species, such as the dark-bellied brent goose, specialise in feeding on saltmarsh plant. APIS identifies saltmarsh as being sensitive to atmospheric nitrogen deposition (critical nitrogen load of 10-20 kg N/ha/yr).

5.55 The main roads that are most relevant to commuter traffic arising from the SLP and the Humber Estuary SPA / Ramsar are sections of the A63 and the M62. Both roads have high traffic volumes and traverse the western-most part of the estuary. The Hull Local Plan included assessment of impacts from the A63 on the Humber Estuary designations. However, a review of habitat mapping on APIS and Magic[91] indicates that none of the habitats (with a critical nitrogen load available) supporting SPA / Ramsar occur in this area of the site. Nitrogen-sensitive habitats relevant to breeding and / or foraging birds include coastal saltmarsh, vegetated shingle, reedbeds and sand dunes. The only habitat mapped within 200m of the A63 and the M62 are mudflats, which do not have an atmospheric critical nitrogen load because it is not a vegetated habitat.

[91] https://magic.defra.gov.uk/MagicMap.aspx

The nearest saltmarsh within 200m of a significant road appears to be in Hull, over 40km from Selby town and over 30km from the Selby boundary. In terms of air quality impacts it is usual to look at sites up to 10km from the boundary because traffic gets very dispersed at greater distances.

5.56 Overall, given a detailed appraisal of supporting habitats within the Humber Estuary SPA / Ramsar, it is concluded that the emerging SLP will not result in LSEs on the SPA / Ramsar regarding atmospheric pollution. The site is screened out from Appropriate Assessment in relation to this impact pathway.

Humber Estuary SAC

5.57 Given that the Humber Estuary SAC overlaps with the SPA / Ramsar, the same road links (i.e. sections of the A63 and the M62) are relevant in relation to the SAC. However, as highlighted above, none of the nitrogen-sensitive habitats occur within 200m from these roads. Therefore, in line with the above, the Humber Estuary SAC is screened out from Appropriate Assessment in relation to this impact pathway.

Thorne & Hatfield Moors SPA

5.58 The Thorne & Hatfield Moors SPA lies approx. 5.4km to the south-east of the former Selby district and therefore within the average distance travelled by commuters in the UK. The site is designated for breeding nightjar, which are sensitive to atmospheric nitrogen deposition because they build their 'nests' as bare scrapes on the ground. An exceedance of the site's critical nitrogen load (5-15 kg N/ha/yr for European dry heaths) could lead to the loss of suitable nightjar nesting habitat. Doncaster Local Plan considered air quality impacts on Thorne and Hatfield Moors SPA. However, while minor local roads within 200m of the SPA may be relevant to journey to work routes arising from Doncaster, they will not be relevant to journey to work routes arising from other local authorities, where such journeys will generally be confined to more significant routes. A review of the local road infrastructure highlights that the M18 is the closest major road to the SPA, approx. 1.3km away. This is beyond the screening distance of 200m used for nitrogen deposition effects from roads. Therefore, LSEs of the SLP on the Thorne & Hatfield Moors SPA can be excluded. The site is screened out from Appropriate Assessment in relation to this impact pathway.

Thorne Moor SAC

5.59 The degraded raised bogs in the Thorne Moor SAC are highly sensitive to atmospheric nitrogen deposition from road traffic. APIS specifies a critical nitrogen load of 5-10 kg N/ha/yr for this habitat and exceedances can result in the growth of vascular plants, the loss of bryophyte cover and a reduction in photosynthetic activity. However, the Thorne Moors SAC overlaps with the northern section of the Thorne & Hatfield Moors SPA and does not lie within 200m of a major road. Therefore, LSEs of the SLP on the Thorne Moor SAC can be excluded. The site is screened out from Appropriate Assessment in relation to this impact pathway.

Hatfield Moor SAC

5.60 The Hatfield Moor SAC is designated for raised and blanket bogs, which have a critical nitrogen load of 5-10 kg N/ha/yr. An exceedance of this load is likely to result in changes to the SAC's community composition, such an increase in shading vascular plants and declines in bryophyte abundance and diversity. However, the closest major road to the SAC is the M180 at approx. 838m distance. On its western edge, the A614 is about 371m from the Hatfield Moors SAC. Therefore, both roads lie beyond the 200m distance for which road effects on nitrogen deposition would arise. LSEs of the SLP on the Hatfield Moor SAC can be excluded. The site is screened out from Appropriate Assessment in relation to this impact pathway.

Screening of SLP Policies and Site Allocations – Atmospheric Pollution

5.61 The following SLP policies have the potential to increase regular commuter traffic and are screened in for Appropriate Assessment regarding the impact pathway atmospheric pollution:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM1 – Meeting Employment Needs (Strategic Policy) (provides for three employment allocations in Eggborough, Sherburn in Elmet and Selby, totalling an area of 130.95ha)

- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
- Policy HG2 – Windfall Developments (Strategic Policy) (hypothetically enables the provision of further dwellings – in addition to those detailed in Policy HG1)
- Policy HG14 – Gypsy & Traveller Sites (provides for 12 Gypsy and Traveller Pitches in Newthorpe)
- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy S2 - Selby Gateway Special Policy Area (hypothetically enables the provision of additional employment land)
- Policy T1 Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T2 London Road Special Policy Area (supports mixed use development)

6. Appropriate Assessment

Recreational Pressure

6.1 An assessment of the distribution of housing growth across Selby District, indicated that the following European sites were most likely to be impacted by a significant increase in recreational footfall:

- Lower Derwent Valley SPA / Ramsar / SAC
- Skipwith Common SAC
- Humber Estuary SPA / Ramsar / SAC

6.2 The following individual allocations were screened in for potential recreational pressure effects ‘alone’ due to their proximity to the Lower Derwent Valley SPA / Ramsar / SAC:

- Land north of A163, North Duffield (NDUF-D) – 40 dwellings within 325m from the Lower Derwent Valley SPA / Ramsar / SAC

6.3 The previous chapter identified several SLP policies for which LSEs regarding recreational pressure could not be excluded, including:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM5 – Tourist, Recreation and Cultural Facilities (Strategic Policy) (supports tourism and recreation developments across the district)
- Policy EM6 – Holiday Accommodation (Strategic Policy) (supports the provision of various types of holiday accommodation, such as hotels, guest houses and holiday cottages)
- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
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- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T1 Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T2 London Road Special Policy Area (supports mixed use development)

Lower Derwent Valley SAC/ SPA / Ramsar

6.4 According to the Natural England's Site Improvement Plan (SIP) and Supplementary Advice on Conservation Objectives, the Lower Derwent Valley SPA / Ramsar / SAC is sensitive to recreational pressure. A review in the ViewRanger application highlights that most of the paths permeating the site run along the banks of the River Derwent, which is where the SIP also identifies the focal point of recreational pressure to be located. There are relatively few formal car parks distributed within the site (providing access to the Derwent Ings in its northern section near Wheldrake and in its southern part around Bubwith), indicating that much of the recreational pressure is likely to arise locally from settlements near the valley and within easy walking distance (e.g. c. 1km).

6.5 The residential allocation in North Duffield (NDUF-D, Land North of A163) was screened in for recreational pressure effects 'alone', given its proximity to the Lower Derwent Valley SPA / Ramsar / SAC of under 1km. This falls within the walking distance that local residents can reasonably be expected to walk from home to reach a destination for recreation. Furthermore, much of the land around the Lower Derwent Valley is intensive arable land, such that the valley with its wildlife interest is likely to represent the main draw for visitors in the area. The single allocation would result in an increase of 40 residential dwellings or 108 additional people living in close proximity to the site (based on an average number of people per household in the UK of 2.4). These dwellings could, due to their proximity, result in elevated recreational footfall in the SPA / Ramsar / SAC, particularly of regular 'on-foot' visitors. There are a further 280 dwellings to be delivered in the Local Plan within 5km of the SPA/SAC/Ramsar site, which could also increase visitor pressure although this is a small number for a large area.

6.6 To evaluate whether this would have the potential to result in significant disturbance of SPA / Ramsar waterfowl and, ultimately, might result in adverse effects on site integrity, levels of visitor use in the site require assessment. Selby District Council and York City Council commissioned a visitor survey at key access locations in the Lower Derwent Valley SPA / Ramsar / SAC, which was undertaken by Footprint Ecology in 2018. Visitor counts and interviews were conducted at three car parks, likely to be the main access locations to the site. The survey locations included a car park (North Duffield Carrs) on the north side of the A163 near North Duffield, which is the site entrance that would be most relevant for pedestrian visitors from the two sites allocated in North Duffield.

6.7 Importantly, at the North Duffield access point, no visitors were counted over two survey days (a total of 16 hours of surveying). This does not mean that no-one visits this part of the site but does highlight that the part of the SPA / Ramsar / SAC closest to North Duffield is currently receiving very low recreational footfall. Of course, visitors from North Duffield could use other parts of the valley (e.g. the Wheldrake Ings or Bank Island, two locations further north that were also surveyed). However, the maximum number of people entering the site at any of these further locations was 2.8 people per hour (with a maximum of 0.4 dogs per hour), indicating that levels of recreational use are low across the entire floodplain. Most notably, the site does not seem particularly popular with dog walkers, which tend to have the greatest disturbance impact in nature conservation sites.

6.8 Otters establish large territories along waterways and also embracing adjacent riparian land to provide adequate foraging, resting and breeding sites. Young adults will also use the full length of waterways when establishing new territories.

6.9 In common with experiences across much of lowland England, populations have been steadily increasing as water quality, in particular, has improved. Otters are typically nocturnal and (considered to be) elusive, and although they will range widely to forage (frequently coming into contact with people) holts and resting places are usually established away from human influence. Therefore, the vulnerability of this species can vary on a diurnal or seasonal basis.

6.10 However, as no new development is proposed in the immediate vicinity of the waterways and riparian habitats other than in or on the edge of established settlements some distance away, it is considered highly unlikely that the conservation objectives for otters on the River Derwent could be undermined and so likely significant effects were ruled out alone.

6.11 Otters are features of both the River Derwent and Lower Derwent Valley European sites. Whilst these will essentially embrace the same communities, they complement each other, the former more effectively safeguarding the long stretches of river and the latter providing extensive areas of riparian land. The same outcomes, as expressed above, can confidently be applied to both European sites.

6.12 Overall, notwithstanding the allocation of 110 residential dwellings in North Duffield between sites NDUF-D and NDUF-O, these would not result in adverse effects on the Lower Derwent Valley SPA / Ramsar / SAC 'alone'.

In-Combination Assessment

6.13 In addition to the individual site in North Duffield, the SLP's anticipated overall residential growth of 7,728 dwellings over the plan period was also screened in, particularly in-combination with growth allocated in adjoining authorities, such as the City of York. Of the 7,728 dwellings, the emerging SLP allocates only 320 dwellings) within 5km of the Lower Derwent Valley SPA / Ramsar / SAC. Five kilometres is the zone within which most frequent or regular visitors to an inland European site derive and growth within this zone is thus expected to significantly contribute to the recreational footprint in such sites.

6.14 This level of growth needs to be set into the context of growth in other nearby authorities as specified in the emerging plans for the City of York (11,788 dwellings) and the East Riding of Yorkshire (20,000 dwellings). The western part of East Riding of Yorkshire, the area that is closest to the Lower Derwent SPA / Ramsar / SAC, is very rural and unlikely to significantly contribute to recreational pressure in the site given the small number of dwellings proposed within 5km visitor threshold of the site. Furthermore, access to the access to the Lower Derwent Valley and River Derwent in this area is significantly influenced by the presence of the NNR and a carefully managed network of footpaths and hides. A considerable amount of private land restricts access still further. The HRA of the of the East Riding of Yorkshire Council Local Plan Update 2020-2039[92] concluded ***"it is considered that adverse effects on the integrity of the Lower Derwent Valley SPA/SAC and River Derwent SAC from recreational pressure can be avoided in-combination beyond reasonable scientific doubt. No mitigation is required."***

6.15 Residential growth in the City of York conurbation, due to its proximity to the northern part of the SPA / Ramsar / SAC, is likely to have a much more significant contribution to the site's overall recreational footprint.

6.16 Footprint Ecology's 2018 visitor survey provides the evidence base for the in-combination assessment of recreational pressure. As discussed in relation to growth in North Duffield, the overall number of visitors in the Lower Derwent Valley SPA / Ramsar / SAC is low. Only 69 visitors with a total of 6 dogs were counted across three survey points over a total of 16 hours of surveying at each location. Compared to many other European sites, this is a very low level of recreational use and indicates that the site has residual recreational capacity (see above).

6.17 Other results from the visitor interviews indicate that the impact of those people that do visit, is relatively low. For example, walking and bird watching in the SPA / Ramsar / SAC (69% of interviewees) was far more popular than dog walking (10.3%). Therefore, recreation in the site appears to centre around less disturbing activities, which are likely to have lower impacts on the qualifying bird species. Furthermore, most visitors do not visit frequently, with approx. 75% visiting at most '2 to 3 times per month'. There was no clear seasonal trend in visit patterns, although slightly more interviewees preferred to visit the site in spring / summer (41.3%) than in autumn / winter (34.4%). A clearer preference for the months when overwintering waterfowl are not present within the SPA / Ramsar / SAC, may have further reduced recreational pressure impacts.

6.18 Interviewees were also asked for their home postcodes, which is important for establishing a core recreational catchment (typically the 75th percentile of 'distance to home' data) for European sites and identifying the contribution by different Local Planning Authorities to the in-combination recreational footprint. Overall, of the 48 successfully geo-referenced visitor postcodes, 14 visitors (27%) were from Selby (although 12 of these were interviewed on the Skipwith Common SAC) and 19 visitors (40%) originated from the City of York. These data highlight that the former Selby district is currently making a very small contribution to the recreational pressure in the Lower Derwent Valley SPA / Ramsar / SAC and that is likely to continue to be the case.

6.19 In terms of straight-line distances to home from relevant survey points, 75% of visitors at Wheldrake Ings travelled from within 14.42km from home and at Bank Island the 75% percentile was higher still at 38.78km. These data highlight the large recreational catchment of the Lower Derwent Valley SPA / Ramsar / SAC, which would include large parts of the Selby District, although the large zone is probably also a function of the relative remoteness of the SPA from major population centres (even York, by far the largest settlement

[92] Fleming Ecology (August 2023). Habitats Regulations Assessment of the East Riding of Yorkshire Council Local Plan Update 2020-2039 (Version 2)

within the core catchment, is almost 8km to the north west of the SPA). Moreover, these results need to be set into the context of the low overall levels of recreational use in the site despite the proximity of a city (York) with a population of more than 150,000 people. The number of interviews per property (expressed as the number of interviews divided by the total number of dwellings in given distance bands) decline markedly beyond 5km, suggesting that housing has little importance for recreational footfall at greater distances.

6.20 As highlighted above, a larger percentage of visitors to the SPA / Ramsar originate from the City of York than the Selby District. The emerging City of York Local Plan (CYLP) allocates two large sites within relatively close proximity to the Lower Derwent Valley SPA / Ramsar. Land West of Elvington Lane is a new garden village allocated for 3,339 dwellings (approx. 2.5km from the SPA / Ramsar) and Station Yard, Wheldrake allocates 147 dwellings in Wheldrake (directly adjacent to the busiest part of the SPA / Ramsar, the Wheldrake Ings SSSI). Given the existing recreation patterns in the SPA / Ramsar (most notably that the northern part of the site is much more popular), it is likely that sites allocated in the CYLP will have a disproportionately larger effect in the European site and a new garden village only a few kilometres from the SPA/Ramsar could change recreational patterns entirely without mitigation. To mitigate recreational pressure in the Lower Derwent Valley SPA / Ramsar, the CYLP therefore requires both allocations to deliver bespoke on-site measures. For example, the garden village will need to deliver a detailed site wide recreation and access strategy to minimise indirect recreational disturbance resulting from the development. Both allocations will need to create additional on-site open space and play facilities to enhance the recreational draw for future residents. As mentioned in the HRA of the CYLP, these mitigation measures are necessary due to the large number of dwellings proposed and the proximity of the site allocations to the SPA / Ramsar. According to the CYLP HRA[93], there is no significant potential for in-combination recreational pressure effects in the Lower Derwent Valley SPA / Ramsar with the ERYC Local Plan or Selby Local Plan as York is by far the largest source of new housing within the core catchment of the SPA / Ramsar.

6.21 Notwithstanding all this, Natural England have expressed some reservations about the potential for 'in combination' recreational pressure on Lower Derwent Valley SAC/SPA. This is mainly associated with the fact that the survey focussed on gateways to the site (such as car parks) and therefore may have overlooked more diffuse entries. Therefore adverse effects on integrity in combination cannot be dismissed without mitigation.

6.22 The SLP, once adopted, will be supported by a Green Infrastructure (GI) Strategy. **Policy NE2 (Protecting and Enhancing Green and Blue Infrastructure)** provides extensive references to the importance of green infrastructure, with a strong focus on improving access to greenspace for recreation and leisure. The policy specifies that the Council will '*seek to protect, maintain, enhance and, where possible, restore and extend Selby District's green and blue infrastructure assets (GBI)*.' The policy goes on to state that development proposals must '*protect and enhance the functionality and connectivity of green and blue infrastructure and corridors having regard to the latest GBI audits and strategies.*' Furthermore, the policy states '*that the GBI should principally benefit the development and enhance or create or facilitate links to connect to the wider network*.' The GI Strategy recognises that the safeguarding, enhancement and provision of green and blue infrastructure also plays a key role in mitigating against pressures upon and the vulnerability of more fragile habitats and sites across the District.

6.23 It is considered that improvements to locally available greenspace is likely to help reduce recreational visits to more protective European sites, such as the Lower Derwent Valley SPA / Ramsar and further underline the conclusion of no adverse effects on integrity from the residual small amount of housing planned for the core catchment in Selby (255 dwellings within 5km), once the main new housing in York is mitigated. Any enhancements to the local GI fabric would have to be strategically placed, such the likelihood of attracting new residents would be maximised. For example, in relation to the Lower Derwent Valley SPA / Ramsar, GI improvements around North Duffield (particularly between the settlement and the closest access point to the SPA / Ramsar) are likely to be most effective.

6.24 Moreover, the Council will review the Lower Derwent Valley SPD that was produced with adjacent local authorities as a draft in 2017, with a view to adoption as a method of addressing future recreational pressure. The SDP was adopted by ERYC in 2018 as at that moment in time the other local authorities involved in the document, including Selby, were/ are at different stages in the preparation of their respective Local Plans, and SPDs must relate to adopted Local Plan policies. This is reflected in a requirement in Policy NE1 that '*Proposals that may directly, indirectly or cumulatively impact on a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site sites will only be supported where it can be demonstrated*

[93] Available at: https://www.york.gov.uk/downloads/file/1824/ex-cyc-14c-annex-c-habitat-regulation-assessment-feb-2019

that there will be no adverse effects on the integrity of the sites… This part of the Policy relates to development that is located within… the 1km Lower Derwent Valley Area of Restraint. Such development must consider the guidance set out in the Lower Derwent Valley Supplementary Planning Document or its successor… 5 Kilometres of the Lower Derwent Valley SAC/SPA/Ramsar. Such development must have regard to up-to-date visitor monitoring data and where necessary apply appropriate mitigation to reduce recreational pressure from development, including any necessary financial contributions towards the delivery of measures identified in the Lower Derwent Valley Supplementary Planning Document'.

6.25 Furthermore, the increasing residential growth in authorities adjoining the SPA / Ramsar (including Selby District) does mean that recreational pressure is important to keep monitored in the event that any mitigation may need introducing in the future, since 5-year plan reviews may well result in further increases in planned housing. **In addition, it is recommended that visitor monitoring in the Lower Derwent Valley SPA / Ramsar is undertaken every five years. This could be undertaken as a joint exercise between the authorities of Selby, City of York and the East Riding of Yorkshire. and this requirement would therefore be included as a monitoring indicator for NE1.**

Conclusion

6.26 The data of Footprint Ecology's visitor survey report indicate that the Lower Derwent Valley SPA / Ramsar / SAC is currently not experiencing a high level of recreational pressure, highlighted primarily by the low hourly visitor volume and the small number of dog walkers. Furthermore, data relating to the frequency of visits indicate that most site usage is not regular (daily / several times per week), reflecting the relatively large core catchment zone of the site. In addition, Natural England has not identified a strategic recreational pressure issue for the SPA / Ramsar / SAC, although they have identified a specific localised issue of increasing visitor use of the flood banks of the river.

6.27 The additional growth planned within the former Selby district within 5km of the SPA / Ramsar / SAC is small (320 dwellings), with most of that housing beyond easy walking distance, and the most likely access point to the European site for Selby residents was the least used in the visitor survey (with no visitors actually being recorded during the survey period). Notwithstanding this, the Local Plan includes provision for mitigation for any development within 5km of SAC/SPA/Ramsar that might have an adverse effect on the integrity of the site, and a commitment to review the Lower Derwent Valley SPA. Overall, with the commitment to mitigation outlined in this HRA, it is concluded that the emerging SLP will not result in adverse effects on the site integrity of the Lower Derwent Valley SPA / Ramsar / SAC regarding recreational pressure.

Skipwith Common SAC

6.28 Skipwith Common SAC is designated for heathland habitats, which are sensitive to recreational trampling, soil compaction, erosion and nutrient enrichment. The SAC is located in the rural eastern part of Selby District, approx. 2.1km from the Selby-Barlby-Osgodby agglomeration. Overall, of its total growth of 7,728 residential dwellings, the SLP allocates 382 dwellings within 5km of Skipwith Common SAC, a distance that typically reflects the core recreational catchment of heathland sites. It is considered unlikely that the other specific allocations would have an impact on the SAC 'alone' and the remainder of this assessment thus considers the impacts of Policy SG2 (Spatial Approach), particularly in-combination with residential growth projected in the City of York.

In-Combination Assessment

6.29 Footprint Ecology's visitor survey (commissioned jointly by Selby District Council and York City Council) also covered the main access point (car park on Cornelius Causeway) to Skipwith Common SAC, including visitor counts and interviews. Over two survey days a total of 81 visitors (equating to 5.1 people per hour) and 28 dogs (equating to 1.8 dogs per hour) were counted. Compared to many European sites with high levels of recreational pressure, the SAC currently clearly is subject to relatively low recreational footfall.

6.30 Dog walking was the most popular recreational activity in the SAC (13 out of 21 interviewees, 62%), followed by walking (5 interviewees, 24%). Despite the SAC's low overall busyness, this may highlight a potential concern with respect to nutrient enrichment in the SAC's sensitive habitat features. Approx. 40% of interviewees are frequent site visitors (coming between daily and several times per week), highlighting that the site's recreational burden is likely to be consistent with a high number of repeat visitors. This was supported by 34% of interviewees who stated that all or more than 75% of their greenspace visits take place on the Skipwith Common SAC.

6.31 To assess the origin of visitors, interviewees were also asked for their postcodes. In total, 12 out of 21 interviewees (57.1%) lived in Selby District, compared to only 14.3% that travelled from the City of York. Therefore, while the Skipwith Common SAC is not overly busy, the former Selby district clearly contributes a significant portion to the recreational footprint. The 75th percentile of interviewees (the cut-off point frequently used to delineate core recreational catchments) had a straight-line distance of 15.53km to home. This would place most of the former Selby district and the housing sites allocated in the SLP in the core catchment of the SAC. However, the number of interviews per property (calculated by dividing the number of interviews by the number of residential properties in 1km distance bands) declines considerably beyond 4km from the SAC. Therefore, any residential housing delivered beyond 4km is unlikely to materially increase the recreational footfall in the SAC. The large catchment zone obtained for the SAC is, at least to some degree, likely to be an artefact of the small number of interviews obtained for the survey.

6.32 As was discussed in relation to the Lower Derwent Valley SPA / Ramsar, the delivery of the GI Strategy is likely to help reduce recreational pressure in the Skipwith Common SAC as at least some new residents will be attracted to this improved network of open spaces and Public Rights of Ways.

Conclusion

6.33 Overall, notwithstanding the low overall level of access, there is some indication that the Skipwith Common SAC is used by local dog walkers. It is important to set the low visitor number in relation to the sensitivities of the site. Recreational pressure is listed as the SAC's main current threat in Natural England's Site Improvement Plan, including issues such as conflict with grazing management through off-lead dogs, contamination of pools in the wet heath, trampling damage and nutrient enrichment. Therefore, evidently, the SAC is sensitive to recreational pressure in principle, particularly if the pattern of housing development surrounding the site significantly changes.

6.34 Within 4km from the SAC (the area from which most interviewees derive), Footprint Ecology reports 3,814 dwellings. The SLP allocates 303 dwellings within 4km of the Skipwith Common SAC, which would result in an 8% increase in the housing development within this main catchment area of the site. Extrapolating from the 9 visitors that were interviewed from the first 4km distance bands, this would be expected to lead to an increase in one interviewee in the SAC. It is therefore considered that the development in the SLP would make a negligible contribution to any in combination increase in recreational pressure on Skipwith Common SAC. However, in recognition of the need to keep this issue under advisement, the Local Plan includes a requirement in Policy NE1 that '*Proposals that may directly, indirectly or cumulatively impact on a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site sites will only be supported where it can be demonstrated that there will be no adverse effects on the integrity of the sites… This part of the Policy relates to development that is located within… 5 Kilometres of Skipwith Common SAC. Such development must have regard to up-to-date visitor monitoring data and where necessary apply appropriate mitigation to reduce recreational pressure from development'.*

6.35 Moreover, as a precautionary measure and in line with the Footprint Ecology report, long-term monitoring of visitor numbers is recommended in the site.

Humber Estuary SPA / Ramsar / SAC

6.36 The Humber Estuary SPA / Ramsar / SAC is a well-established recreation destination in the region. Recreational activities on the floodbank have the potential to cause disturbance to the resident bird populations, while human activity in the intertidal zone or on the water can affect SAC features, including saltmarsh and mudflats. Natural England's SIP indicates that recreational disturbance, particularly from dog walkers and birders, along floodbanks may be contributing to the local declines in breeding and migratory bird species at certain locations in the estuary. At its closest point, the SPA / Ramsar / SAC boundary lies approx. 1km to the east of Selby District. Therefore, while a large part of the district's population is unlikely to be visiting the site regularly, residential growth in the south-east of the former Selby district could lead to an increase in recreational pressure, in-combination with population increases in the East Riding of Yorkshire, Doncaster District and North Lincolnshire. This section will assess the spatial distribution of residential growth detailed in the SLP and place it into context of the Footprint Ecology visitor survey undertaken in the estuary to establish a baseline of visitor pressure.

6.37 The Humber Estuary SPA / Ramsar / SAC is particularly appealing to wildlife watchers, dog walkers and walkers. The section of the estuary most likely to be visited by Selby residents, based on proximity to home, is the western-most part of the site around Goole. The estuary around Goole provides good accessibility, with the Trans Pennine Trail (a well-publicised long-distance hiking trail) running along the northern bank of

the River Ouse. Notwithstanding this, based on satellite mapping, there do not appear to be many formal car parks in this part of the estuary, which would decrease the likelihood that this part of the estuary is a regular destination for Selby residents. Based on the distance to the closest significant settlement in the former Selby district (Drax at approx. 5.6km straight-line distance), the Humber Estuary is only considered to be a realistic destination for motorists, but not for on-foot visitors. The distance to the former Selby district and the lack of settlements in the south-eastern part of the district, indicate that the SLP could only materially contribute to recreational pressure in-combination with other plans and projects.

In-Combination Assessment

6.38 Footprint Ecology undertook a visitor survey at 20 different survey points in winter (November – March) 2011 / 2012. The survey coverage included a survey point at Goole, the closest part of the estuary to Selby District. The main purpose of this survey was to identify the level of access across the SPA / Ramsar / SAC, to determine the recreational activities that people were undertaking and to establish were visitors were travelling from to visit the site (i.e. gaining an understanding of the site's core recreational catchment).

6.39 One of the features of the survey is its thorough coverage of the estuary and the high survey effort, totalling 320 hours of wintering counting / interviewing. Over the entire survey duration, a total of 2,177 visitors were counted entering the SPA / Ramsar / SAC, indicating that the site is very popular for recreational use. In terms of busyness, Goole has intermediate levels of recreational use (43 people and 14 dogs entering the site). This recreational pressure is higher than in some locations (e.g. Easington Bank), but much lower than at other access points (Donna Nook; 726 people and 20 dogs entering). The temporal characteristics of recreational visits indicate that there is a large proportion of repeat visitors to the site. For example, approx. 60% of interviewees are regular visitors, coming 'daily', 'most days' or '1 to 3 times a week'. Importantly, repeat visitors make up 94% of the recreational burden at Goole, indicating this area of estuary is particularly important for local residents.

6.40 As part of the questionnaire, interviewees were also asked for their home postcode in order to determine the straight-line distances that they travelled from home. Overall, 50% of people visiting from home (i.e. the visitor group that is most likely to contribute to the regular recreational burden) travelled a distance of 4.42km to their survey point (n=513). Clearly, the draw of different survey points differs based on their distance to nearby settlements and how well they are advertised for recreation. 50% of the visitors interviewed in Goole lived within 0.4km. When considering only car-based visitors (the group most likely to be relevant for Selby District), 50% of interviewees lived within 5km of Goole (and several other survey points across the estuary). The median distance travelled by dog walkers to visit the site was 3km, indicating that this user group mainly derives from settlements close to the estuary. This is important as dog walking is one of the activities resulting in the strongest disturbance responses in sensitive bird species.

6.41 A further visitor survey was carried out by Footprint Ecology between July and October 2021[94] in order to form part of the evidence base for the HRA of the East Riding of Yorkshire Council Local Plan Review. Eight locations were subjected to visitor interview surveys, stratified between summer and autumn survey periods with 322 interviews carried out in total.

6.42 Overall, 61.8% of interviewees had arrived by car/van, with most of the remainder (30.4%) having travelled on foot. The majority of interviews carried out across all survey locations (88.1% in the summer and 78% in the autumn) were with people undertaking a day visit directly from home. The most frequently recorded main activity across all survey locations was walking (31.7% of interviewees), closely followed by dog walking (31.4% of interviewees). Bird/wildlife watching was the third most frequently recorded activity overall (22.1%).

6.43 Proximity to home was the most commonly given reason for site choice, accounting for 20.2% of responses. A total of 306 interviewee postcodes (95.1%) could be accurately mapped, with the greater proportion of recorded postcodes originating from an arc stretching westwards from the Spurn Peninsula and Hull, through Sheffield/Leeds, and south into the English Midlands.

6.44 Interviewees originated from a wide core area, stretching down to the English Midlands. Nevertheless, many day visitors originated from within the East Riding of Yorkshire boundary, with particular concentrations within, and in the vicinity of, settlements long the Humber shoreline, including Brough, Hull, and Paull.

6.45 The straight-line distance ('as the crow-flies') from each interviewee's home postcode to the relevant survey location was calculated. Across all visit types during the summer survey period (101 interviewees) the mean

[94] Saunders, P. & Liley, D. (2022). Humber Estuary Visitor Survey Report. Report by Footprint Ecology.

distance was 18km and the median was 6.2km, with overall distances for the autumn survey period (205 interviewees) being much larger, with a mean of 66.4km and a median of 17.6km. Amongst interviewees undertaking a day trip from home within the three most frequently recorded activity types, dog walkers exhibited the shortest straight-line distances, with a mean distance of 4.6km.

6.46 The postcode data collected during the visitor surveys indicate that 75% of day visiting interviewees originate from within 18.5km of the survey location, similar to the 18.3km distance calculated as a result of previous visitor survey work carried out along the Humber Estuary. Using data for those on a short visit directly from home and excluding all bird/wildlife watchers from the postcode data (given the presence of the rare bird at Spurn during the surveys), 75% of visitors lived within 11.5km of the survey point. This distance therefore describes where the majority of visitors originate and was used in the HRA work for the East Riding Local Plan Review to screen housing growth for likely significant effects from recreation.

6.47 Selby does overlap slightly with this 11.5km zone, however the visitor survey data shows that only 1 person came from Selby District, and that person lived over 11.5km away (at Selby itself) and was on their first ever visit. No visitors to the SAC/SPA/Ramsar lived within the part of Selby that falls within the 11.5km zone. However, in recognition of the need to keep this issue under advisement, the Local Plan includes a requirement in Policy NE1 that '*Proposals that may directly, indirectly or cumulatively impact on a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site sites will only be supported where it can be demonstrated that there will be no adverse effects on the integrity of the sites… This part of the Policy relates to development that is located within… 10 kilometres of the Humber Estuary SAC/SPA/Ramsar. Such development must have regard to up-to-date visitor monitoring data and where necessary apply appropriate mitigation to reduce recreational pressure from development'.*

Conclusion

6.48 The residential sites closest to the Humber Estuary allocated in the SLP are in Hemingbrough, amounting to a relatively modest increase of 131 dwellings over the plan period. At their closest point, these new dwellings will be approx. 6.6km from the Humber Estuary SPA / Ramsar / SAC. Furthermore, it is to be noted that most allocations, especially the larger settlements, lie further than 11.5km from the site. Given the data presented above, in particular the postcode and visitor origins data, it is considered unlikely that residential growth in the former Selby district will materially increase recreational pressure along the Humber estuary, 'alone' or in-combination and thus no adverse effect on integrity would arise. However, to underline this conclusion additions have been made to Policy NE1.

Loss of Functionally Linked Habitat

6.49 An assessment of the distribution of housing growth across Selby District, indicated that the following European sites could be impacted through the loss of functionally linked habitats:

- Lower Derwent Valley SPA / Ramsar
- Humber Estuary SPA / Ramsar

6.50 The following individual allocations were screened in for Appropriate Assessment 'alone' because they lie within the typical foraging ranges of particular SPA / Ramsar waterfowl / waders associated with the Lower Derwent Valley SPA / Ramsar and / or the Humber Estuary SPA / Ramsar:

- Land at Turnhead Farm, Barlby (BARL-K) – 6.1km from the Lower Derwent Valley SPA / Ramsar
- Lake View Farm, Osgodby (OSGB-G) – 5.7km from the Lower Derwent Valley SPA / Ramsar
- Land east of Sand Lane (OSGB-I) – 5.5km from the Lower Derwent Valley SPA / Ramsar
- Land north of Mill Lane, Carlton (CARL-G) – 9km from the Lower Derwent Valley SPA / Ramsar and 8.2km from the Humber Estuary SPA / Ramsar
- Bon Accord Farm, Main Street, Cliffe (CLIF-B) – 3.7km from the Lower Derwent Valley SPA / Ramsar and 8.9km from the Humber Estuary SPA / Ramsar
- Land north of Cliffe Primary School (CLIF-O) – 3.8km from the Lower Derwent Valley SPA / Ramsar and 9km from the Humber Estuary SPA / Ramsar

- Land East of Mill Lane, Hemingbrough (HEMB-G) – 3.1km from the Lower Derwent Valley SPA / Ramsar and 6.7km from the Humber Estuary SPA / Ramsar
- Land South of School Road, Hemingbrough (HEMB-K) – 2.6km from the Lower Derwent Valley SPA / Ramsar and 6.6km from the Humber Estuary SPA / Ramsar
- Land north ofA163, North Duffield (NDUF-D) – 325m from the Lower Derwent Valley SPA / Ramsar
- Cross Hills Lane, Selby (SELB-BZ) – 9.1km from the Lower Derwent Valley SPA / Ramsar
- Land on the former Rigid Paper site, Denison Road, Selby (SELB-AG) – 7.5km from the Lower Derwent Valley SPA / Ramsar
- Industrial Chemicals Ltd, Canal View, Selby (SELB-B) – 8.1km from the Lower Derwent Valley SPA / Ramsar
- Olympia Park, Barlby Road, Barlby (SELB-CA) – 6.4km from the Lower Derwent Valley SPA / Ramsar

6.51 Furthermore, the previous chapter identified several SLP policies for which LSEs regarding functionally linked habitat loss could not be excluded, including:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM1 – Meeting Employment Needs (Strategic Policy) (provides for three employment allocations in Eggborough, Sherburn in Elmet and Selby, totalling an area of 130.95ha)
- Policy EM5 – Tourist, Recreation and Cultural Facilities (Strategic Policy) (supports tourism and recreation developments across the district)
- Policy EM6 – Holiday Accommodation (Strategic Policy) (supports the provision of various types of holiday accommodation, such as hotels, guest houses and holiday cottages)
- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
- Policy HG2 – Windfall Developments (Strategic Policy) (hypothetically enables the provision of further dwellings – in addition to those detailed in Policy HG1)
- Policy HG14 – Gypsy & Traveller Sites (provides for 12 Gypsy and Traveller Pitches in Newthorpe)
- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy S2 - Selby Gateway Special Policy Area (hypothetically enables the provision of additional employment land)
- Policy T1 Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T2 London Road Special Policy Area (supports mixed use development)

Lower Derwent Valley SPA / Ramsar and the Humber Estuary SPA / Ramsar

6.52 Both the Lower Derwent Valley SPA / Ramsar and the Humber Estuary SPA / Ramsar are designated for mobile bird species, including waterfowl, waders and birds of prey. These species are likely to routinely forage or roost beyond the designated site boundary, implying that the designated populations might depend on such functionally linked habitats for their long-term survival. Consequently, a loss of individual such land parcels may affect the functionality of the network of supporting sites and, ultimately, may have adverse effects on site integrity. Various parameters are likely to determine whether a site is functionally linked, including its distance to the SPA / Ramsar, size (ha), habitat, the extent of surrounding development and the nature of flightlines to / from the designated sites. The following section will assess the sites allocated in the SLP for these parameters (note that sites beyond the core foraging / roosting areas for SPA / Ramsar species have already been screened out and are not discussed further).

6.53 Natural England has published guidance on Impact Risk Zones (IRZs) for SSSIs (the individual management constituents of European sites). The guidance note specifies the impact distances of different types of development (e.g. rural residential development) as well as the extent to which different bird populations depend on functionally linked habitat. Functional habitat linkage may extend up to the maximum foraging distance for designated species, however it should be noted that the number of birds foraging in off-site habitats will decrease with distance from the designated site boundary.

6.54 For the Humber Estuary SPA non-breeding waterbird assemblage, Natural England recommends focusing on what are referred to as the 'main component species' of the assemblage. Main component species are defined as:

- All species listed individually under the assemblage feature on the SPA citation (i.e., the species that qualified in 2004 when the site was designated).
- Species which might not be listed on the SPA citation but occur at site levels of more than 1% of the national population according to the most recent Humber Estuary Wetland Bird Survey (WeBS) 5-year average count.
- Species where more than 2000 individuals are present according to the most recent Humber Estuary WeBS count.

6.55 The assemblage qualification is therefore subject to change as species' populations change. Species which are not listed on the Humber Estuary SPA citation but occur at site levels of more than 1% of the national population according to the most recent Humber Estuary Wetland Bird Survey (WeBS) 5-year average count and are known to use non-wetaland habitats i.e., arable farmland and/ or grassland/ pasture, include:

- Greylag goose, *Anser anser* (non-breeding)
- Little egret, *Egretta garzetta* (non-breeding)
- Pink-footed goose, *Anser brachyrhynchus* (non-breeding)
- White-fronted goose, *Anser albifrons* (non-breeding)

6.56 A review of the IRZ guidance note highlights that both SPAs / Ramsars are designated for species that may forage in lowland farmland at great distances from the site boundary. For example, golden plovers (qualifying species of both sites) and lapwing (a qualifying species of the Humber Estuary SPA) have maximum foraging distances of 15-20km from their roost sites. NE has denoted IRZs of 5km for rural residential developments (over 50 units) and non-residential developments (over 1ha in size) for this species. Bewick's swans, greylag goose, pink-footed goose and white-fronted goose have a maximum foraging range of 10km, although pink-footed goose have been known to fly 20km to feed.

6.57 The little egret inhabits fresh, brackish or saline wetlands[95] and shows a preference for shallow waters (10-15 cm deep) in open, unvegetated sites where water levels and dissolved oxygen levels fluctuate daily, tidally or seasonally, and where fish are concentrated in pools or at the water's surface[96]. Little egret may feed up to 7-13km away from breeding colonies during the breeding season[97].

6.58 Notwithstanding these IRZs and little egret foraging distances, this HRA adopts a precautionary approach and uses 10km as the distance to flag potential functionally linked habitat.

6.59 Table 5 below provides an assessment of the allocations screened in for Appropriate Assessment, including the following parameters: distance to relevant SPAs / Ramsars, site size (ha), habitat type, the extent of surrounding development and the nature of the flightlines to and from relevant sites. In determining whether an allocation has the potential to be functionally linked to a SPA / Ramsar, the following criteria have been considered in sequential order:

- Distance from the SPA / Ramsar – Any allocations beyond 10km from both SPAs / Ramsars were not included in the assessment

[95] https://www.aviornis.nl/uploads/media/Parelhoenders_in_Handbook_of_the_Birds_of_the_World_01.pdf
[96] Kushlan and Hancock (2005). The Herons. Oxford University Press
[97] https://www.aviornis.nl/uploads/media/Parelhoenders_in_Handbook_of_the_Birds_of_the_World_01.pdf

- Site size – Allocations below 2ha in size are unlikely to provide sufficient resources to support 1% of the qualifying population of a species (although exceptions were made for sites close to the 2ha area, if other criteria were fulfilled)
- Habitat type – Sites without arable land or wet grassland were considered unsuitable for the species described above.
- Surrounding development – SPA / Ramsar waterfowl generally prefer rural habitats and sites in a highly urbanised context are less likely to be chosen
- Nature of flightlines – SPA / Ramsar birds are likely to navigate more easily to foraging sites that support uninterrupted flightlines (due to the use of visual cues)

Table 6: Characterisation of the sites allocated in the Selby Local Plan, which fall within the maximum foraging distances for pertinent species.

Allocation Ref	Site Name	Distance to the Lower Derwent Valley SPA / Ramsar	Distance to the Humber Estuary SPA / Ramsar	Size (ha)	Habitat Type	Surrounding Development	Nature of Flightlines to / from the SPAs / Ramsars	Potential Implications for SPA / Ramsar waterfowl
BARL-K	Land at Turnhead Farm, Barlby	6.1km	13.6km	1.02	Existing brownfield development	Rural	Relatively uninterrupted flightline to the SPA / Ramsar	No
OSGB-C	Land East of St Leonards Avenue	6.7km	12km	0.84	Arable land (probably cereal)	Semi-rural, amidst residential dwellings	Relatively uninterrupted flightline to the SPA / Ramsar	No
OSGB-D	Osgodby Nurseries, Hull Road	5.8km	11.5km	0.8	Arable land (probably cereal)	Semi-rural, amidst residential dwellings	Relatively uninterrupted flightline to the SPA / Ramsar	No
OSGB-G	Lake View Farm, Osgodby	5.7km	11.6km	0.69	Largely existing brownfield development	Semi-rural, amidst residential dwellings	Relatively uninterrupted flightline to the SPA / Ramsar	No
OSGB-I	Land east of Sand Lane, Osgodby	5.5km	11.3km	2.81	Arable land (probably cereal)	Rural	Relatively uninterrupted flightline to the SPA / Ramsar	Yes
CARL-G	Land north of Mill Lane, Carlton	9km	8.2km	5.12	Arable land	Rural	Relatively uninterrupted flightlines to both SPAs / Ramsars	Yes
CLIF-B	Bon Accord Farm, Main Street, Cliffe	3.7km	8.9km	0.64	Some brownfield development and small section of grassland	Amidst existing residential dwellings and next to major A road	Relatively uninterrupted flightlines to both SPAs / Ramsars	No
CLIF-O	Land north of Cliffe Primary School, Main Street, Cliffe	3.8km	9km	3.03	Arable land (probably cereal)	Semi-rural	Flightlines to both SPAs / Ramsars potentially impeded by residential development	Yes

Allocation Ref	Site Name	Distance to the Lower Derwent Valley SPA / Ramsar	Distance to the Humber Estuary SPA / Ramsar	Size (ha)	Habitat Type	Surrounding Development	Nature of Flightlines to / from the SPAs / Ramsars	Potential Implications for SPA / Ramsar waterfowl
HEMB-G	Land East of Mill Lane, Hemingbrough	3.1km	6.7km	1.59	Arable land (potentially cereal)	Rural	Relatively uninterrupted flightlines to both SPAs / Ramsars	Yes
HEMB-K	Land South of School Road, Hemingbrough	2.6km	6.6km	0.21	Arable land	Rural	Relatively uninterrupted flightlines to both SPAs / Ramsars	No
SELB-BZ	Cross Hills Lane, Selby	9.1km	13.8km	78.92	Mostly arable land and some grassland	More urbanised, on the western edge of Selby town	Flightlines to both SPAs / Ramsars potentially impeded by residential development	Yes
SELB-AG	Land on the former Rigid Paper Site, Denison Road, Selby	7.5km	12.3km	8.24	Wet grassland	Urban	Flightline to the Lower Derwent SPA / Ramsar potentially interrupted	No
SELB-B	Industrial Chemicals Ltd, Canal View, Selby	8.1km	12.6km	15.02	Brownfield development and approx. 50% grassland	Urban	Flightline to the Lower Derwent SPA / Ramsar potentially interrupted	No
SELB-CA	Olympia Park, Barlby Road, Barlby	6.4km	11.2km	33.6	Brownfield development and a portion of arable fields	Semi-rural (on eastern edge of Selby town, but opening towards the countryside)	Relatively uninterrupted flightline to the Lower Derwent Valley SPA / Ramsar	Yes
SELB-CR	Former Ousegate Maltings	7.9km	12.7km	0.41	Existing development	Urban	Flightline to both SPA / Ramsars potentially interrupted	No
NDUF-D	Land north of the A163	475.9m	11.3km	1.8	Arable land	Semi-rural (on eastern edge of North Duffield, but opening towards the countryside)	Relatively uninterrupted flightline to the Lower Derwent Valley SPA / Ramsar	Yes
NDUF-O	Land north of Gothic Farm, Back Lane	400.2m	11.6km	3.28	Arable land	Semi-rural (on northern edge of North Duffield, but opening towards the countryside)	Relatively uninterrupted flightline to the Lower Derwent Valley SPA / Ramsar	Yes
RICC-J	Land at Landing Lane	7.1km	15.7	1.2	Arable land	Semi-rural (on southern edge of Riccal, but	Flightlines to both SPAs / Ramsars potentially	Yes

Allocation Ref	Site Name	Distance to the Lower Derwent Valley SPA / Ramsar	Distance to the Humber Estuary SPA / Ramsar	Size (ha)	Habitat Type	Surrounding Development	Nature of Flightlines to / from the SPAs / Ramsars	Potential Implications for SPA / Ramsar waterfowl
						opening towards the countryside)	impeded by residential development	

6.60 The assessment in Table 6 above highlights that several sites allocated in the SLP have the potential to be functionally linked to the Lower Derwent Valley SPA / Ramsar and / or the Humber Estuary SPA / Ramsar. This data also highlights that the identification of functionally linked habitat in relation to growth in the former Selby district is not straightforward. For example, the site allocated in Carlton is fairly large (over 5ha in size) and comprises arable land, which is suitable foraging habitat. However, the allocation also lies quite far from the Lower Derwent Valley SPA / Ramsar and Humber Estuary SPA/ Ramsar (between 8 and 9km), which is close to the maximum foraging distances for the identified pertinent species. Notwithstanding this, as a precautionary measure, this site has been flagged as having potential implications for SPA / Ramsar waterfowl.

6.61 While few allocations fulfil all criteria of functionally linked habitats, development proposals in one area is of primary concern:

- The site allocated at Olympia Park, Barlby Road, Barlby (SELB-CA) is large and lies on the eastern edge of Selby town. While the site does comprise brownfield elements, the eastern section of the allocation constitutes entirely arable land. At a relatively uninterrupted flightline distance of 6.4km to the Lower Derwent Valley SPA / Ramsar (11.2km from the Humber Estuary SPA/ Ramsar, therefore beyond the 10km precautionary distance described in paragraph 6.58), it cannot be excluded that this allocation constitutes functionally linked habitat to Lower Derwent Valley SPA / Ramsar.

6.62 Overall, it is considered that policy mitigation in relation to the above site allocation is required, to avoid adverse effects on the integrity of the Lower Derwent Valley SPA / Ramsar regarding the loss of functionally linked habitat.

In- combination Assessment

6.63 Of particular relevance to the Lower Derwent Valley SPA / Ramsar and the Humber Estuary SPA/ Ramsar is the recently submitted East Yorkshire Solar Farm (EN010143). This is a National Infrastructure Project, covering 1,445 hectares (ha) of land, predominately agricultural land.

6.64 The Project has been subjected to its own HRA which concluded that *"Overall, given the adequate mitigation framework that is in place, the AA concluded that the Scheme would not result in adverse effects on the integrity of the Lower Derwent Valley SPA/Ramsar and Humber Estuary SPA/Ramsar regarding the loss of functionally linked habitat."*

Conclusion

6.65 In the first instance, the SLP was reviewed to assess whether relevant / appropriate mitigation wording is already included in the plan. It is considered that two policies in the SLP contain protective policy wording that is supportive for the preservation of foraging habitats. **Policy NE2 (Protect and Enhance Green and Blue Infrastructure)** states that '*The Council will seek to protect, maintain, enhance and, where possible, restore and extend Selby District's green and blue infrastructure assets (GBI)*.' While the policy does not refer to functionally linked habitats for birds, it provides general protection to all green infrastructure, which includes habitats that the birds may forage in (albeit not arable land).

6.66 Furthermore, and more importantly, **Policy NE1 (Protecting Designated Sites and Species)** contains wording that extends protection to European sites, and their qualifying species and habitats. For example, the policy states sets out a requirement for development within 10km of Lower Derwent Valley SPA/Ramsar or Humber Estuary SPA/Ramsar to either confirm that habitat on the site is not suitable for SPA birds, or to undertake a suite of non-breeding bird surveys to inform the need for mitigation.

6.67 The supporting text goes on to state *"To meet the requirements of the Habitats Directive, developers of sites within 10km of these designations must provide evidence that proposals will not result in adverse effects on the integrity of designated areas and associated wildlife through loss of functionally-linked land. Evidence that the development proposals will not cause adverse effects should be submitted through the planning application process and can be either because the development site is not a suitable habitat, or does not currently support a significant proportion of the protected species associated with the designation. Evidence should include surveys of the proposed development sites current usage, (if any), by designated species, including for over wintering SPA/Ramsar bird species. A land parcel can be considered to support a significant population of a designated species if it is regularly used by 1% of the qualifying bird population. Non-breeding bird surveys must be undertaken during autumn, winter and spring."*

6.68 The sites identified in Table 6 have also been listed as requiring *"Appropriate Assessment for functionally linked habitats as they lie within the typical foraging ranges of species associated with the Lower Derwent Valley and Humber Estuary SPA/Ramsar designations"* and this wording is included in the Policy for each relevant allocation. With this wording included in the SLP, adverse effects on the integrity of the Lower Derwent Valley SPA / Ramsar can be excluded.

6.69 It is considered that allocating suitable sites for development prior to at least one season of wintering bird surveys being completed is appropriate and legally compliant in this case. Firstly, the law accepts that ecological investigation to support plan development must be tiered, with more detailed investigation undertaken at each subsequent stage:

- The Court of Appeal[98] has ruled that provided the competent authority is duly satisfied that mitigation can be achieved in practice (in other words that solutions exist that are likely to be effective) this will suffice to enable a conclusion that the proposed development would have no adverse effect.
- The High Court[99] has ruled that for '*a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of the Habitats Regulations*'.
- Advocate-General Kokott[100] has commented that *'It would also hardly be proper to require a greater level of detail in preceding plans* [than lower tier plans or planning applications] *or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure'*.

6.70 Secondly, the functionally-linked habitats in question are common, widespread and easily recreated (or managed in a more favourable manner) and the species in question do not have highly specific habitat requirements and are sufficiently widespread in their use of this functionally-linked land that development is only likely to affect a small amount of their overall foraging resource.

Water Quality

6.71 An assessment of the European sites linked to development across Selby District, indicated that the following European sites could be impacted through changes in water quality:

- Lower Derwent Valley SPA / Ramsar / SAC
- River Derwent SAC
- Humber Estuary SPA / Ramsar / SAC

6.72 The main scope for impact is via treated wastewater discharge. Moreover, some allocations may have the potential for impacting the water quality in aquatic European sites through direct surface run-off (such as from overflowing sewerage systems or Package Treatment Plants; PTPs). The following individual

[98] No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015
[99] High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015
[100] Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph 49.
http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN

development allocations were screened in for Appropriate Assessment 'alone' because they lie in close proximity to European sites that are dependent on good water quality:

- Land East of Mill Lane, Hemingbrough (HEMB-G) – 1.2km from the River Derwent SAC
- Land South of School Road, Hemingbrough (HEMB-K) – 1.5km from the River Derwent SAC
- Land north of A163, North Duffield (NDUF-D) – 475.9m from the Lower Derwent Valley SPA / Ramsar
- Land north of Gothic Farm, Back Lane (NDUF-O) - 400.2m from the Lower Derwent Valley SPA / Ramsar

6.73 Furthermore, the previous chapter identified several SLP policies for which LSEs regarding water quality impacts could not be excluded, including:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM1 – Meeting Employment Needs (Strategic Policy) (provides for three employment allocations in Eggborough, Sherburn in Elmet and Selby, totalling an area of 130.95ha)
- Policy EM5 – Tourist, Recreation and Cultural Facilities (Strategic Policy) (supports tourism and recreation developments across the district)
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- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
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- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
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- Policy T1 Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T2 London Road Special Policy Area (supports mixed use development)

6.74 The following Appropriate Assessment combines the discussion of the River Derwent SAC and the Lower Derwent Valley SPA / Ramsar / SAC, because these are hydrologically connected, interdependent sites. The Humber Estuary SPA / Ramsar / SAC, while also in wider hydrological connectivity with the River Derwent, is discussed separately; especially due to it being a considerable distance (in terms of flowpath) from the River Derwent.

River Derwent SAC and the Lower Derwent Valley SPA / Ramsar / SAC

6.75 The River Derwent SAC and the Lower Derwent Valley SPA / Ramsar both lie in the wider Humber River Basin District and in the Environment Agency's Derwent Management Catchment. The Derwent Lower Yorkshire operational catchment covers an area ranging from Elvington down to Barmby on the Marsh (where the River Derwent meets the River Ouse), which encompasses large parts of the River Derwent SAC and the Lower Derwent Valley floodplains.

6.76 The land surrounding these European sites is largely low-lying agricultural land and the EA's Catchment Data Explorer highlights that agriculture is by far the most important Reason For Not Achieving Good Status (RNAGS), followed by the water industry, which includes Wastewater Treatment Works (WwTWs). The SIP

for the River Derwent SAC lists water pollution as one of the main threats to the site, highlighting that diffuse sediment run-off is the and cattle trampling are the primary issues in the SAC. Point-source contributions from WwTWs are not specifically mentioned. The SIP for the Lower Derwent Valley SPA / Ramsar / SAC does not mention water pollution as a threat. Notwithstanding this, AECOM considers that the SPA / Ramsar / SAC is sensitive to changes in water quality, particularly from high phosphate loadings in treated sewage effluent.

6.77 A review of the European Commission urban wastewater website indicates that only one major WwTW serves Selby District. This is at Wheldrake (located outside of the former Selby district administrative boundary), which discharges into the River Derwent. The emerging SLP allocates only a few sites that are likely to produce wastewater that discharges into the R. Derwent, including the residential site in North Duffield. The remaining site allocations, particularly urban growth around Selby town and the new settlement proposal at Stillingfleet (3,952 dwellings of which 945 dwellings are to be delivered in the plan period), will all be treated by WwTWs discharging into the River Ouse. The R. Ouse meets the R. Derwent downstream from the River Derwent SAC and the Lower Derwent Valley SPA / Ramsar, meaning that a significant proportion of the volume of treated sewage effluent associated with growth allocated in the SLP will not be in hydrological continuity with these sites. Yorkshire Water have recently put their draft Drainage and Wastewater Management Plan (DWMP) out to consultation. The DWMP is accompanied by a Habitats Regulations Assessment but it only goes up to HRA screening (test of likely significant effects) with the appropriate assessment still to be undertaken. The River Derwent SAC has been screened in for appropriate assessment pending further details. Although a series of European sites were identified by Natural England as suffering from excessive nutrient inputs in March 2022 (thereby requiring a nutrient neutrality approach to be introduced) the River Derwent SAC was not on that list.

6.78 Four site allocations were screened in for Appropriate Assessment ‘alone’, due to their proximity to the River Derwent SAC and, particularly, the Lower Derwent Valley SPA / Ramsar. On urban development sites, the high coverage of the ground by impervious surfaces (e.g. roads, parking areas, rooftops) prevents most of the water from infiltrating the ground, where natural attenuation processes would result in some pollutant removal. Instead, surface run-off either reaches surface waterbodies directly or is transported to recipient streams via storm sewer systems. The pollutants that might affect the water quality in that way include sediment, oil / grease, toxic chemicals from cars, pesticides from urban greenspaces, road salts and heavy metals. Furthermore, surface run-off typically has higher temperatures, which can impair the health and reproduction of aquatic life.

6.79 The type of sewage treatment in place will also have potential water quality effects, particularly in the allocation in North Duffield. Not all properties are connected to the mains sewerage system and thus have in-situ wastewater treatment solutions, such as septic tanks and small Package Treatment Plants (PTPs). Septic tanks are very basic systems that separate liquids from solids and allow the natural breakdown of the sludge by bacteria. PTPs provide more advanced cleaning of wastewater by utilising air flow to maximise the breakdown of chemical contaminants. Notwithstanding this, they are subject to tight regulations by the Environment Agency. Both in-situ technologies are associated with risks such as failure, leakage and overflow, with the potential to result in localised water quality impacts.

In-Combination Assessment

6.80 Notwithstanding the relatively small overall amount of growth in the former Selby district that may impact the water quality in the Lower Derwent Valley, this needs to be set into the context of the in-combination growth delivered across the authority of East Riding of Yorkshire. Several WwTWs serving that authority (e.g. Pocklington and Melbourne WwTWs along the Pocklington Canal, and Stamford Bridge WwTW further upstream on the R. Derwent) will also discharge into the R. Derwent, and potentially lead to in-combination water quality effects in the river and associated European sites.

6.81 The available headroom at WwTWs is the primary factor in determining whether additional growth can be supported. The Environment Agency sets permit levels for aquatic pollutants (this includes nutrients such as phosphorus) for WwTWs. These permits identify the maximum amounts of pollutants that can be discharged from sewage works without putting the Conservation Objectives of European sites at risk. If permit limits are exceeded, mitigation measures are required to ensure that adverse effects on the integrity of linked European sites are prevented. Mitigation measures may include technological improvements at WwTWs, off-site measures (e.g. downstream construction wetlands) or rerouting of sewage to works that have remaining capacity.

6.82 Moreover, under the Environment Act 2021 there is a statutory requirement for water and sewerage companies to produce DWMPs (they must cover a minimum of 25 years) looking at current and future capacity, pressures, and risks to their networks such as climate change and population growth. DWMPs must detail how companies will manage these pressures and risks through their business plans and how they will work with other risk management authorities or drainage asset owners.

6.83 Water and sewerage companies are obliged to service growth so if that requires them to provide an alternative treatment solution they will do so. Each DWMP has its own HRA and cannot be adopted if the water and sewerage companies can't either avoid effects on European sites or deliver suitable compensation.

6.84 Policy IC4 (Water Supply, Wastewater Treatment and Drainage Infrastructure) therefore specifically aims to ensure that adequate water supply and wastewater infrastructure to existing, new, or improved, wastewater drainage and treatment facilities is secured prior to first occupation of the development. Given this it is considered that the plan contains adequate safeguards to ensure no adverse effect on integrity would arise either alone or in combination with other plans and projects.

6.85 Given it is an intertidal waterbody, with both freshwater and seawater input being important, it is considered that the Humber Estuary SPA / Ramsar / SAC is sensitive to both increased phosphorus and nitrogen loadings. The potential eutrophication associated with high nutrient input to the estuary has the potential to alter the structure of SAC habitats (such as the Atlantic saltmarsh) and to affect qualifying waterfowl and waders by impacting their food resources. The flowpath distance between the confluence of the Rivers Derwent and Ouse and the Humber Estuary SPA / Ramsar / SAC is approx. 7.2km. While some degree of nutrient attenuation is likely to occur over this distance, the estuary will receive the in-combination treated sewage effluent from the entire former Selby district and most of the City of York (York WwTW also discharges to the R. Ouse). Clearly, the discharge of nutrients in sewage requires further consideration, especially considering that none of the WwTWs in these two authorities have bespoke nitrogen or phosphorus removal in place.

6.86 Natural England's SIP identifies water pollution as the most important threat / pressure to the integrity of the Humber Estuary SPA / Ramsar / SAC. One of the main concerns is an annual dissolved oxygen (DO) sag in the River Ouse, which may have implications for the upstream migration of sea lamprey and other qualifying species. While the reasons for these low annual Dissolved Oxygen (DO) levels are unknown, it cannot be excluded that nutrient discharge from WwTWs is a contributing factor. Furthermore, there are several point sources contributing high phosphorus loadings to the estuary, including a former smelting plant and several clay pits. These sources all have the potential to act in-combination with the growth allocated in the SLP.

6.87 Review of the Environment Agency Catchment Data Explorer highlights that the R. Ouse from the River Wharfe to the Upper Humber had moderate ecological status in 2019. Specifically, the physico-chemical parameters failed to achieve good status because the phosphate concentrations in the R. Ouse were rated as 'Moderate'. Various RNAGS are given, including point-source continuous discharge of treated sewage effluent. Overall, these data highlight that the water entering the Humber Estuary SPA / Ramsar / SAC is currently not meeting its water quality targets in terms of phosphorus. The Middle Humber also has a 'Moderate' classification for nitrogen, illustrating that the overall nitrogen loading may also represent an issue for the ecological integrity of the site.

6.88 The R. Ouse is likely to receive the in-combination treated sewage effluent from 7,728 dwellings allocated in the SLP and the 11,788 dwellings allocated in the emerging City of York Local Plan. Therefore, it is important to ensure that there remains sufficient headroom in the WwTWs serving the former Selby district (see earlier AA on the River Derwent SAC and the Lower Derwent Valley SPA / Ramsar / SAC), in order to ensure that the integrity of the Humber Estuary SPA / Ramsar / SAC is protected.

6.89 Moreover, under the Environment Act 2021 there is a statutory requirement for water and sewerage companies to produce DWMPs (they must cover a minimum of 25 years) looking at current and future capacity, pressures, and risks to their networks such as climate change and population growth. DWMPs must detail how companies will manage these pressures and risks through their business plans and how they will work with other risk management authorities or drainage asset owners.

6.90 Water and sewerage companies are obliged to service growth so if that requires them to provide an alternative treatment solution they will do so. Each DWMP has its own HRA and cannot be adopted if the

water and sewerage companies can't either avoid effects on European sites or deliver suitable compensation.

6.91 Yorkshire Water have produced a Drainage and Wastewater Management Plan (DWMP) covering 2025-2050, which is accompanied by a Habitats Regulations Assessment. The DWMP is based on robust population projections for future growth to 2050. The HRA[101] ultimately concludes that with appropriate mitigation, no likely impact is expected on any protected sites, including the River Derwent SAC.. Since this goes beyond the Local Plan period and covers growth in Selby as well as elsewhere in their supply area, it provides the most robust assessment possible.

6.92 Moreover, policy IC4 (Water Supply, Wastewater Treatment and Drainage Infrastructure) therefore specifically aims to ensure that adequate water supply and wastewater infrastructure to existing, new, or improved, wastewater drainage and treatment facilities is secured prior to first occupation of the development. Given this it is considered that the plan contains adequate safeguards to ensure no adverse effect on integrity would arise either alone or in combination with other plans and projects.

6.93 The need to protect water quality, level or flow is also addressed by Policy NE 1 of the Local Plan, which states that any application that has the potential to affect water quality, levels or flow within designated SACs/SPAs/Ramsars must consider potential impacts on hydrological regimes which could affect the integrity of designated habitats, applying appropriate mitigation where deemed necessary, including through measures set out in IC4 and NE5. This specifically relates to Land East of Mill Lane, Hemingbrough (HEMB-G), Land South of School Road, Hemingbrough (HEMB-K), Land north of A163, North Duffield (NDUF-D) and Land north of Gothic Farm, Back Lane (NDUF-O) due to their proximity to the Lower Derwent Valley SPA / Ramsar.

Water Quantity, Level and Flow

6.94 Delivery of the SLP will inevitably result in an increase on the potable water demand within the district, which may be associated with a requirement for further water abstraction. The following European sites depend on an appropriate supply of freshwater:

- River Derwent SAC
- Lower Derwent Valley SPA / Ramsar / SAC
- Humber Estuary SPA / Ramsar / SAC

6.95 The previous chapter identified several SLP policies for which LSEs on the water quantity, level and flow in these European sites could not be excluded, including:

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM1 – Meeting Employment Needs (Strategic Policy) (provides for three employment allocations in Eggborough, Sherburn in Elmet and Selby, totalling an area of 130.95ha)
- Policy EM5 – Tourist, Recreation and Cultural Facilities (Strategic Policy) (supports tourism and recreation developments across the district)
- Policy EM6 – Holiday Accommodation (Strategic Policy) (supports the provision of various types of holiday accommodation, such as hotels, guest houses and holiday cottages)
- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
- Policy HG2 – Windfall Developments (Strategic Policy) (hypothetically enables the provision of further dwellings – in addition to those detailed in Policy HG1)
- Policy HG14 – Gypsy & Traveller Sites (provides for 12 Gypsy and Traveller Pitches in Newthorpe)
- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)

[101] Available at: https://www.yorkshirewater.com/media/5mbjzlqx/yw_dwmp-hra_report_final.pdf

- Policy S2 - Selby Gateway Special Policy Area (hypothetically enables the provision of additional employment land)
- Policy T1 Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy T2 London Road Special Policy Area (supports mixed use development)

6.96 It is to be noted that the above listed European sites have the highest potential to be impacted by the further exploration of water resources.

6.97 The River Derwent SAC is designated for being a water course of plain to montane levels with *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. Furthermore, the river supports several fish species (e.g. river lamprey and bullhead), as well as the anadromous species sea lamprey travelling upstream from the Humber Estuary. Sufficient water levels / flows are especially important for anadromous species in order to enable their migratory routes, which are essential to the species' reproductive success. Natural England's SIP highlights water abstraction as one of the threats to the integrity of the SAC. A sufficient supply of freshwater from the River Derwent (via flooding or surface water and groundwater connectivity) is also integral in supporting the habitats and species of the Lower Derwent Valley SPA / Ramsar / SAC.

6.98 A sufficient input of freshwater is also integral to the Humber Estuary SPA / Ramsar / SAC that lies downstream from the confluence of the River Ouse and the River Derwent. The Humber Estuary SAC is also designated for sea lamprey and a reduced in-combination input of freshwater input from the R. Ouse and its upstream tributaries, may prevent this species from reaching its spawning grounds. The volume of freshwater input also influences salinity gradients, tidal mixing processes, DO concentrations and prey availability in the estuary, with potential knock-on impacts on qualifying SPA / Ramsar waterfowl.

6.99 The process of water abstraction and the public water supply are generally considered on large spatial scales and it is generally not possible (nor appropriate) to assess individual site allocations for their potential effects on water levels and flows.

6.100 Water companies publish Water Resource Management Plans (WRMPs). These are statutory documents that all water companies must produce at least every five years. WRMPs set out how the water company intends to achieve a secure supply of water for their customers while protecting and enhancing the environment.

6.101 The plan must forecast the expected water supply and demand (for public water supply) over, at least, 25 years and determine a preferred programme to meet the water resource deficit by identifying and appraising a range of options. WRMPs are subject to their own HRAs and are 'regional' documents that by definition consider in-combination impacts across multiple authorities. Therefore, the following AA merges the discussion on relevant European sites, making explicit reference to sites where necessary.

In-Combination Assessment

6.102 To assess potential adverse impacts of the SLP on the water quantity, level and flow in relevant European sites, the latest WRMP published by Yorkshire Water (the company responsible for the potable water supply in Selby District) was reviewed. The company's latest WRMP was published in April 2020 and provides an appraisal of different water resource options likely to be required to serve the growing population. Generally, any water resource options that do not increase the existing consented abstractions or 'exploit' new resources are unlikely to represent a threat for the integrity of European sites. Consented abstractions would have been previously subject to HRA. Instead, proposals for increased abstraction volumes or the development of previously unused water resources, are most likely to be a risk for the hydrological integrity of aquatic sites. For example, a supply management option that represents a particular issue for marine sites is the desalination of saltwater, which effectively removes marine habitat and alters the solute balance in the aquatic environment.

6.103 The WRMP comprises two Water Resource Zones (WRZs) that make up the Yorkshire Water supply area, namely the Grid Surface Water Zone (GSWZ) and the East Surface Water Zone (ESWZ). The former Selby district lies in the GSWZ, which is a large conjunctive use zone in which water resources can be shared between different geographic areas according to need. Yorkshire Water has an agreement with Severn Trent Water for the abstraction of 21,550 Ml/yr from the Derwent Valley reservoirs, which is used to supply large parts of South Yorkshire including Selby District. Another feature of Yorkshire Water's water supply is that it derives from different sources, including 45% from impounding reservoirs, 30% from rivers and 25% from

boreholes. Abstracting water from various resources ensures flexibility and enables Yorkshire Water to better respond to environmental pressures, such as decreases in the Deployable Output from rivers.

6.104 The Environment Agency (EA) publishes Catchment Abstraction Management Strategies (CAMS) for all major waterbodies in the UK. The CAMS ensure that enough water is available for people, while sufficient water remains in the waterbodies to support a healthy environment. As such the EA may attach certain conditions to abstraction licenses (e.g. time limitations or Hands-Off Flows) or may make certain resources unavailable for licensing. The CAMS for the River Derwent indicates that water availability is not an issue at high, mid and low flows. However, at very low flows only limited water may be available for use. However, most Assessment Points in the R. Derwent have at least restricted water available for licensing at very low flows.

6.105 Notably, Yorkshire Water's WRMP provides a forecast of the supply-demand balance over the plan period based on robust population projections. Since this goes beyond the Local Plan period and covers growth in Selby as well as elsewhere in their supply area, it provides the most robust assessment possible. This balances the Deployable Output (i.e. the water available for use) from a 1 in 200-year severe drought against an unconstrained demand year. In other words, this balance is precautionary as it models a scenario in which groundwater levels or river flows are much lower than normal, restricting the amount of water available for abstraction. The key challenges that were taken into account in determining the supply-demand balance for the WRMP included:

- A projected increase of the Yorkshire population by one million by 2045;
- Losses resulting from climate change, amounting to 100 Ml/d;
- Environmental pressure to reduce the amount of water that is abstracted;
- Process losses and leakages; and
- Provision of resilience.

6.106 The WRMP shows that it will be in a supply-demand surplus between 2015/16 and 2035/36. However, subsequently demand is modelled to outpace supply, leading to a supply-demand deficit of 6.49 Ml/d in 2035/36 and 33.97 Ml/d by 2044/45. Yorkshire Water identifies this deficit to be the result of the risks associated with climate change and sustainability reductions applied at some point in the WRMP period. The supply-demand deficit highlights that further resource options required appraisal.

6.107 Water companies respond to supply-demand deficits by considering development options required to meet the growing water demand in the WRMP period. These options may involve a combination of demand management (e.g. investments to reduce leakage reduction, install smart meters, etc.) and supply-side (e.g. bulk water transfer, desalination, water reuse schemes and new groundwater / river abstractions). Typically, demand management is regarded as less 'invasive' and preferable regarding the environment, but it is often insufficient to meet the growing water demand. In contrast, the exploitation of new water resources or increases to existing abstractions are considered primary means through which adverse effects on European sites might occur. The list of potential options then undergoes several rounds of screening from an 'unconstrained', a 'constrained' to a 'feasible' options list. The feasible options then undergo detailed environmental assessments following statutory requirements, including HRA and Water Frameworks Directive Assessment (WFDA).

6.108 Yorkshire Water's preferred solution to meet the projected water demand primarily involves a significant leakage reduction programme. This is aiming to reduce leakage to 150 Ml/d by 2044/45. However, the company also considers taking forward several supply-side solutions, including groundwater options in North and East Yorkshire and an abstraction license increase for the River Wharfe (which feeds into the R. Ouse and ultimately contributes freshwater input to the Humber Estuary SPA / Ramsar / SAC. The River Wharfe proposal is for an annual abstraction limit increase of 10 Ml/d, which would have a potential moderate impact on the river flow. However, a review of the CAMS for the Wharfe and Lower Ouse, highlights that Assessment Point 2 (River Wharfe) currently has water available for licensing.

6.109 HRA report that there is already a statutory process to cover this. There is an adopted WRMP which will go well beyond the Local Plan period, is based on robust population projections, and will have had its own HRA which should have concluded no adverse effects on the integrity of European sites. Check the website and beef up the report where we can with core conclusions from that HRA. All the LPA can do is require

development to be suitably phased with any improvement in public water supply infrastructure. They already have this in a general policy but are looking into strengthening the wording.

6.110 There is an adopted WRMP which goes well beyond the Local Plan period and is based on robust population projections. The HRA of the current WRMP (WRMP19), published in 2019 was submitted to the relevant regulators (Natural England and Environment Agency) and concluded no likely significant effects either alone or in-combination with other plans and projects. This has since been replaced by WRMP24.

6.111 The follow up WRMP (WRMP24), builds on WRMP19. The HRA of Yorkshire Water's WRMP24 is not publicly accessible. However, cannot be adopted if the water and sewerage companies can't either avoid effects on European sites or deliver suitable compensation. Also, given that the R. Wharfe has water available for licensing, it is not expected that an increase of 10 Ml/d will lead to material effects on the river. Furthermore, consent to the proposal will have to be granted by the Environment Agency. This process guarantees that adverse effects on the integrity of the Humber Estuary SPA / Ramsar / SAC will not occur.

6.112 The HRA of the WRMP[102] has concluded that following inclusion of appropriate mitigation measures during the construction phase of relevant schemes that no adverse effects on the integrity of any European site are anticipated.

6.113 In conclusion it is therefore considered that adverse effects on integrity will not arise from this pathway due to the Selby Local Plan, either alone or in combination with other plans or projects. The need to protect water quality, level or flow is also addressed by Policy NE 1 of the Local Plan, which states that any application that has the potential to affect water quality, levels or flow within designated SACs/SPAs/Ramsars must consider potential impacts on hydrological regimes which could affect the integrity of designated habitats, applying appropriate mitigation where deemed necessary, including through measures set out in IC4 and NE5.

Atmospheric Pollution

6.114 The screening for LSEs section identified that the Lower Derwent Valley SAC, Lower Derwent Valley SPA/Ramsar, Skipwith Common SAC and River Derwent SAC required an Appropriate Assessment regarding atmospheric pollution. This was due to the fact that pollution-sensitive habitats lie directly adjacent to several potential commuter routes linking The former Selby districtwith the authority of East Riding of Yorkshire.

6.115 The following SLP policies with the potential to increase regular commuter traffic were identified and screened in for Appropriate Assessment (it is to be noted that Policies EM6 and EM7, both promoting tourism opportunities, were not screened in because they will not increase the 'regular' traffic burden in the district):

- Policy SG2 – Spatial Approach (Strategic Policy) (specifies that a minimum of 6,452 dwellings will be delivered between 2020 and 2040 and outlines the applicable settlement hierarchy)
- Policy EM1 – Meeting Employment Needs (Strategic Policy) (provides for three employment allocations in Eggborough, Sherburn in Elmet and Selby, totalling an area of 130.95ha)
- Policy HG1 – Meeting Local Housing Needs (Strategic Policy) (specifies the delivery of 7,940 net new dwellings across the district; i.e. the quantum that needs assessment)
- Policy HG2 – Windfall Developments (Strategic Policy) (hypothetically enables the provision of further dwellings – in addition to those detailed in Policy HG1)
- Policy HG14 – Gypsy & Traveller Sites (provides for 12 Gypsy and Traveller Pitches in Newthorpe)
- Policy S1 - Selby Station Quarter Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)
- Policy S2 - Selby Gateway Special Policy Area (hypothetically enables the provision of additional employment land)
- Policy T1 Tadcaster Town Centre Regeneration Area – Special Policy Area (hypothetically enables the provision of further dwellings in addition to those detailed in Policy HG1)

[102] Ricardo Energy & Environment (2022) Habitats Regulation Assessment of the Draft WRMP24. Report prepared for Yorkshire Water Services, September 2022.

- Policy T2 London Road Special Policy Area (supports mixed use development)

Skipwith Common SAC

6.116 The qualifying Northern Atlantic wet heaths with *Erica tetralix* and the European dry heaths within the SAC both have a critical nitrogen load of 5-15 kg N/ha/yr. Heathlands are nutrient-poor habitats and resident species have specifically adapted to these conditions. An exceedance of the critical load would lead to a transition from heather to more competitive grasses. Furthermore, excessive nitrogen deposition leads to a decline in lichen abundance and diversity, changes in plant biochemistry and increased susceptibility of abiotic stress (e.g. frost and drought). York Road, although a minor road, does lie within 200m of the SAC and could be affected by growth in Selby. For this reason Natural England requested that air quality impacts on the SAC are covered by modelling.

6.117 The results of the updated 2024 air quality modelling are presented in Appendix C. When interpreting air quality data it is important to note that:

- Paragraph 5.26 of Natural England guidance[103] states that '*An exceedance* [of the critical level or load] *alone is insufficient to determine the acceptability (or otherwise) of a project'.* So, the fact that the critical level for NOx or critical load for nitrogen are already exceeded is not a legitimate basis to conclude that any further NOx or nitrogen (no matter how small) will result in an adverse effect;
- Paragraph 4.25 of the same guidance states '*…1% of critical load/level are considered by Natural England's air quality specialists (and by industry, regulators and other statutory nature conservation bodies) to be suitably precautionary, as any emissions below this level are widely considered to be imperceptible…There can therefore be a high degree of confidence in its application to screen for risks of an effect*'.

6.118 The SAC boundary is adjacent to York Road. However, the SAC is internationally designated for its heathland. The nearest area of heathland is c. 95m from the roadside according to www.magic.gov.uk and the vast majority of heathland on the SAC is over 400m from York Road, well beyond the zone of influence. This is relevant to the assessment because pollution effects due to traffic decline rapidly with increasing distance from the roadside. Modelled NOx concentrations are well below the critical level by 90m from the roadside under all scenarios.

6.119 While ammonia concentrations exceed the critical level for lower plants (1 μgm^{-3}) throughout the transect, being 2.12 μgm^{-3} under all scenarios, this is overwhelmingly due to existing sources in the general area such as agriculture and the contribution of the Local Plan at 90m from the road and beyond is so small as to be effectively invisible in the modelling. The same is true of nitrogen deposition; deposition rates are well above the critical load for heathland but that is due to existing background sources. The 'in combination' dose (i.e. Selby Local Plan combined with other traffic growth over the plan period) is responsible for a less than 0.01 kgN/ha/yr at 90m from the roadside which is less than 0.1% of the critical load, well below the 1% of the critical load threshold that Natural England uses to dismiss a contribution as insignificant and too small to actually show in the model.

6.120 Therefore, it can be concluded that the Selby Local Plan will not have an adverse effect on the integrity of Skipwith Common SAC through reduced air quality either alone or in combination with other plans or projects.

Lower Derwent Valley SAC/SPA

6.121 As discussed earlier in the report, the qualifying lowland hay meadows in the SAC have a critical nitrogen load of 10-20 kg N/ha/yr. An exceedance of the critical load could lead to an increase in tall grasses and to a decline in overall plant diversity. While less sensitive, the golden plover feature of the SPA is also identified as being potentially sensitive to nitrogen deposition on alluvial meadow according to APIS. Notwithstanding this, it is noted that source apportionment data for the SAC show that livestock (33%) and fertilisers (8%) make a much greater contribution to nitrogen deposition within the grid square than road transport (5%, which is very low compared to many other SACs and almost certainly attributable to the absence of major roads and other significant combustion sources around the site). Moreover, the Local Plans will only make

[103] 'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. Version: June 2018'. http://publications.naturalengland.org.uk/publication/4720542048845824

a potentially significant contribution to nitrogen deposition within the SAC in a very localised area, up to 200m from major journey to work routes.

6.122 In this rural part of Selby District, the A163 is one of the main roads connecting the former Selby district with the East Riding of Yorkshire and is the only such connection through the SAC. The Department for Transport's road traffic statistics show that this A road is fairly quiet, with 2,637 cars, 568 Light Goods Vehicles and 203 Heavy Goods Vehicles being counted at manual count point 73457 near Skipwith Common in 2019. It is likely that the primary journey-to-work routes between the former Selby district and the East Riding of Yorkshire would involve the A163. For example, according to Google Maps, the fastest routes between Selby and Market Weighton or Beverley (two of the main settlements in the southern part of East Riding and Yorkshire) would be along that road. Even for a trip between Selby town and the City of Hull, one of the three suggested routes involves the A163 (with little difference in distance or journey time between the route options).

6.123 Therefore, as a second step it was important to establish the likely commuter flux between the former Selby district and East Riding of Yorkshire. Census 2021 data shows that of 10,870 commuters travelling into the former Selby district for work, 2,043 (18.8%) people travel from the East Riding of Yorkshire. Only Wakefield District contributes a higher proportion of commuters (2,111 people, 19.4%). When considering the outflow of commuters from Selby District, Leeds and York are both more important workplace destinations. Notwithstanding this, the East Riding of Yorkshire still is the 4th most important destination (1,461 commuters, 8.4%). The importance of the former Selby district as a workplace destination for residents from the East Riding of Yorkshire is particularly important, because the SLP allocates a minimum of 91.2ha of employment land (most of it around Selby town). This could lead to an increase in the number of commuters along the A163 through the Lower Derwent Valley SAC and corresponding elevations in nitrogen deposition rates.

6.124 In their response to the Regulation 18 consultation, Natural England commented that the assessment undertaken for the City of York Local Plan on the A166, A1079 and B1228 where they cross the Lower Derwent Valley designations to be considered in the HRA of the Selby Local Plan. However, the A1079 and A166 are both over 200m from the Derwent Valley SPA/Ramsar and while the B1228 is within 200m of the SPA/Ramsar site, none of these roads are likely to be significant journey to work routes for residents of Selby town or District travelling eastward as they would necessitate significant detours. The A163 is clearly the main route going east from the former Selby district to reach places such as Market Weighton.

6.125 Three transects were modelled into the SAC/SPA/Ramsar site from the A163. Forecast NOx concentrations are well below the critical level throughout all three modelled transects in all scenarios. Therefore NOx as a pollutant in atmosphere can be dismissed. Total ammonia concentrations do not exceed the critical level for general vegetation (3 μgm^{-3}) at any point on any transect under any modelled scenario. While the lower critical level (1 μgm^{-3}) is identified on APIS as being suitable for the alluvial forest interest feature of the SAC, it is understood from the Supplementary Advice on the Conservation Objectives that this interest feature is only found at Thornton Ellers (SE729456) which is well beyond the modelled transect. Therefore, since the critical level for general vegetation will not be exceeded no adverse effect on the integrity of the SAC/SPA/Ramsar site will arise from ammonia in atmosphere.

6.126 The minimum critical load for nitrogen relevant to the habitats in the SAC/SPA/Ramsar site (10 kgN/ha/yr) is exceeded throughout all three transects due to background sources of nitrogen such as agriculture. The only SAC feature susceptible to atmospheric nitrogen deposition is its alluvial meadows. The only SPA species noted as being susceptible to nitrogen deposition to alluvial meadows is wintering golden plover. On the most affected transect E02a, the nitrogen dose due to Selby Local Plan alone does not exceed 1% of the critical load at any point on any transect under any scenario. The in combination dose due to all traffic growth exceeds 1% of the critical load, but only within 10m of the roadside. Therefore, the 'in combination' dose due to traffic growth is mathematically imperceptible except in an immediate roadside location which will be affected by general edge effects from the road irrespective of future traffic growth.

6.127 Moreover, given that the site is alluvial meadow, the road (and particularly traffic growth due to Local Plans) will be a minimal source of nitrogen compared to fluvial sources. Although the river only inundates the meadows for parts of the year, more nitrogen and phosphorus will enter the system during the c. 6 months of periodic inundation than will come from atmosphere during a 12 month period. For example, a typical nitrate loading for the River Derwent is 11.29 mg/l [104].Therefore if the river floods 1 ha of the SAC to a 30

[104] https://pure.york.ac.uk/portal/en/publications/spatial-and-temporal-trends-in-nitrate-concentrations-in-the-river-derwent-north-yorkshire-and-its-need-for-nvz-status(2f4ccfd6-b21a-4908-b2b3-

cm depth the flood waters overlying that hectare contain 34 kilograms of nitrogen as nitrate. In contrast, our modelling indicates the total 'in combination' loading to the SAC from traffic growth is a worst case 0.37 kilograms of nitrogen per hectare, and that will apply to considerably less than 0.1% of the SAC. Moreover, whereas the river will contribute both nitrogen and phosphorus loading, only nitrogen derives from atmosphere. Differences in management regime and stocking density (noting that livestock will also be contributing nitrogen to the site), along with flood depth and duration, will be the main factors governing the botanical quality of the sward.

6.128 As a result, it is considered that the forecast nitrogen deposition would not materially interfere with the ability of either the SAC or SPA to achieve their conservation objectives and therefore would not result in an adverse effect on the integrity of the SAC or SPA.

River Derwent SAC

6.129 With regard to the A163, impacts have already been assessed for Lower Derwent Valley SAC/SPA/Ramsar site and a similar conclusion of no adverse effect on integrity can be drawn for the interest features of River Derwent SAC. Most only use the river channel itself and while otter may use the adjacent meadows, they have broad habitat requirements and are not affected by relatively subtle changes to species composition or habitat structure, except at the coarsest level. With regard to the A63, the modelling in Appendix C shows that the critical level for NOx or the relevant critical level for ammonia (the upper critical level of 3 μgm^{-3} applicable to general vegetation) will not be exceeded at any point on either transect (E03a and E03b) under any scenario. The critical load for nitrogen deposition is exceeded throughout both transects but this is due to background sources. The functionally-linked habitat adjacent to the river channel at this location appears to be predominantly wet woodland. However, according to APIS wet woodland (Alluvial forests with Alnus glutinosa and Fraxinus excelsior) are not vulnerable to nitrogen deposition. Moreover, as discussed for the A163, habitat use by otter is not affected by relatively subtle changes to species composition or habitat structure, except at the coarsest level.

6.130 It is therefore possible to conclude that atmospheric nitrogen deposition due to the Selby Local Plan will not have an adverse effect on the integrity of the River Derwent SAC.

e985e93ba575).html#:~:text=The%20Derwent%20is%20a%20relatively%20clean%20river%3B%20however%2C,data%20from%201990%20to%202004%20for%20Derwent%20Bridge

7. Conclusions

7.1 This HRA discussed potential implications of the SLP on European sites within the former Selby district and up to 10km from the authority boundary. Several impact pathways were identified to be relevant to the SLP, including recreational pressure, loss of functionally linked habitat, water quality, water quantity, level and flow, and atmospheric pollution. At the LSEs stage, all impact pathways were taken forward to Appropriate Assessment, for a more detailed appraisal of potential effects on European sites. Due to an absence of LSEs, the Kirk Deighton SAC, the Thorne & Hatfield Moors SPA and the Thorne Moor SAC were excluded from Appropriate Assessment. The following paragraphs summarise the main conclusions and recommendations arising from work carried out in the Appropriate Assessment.

Recreational Pressure

Lower Derwent Valley SPA / Ramsar / SAC, Skipwith Common SAC, Humber Estuary SAC/SPA/Ramsar

7.2 It was determined that the SLP would lead to a relatively small amount of growth (320 dwellings) within 5km of the either SPA / Ramsar / SAC, with most housing lying beyond easy walking distance. For Lower Derwent Valley SPA/SAC/Ramsar the access point to the European site most relevant to the former Selby district was least busy in Footprint Ecology's visitor survey (no visitors were recorded over 16 hours of surveying). The amount of housing proposed for allocation within 5km of the SAC/SPA/Ramsar site is small and analysis of the visitor survey data for the SAC/SPA/Ramsar site leads to a conclusion that this amount of housing growth will not significantly change visitor pressure in the SAC/SPA/Ramsar even in combination with other plans and projects due to low levels of visitor use of the closest parts of the SPA to these allocations. However, Natural England noted in consultation responses that for Lower Derwent Valley SAC/SPA the surveyed focussed on certain gateways to the site and therefore may have underestimated diffuse visitors.

7.3 Moreover, the Council will review the Lower Derwent Valley SPD that was produced with adjacent local authorities as a draft in 2017, with a view to adoption as a method of addressing future recreational pressure. The SDP was adopted by ERYC in 2018 as at that moment in time the other local authorities involved in the document, including Selby, were/ are at different stages in the preparation of their respective Local Plans, and SPDs must relate to adopted Local Plan policies. This is reflected in a requirement in Policy NE1 that '*Proposals that may directly, indirectly or cumulatively impact on a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site sites will only be supported where it can be demonstrated that there will be no adverse effects on the integrity of the sites… This part of the Policy relates to development that is located within… the 1km Lower Derwent Valley Area of Restraint. Such development must consider the guidance set out in the Lower Derwent Valley Supplementary Planning Document or its successor… 5 Kilometres of the Lower Derwent Valley SAC/SPA/Ramsar. Such development must have regard to up-to-date visitor monitoring data and where necessary apply appropriate mitigation to reduce recreational pressure from development, including any necessary financial contributions towards the delivery of measures identified in the Lower Derwent Valley Supplementary Planning Document'.*

7.4 The Local Plan allocates 382 dwellings within 5km of the Skipwith Common SAC, a distance that typically reflects the core recreational catchment of heathland sites. It is considered unlikely that the other specific allocations would have an impact on the SAC 'alone' and the remainder of this assessment thus considers the impacts of Policy SG2 (Spatial Approach), particularly in-combination with residential growth projected in the City of York. Extrapolating from visitor survey data it is therefore considered that the development in the Local Plan would make a negligible contribution to any increase in recreational pressure on Skipwith Common SAC. Nonetheless, as a precaution Policy NE1 of the Local Plan includes a requirement in Policy NE1 that '*Proposals that may directly, indirectly or cumulatively impact on a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site sites will only be supported where it can be demonstrated that there will be no adverse effects on the integrity of the sites… This part of the Policy relates to development that is located within… 5 Kilometres of Skipwith Common SAC. Such development must have regard to up-to-date visitor monitoring data and where necessary apply appropriate mitigation to reduce recreational pressure from development'.*

7.5 Finally, to ensure that the integrity of the Lower Derwent Valley SPA / Ramsar / SAC and the Skipwith Common SAC is maintained in the long-term, it was recommended that visitor monitoring in these sites is undertaken every five years. Moreover, Policy NE1 has been specifically amended to ensure that developments will need to consider their potential for causing recreational pressure within 5km of these sites (or 10km of Humber Estuary SAC/SPA/Ramsar site) and if necessary provide mitigation.

7.6 The residential sites closest to the Humber Estuary allocated in the SLP are in Hemingbrough, amounting to a relatively modest increase of 131 dwellings over the plan period. At their closest point, these new dwellings will be approx. 6.6km from the Humber Estuary SPA / Ramsar / SAC. Furthermore, it is to be noted that most allocations, especially the larger settlements, lie further than 11.5km from the site. Given the data presented above, in particular the postcode and visitor origins data, it is considered unlikely that residential growth in the former Selby district will materially increase recreational pressure along the Humber estuary, 'alone' or in-combination and thus no adverse effect on integrity would arise. However, to underline this conclusion additions have been made to Policy NE1.

7.7 Overall, given this evidence, it was concluded that the emerging SLP will not result in adverse effects on the site integrity of the Lower Derwent Valley SPA / Ramsar / SAC, Skipwith Common SAC or Humber Estuary SPA/SAC/Ramsar regarding recreational pressure.

Loss of Functionally Linked Habitat

Lower Derwent Valley SPA / Ramsar and the Humber Estuary SPA / Ramsar

7.8 The Appropriate Assessment indicated that several of the residential and employment sites allocated in the SLP lie within the maximum foraging distances of Bewick's swans and golden plover, qualifying species of nearby European sites such as the Lower Derwent Valley SPA / Ramsar and the Humber Estuary SPA / Ramsar that will forage inland as opposed to being predominantly coastal feeders like the other qualifying species. Furthermore, several sites comprise suitable foraging habitat and are sufficiently large to be potentially linked to European sites. While the SLP already requires for proportionate ecological assessments, AECOM recommends that further wording requiring the need for overwintering bird surveys is included in the plan to provide further specificity. At present, adverse effects (without mitigation) arising from some of the sites allocated in the Local Plan cannot be excluded, particularly in relation to the Lower Derwent Valley SPA / Ramsar.

7.9 This relates to the following sites:

- OSGB-I Land east of Sand Lane, Osgodby
- CARL-G Land north of Mill Lane, Carlton
- CLIF-O Land north of Cliffe Primary School, Main Street, Cliffe
- HEMB-G Land East of Mill Lane, Hemingbrough
- SELB-BZ Cross Hills Lane, Selby
- SELB-CA Olympia Park, Barlby Road, Barlby
- NDUF-D Land north of the A163
- NDUF-O Land north of Gothic Farm, Back Lane
- RICC-J Land at Landing Lane

7.10 Policy NE1 supporting text states *"To meet the requirements of the Habitats Directive, developers of sites within 10km of these designations must provide evidence that proposals will not result in adverse effects on the integrity of designated areas and associated wildlife through loss of functionally-linked land. Evidence that the development proposals will not cause adverse effects should be submitted through the planning application process, and can be either because the development site is not a suitable habitat, or does not currently support a significant proportion of the protected species associated with the designation. Evidence should include surveys of the a proposed development sites current usage, (if any), by designated species, including for over wintering SPA/Ramsar bird species. A land parcel can be considered to support a*

significant population of a designated species if it is accessed by 1% of the qualifying bird population. Non-breeding bird surveys must be undertaken during autumn, winter and spring."

7.11 The sites identified in Table 6 have also been listed as requiring *"Appropriate Assessment for functionally linked habitats as they lie within the typical foraging ranges of species associated with the Lower Derwent Valley and Humber Estuary SPA/Ramsar designations".*

7.12 With the inclusion of this text to Policy NE1 supporting text, adverse effects on the integrity of the Lower Derwent Valley SPA / Ramsar can be excluded.

Water Quality

River Derwent SAC, Lower Derwent Valley SPA / Ramsar and Humber Estuary SPA / Ramsar

7.13 The qualifying habitats and species of the River Derwent SAC, the Lower Derwent Valley SPA / Ramsar and the Humber Estuary SPA / Ramsar are sensitive to negative changes in water quality, particularly the discharge of phosphorus in wastewater. Potential sources of phosphorus from development sites include surface runoff from impermeable surfaces and leaking / overflowing Package Treatment Plants (PTPs), as well as treated sewage effluent from Wastewater Treatment Works (WwTWs).

7.14 Regarding the discharge of treated sewage effluent, by far the most important contributor of these sources to phosphorus loading in freshwater systems. Policy IC4 (Water Supply, Wastewater Treatment and Drainage Infrastructure) aims to ensure that adequate water supply and wastewater infrastructure to existing, new, or improved, wastewater drainage and treatment facilities is secured prior to first occupation of the development. Moreover, The need to protect water quality, level or flow is also addressed by Policy NE 1 of the Local Plan, which states that any application that has the potential to affect water quality, levels or flow within designated SACs/SPAs/Ramsars must consider potential impacts on hydrological regimes which could affect the integrity of designated habitats, applying appropriate mitigation where deemed necessary, including through measures set out in IC4 and NE5.

7.15 As such, adverse effects on the integrity of the River Derwent SAC, the Lower Derwent Valley SPA / Ramsar and the Humber Estuary SPA / Ramsar can be excluded.

Water Quantity, Level and Flow

River Derwent SAC, Lower Derwent Valley SPA / Ramsar and Humber Estuary SPA / Ramsar

7.16 The HRA of Yorkshire Water's WRMP[105] has concluded that following inclusion of appropriate mitigation measures during the construction phase of relevant schemes that no adverse effects on the integrity of any European site are anticipated. In conclusion it is therefore considered that adverse effects on integrity will not arise from this pathway due to the Selby Local Plan, either alone or in combination with other plans or projects. The need to protect water quality, level or flow is also addressed by Policy NE 1 of the Local Plan, which states that any application that has the potential to affect water quality, levels or flow within designated SACs/SPAs/Ramsars must consider potential impacts on hydrological regimes which could affect the integrity of designated habitats, applying appropriate mitigation where deemed necessary, including through measures set out in IC4 and NE5.

[105] Ricardo Energy & Environment (2022) Habitats Regulation Assessment of the Draft WRMP24. Report prepared for Yorkshire Water Services, September 2022.

Atmospheric Pollution

Skipwith Common SAC

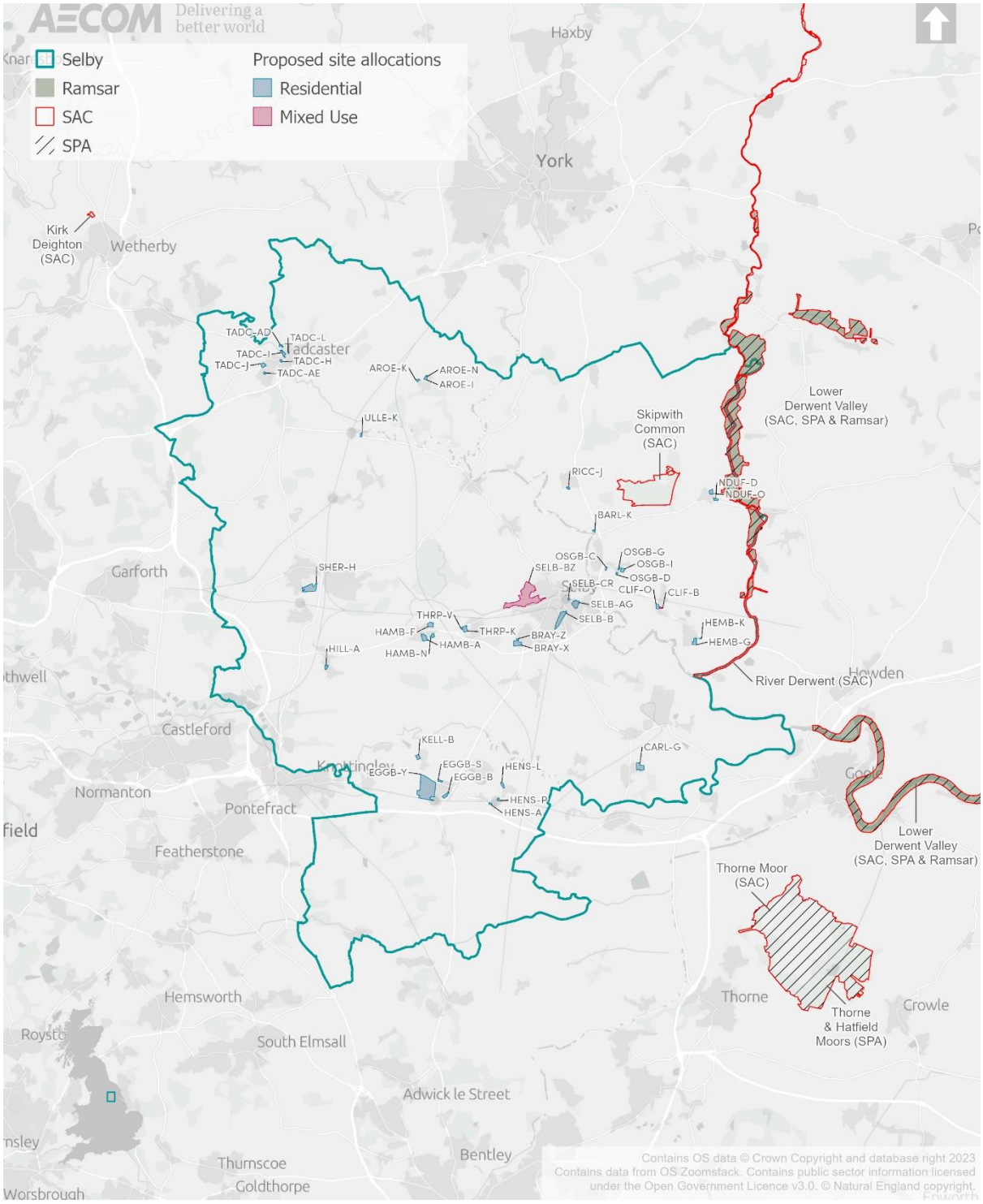
7.17 The qualifying Northern Atlantic wet heaths with *Erica tetralix* and the European dry heaths within the SAC both have a critical nitrogen load of 5-15 kg N/ha/yr. Heathlands are nutrient-poor habitats and resident species have specifically adapted to these conditions. An exceedance of the critical load would lead to a transition from heather to more competitive grasses.

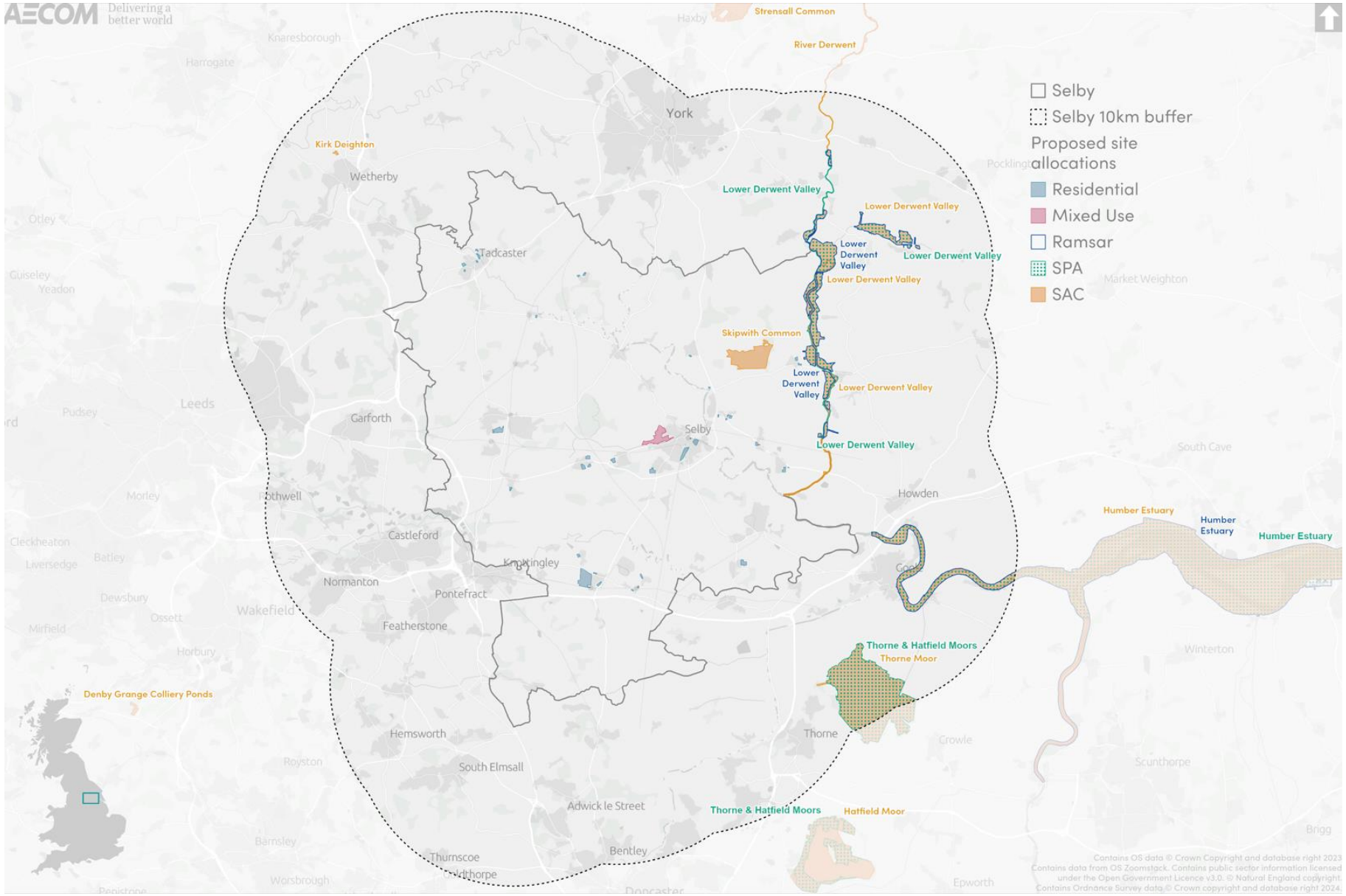
7.18 York Road, although a minor road, does lie within 200m of the SAC and could be affected by developmental growth. For this reason Natural England requested that air quality impacts on the SAC are covered by modelling. However, as a result of modelling it was possible to conclude that the Selby Local Plan will not have an adverse effect on the integrity of Skipwith Common SAC through reduced air quality either alone or in combination with other plans or projects.

Lower Derwent Valley SAC/SPA/Ramsar site

7.19 The lowland hay meadows in the Lower Derwent Valley SAC are sensitive to atmospheric pollution. The Appropriate Assessment determined that the A163, a likely commuter route between the East Riding of Yorkshire and Selby District, bisects the SAC and could lead to an increase in nitrogen deposition in sensitive habitats. While less sensitive, the golden plover feature of the SPA is also identified as being potentially sensitive to nitrogen deposition on alluvial meadow according to APIS. However, modelling demonstrated that it was possible to conclude that the Selby Local Plan will not have an adverse effect on the integrity of Lower Derwent Valley SPA/SAC/Ramsar through reduced air quality either alone or in combination with other plans or projects.

Appendix A Map of sites allocated in the Selby Local Plan and European sites within 10km of Selby District




AECOM
Delivering a better world
Selby
Selby 10km buffer
Proposed site allocations
Residential
Mixed Use
Ramsar
SPA
SAC
Strensall Common
River Derwent
York
Kirk Deighton
Wetherby
Lower Derwent Valley
Tadcaster
Skipwith Common
Selby
Garforth
Leeds
Castleford
Pontefract
Normanton
Featherstone
Knottingley
Howden
Humber Estuary
Thorne & Hatfield Moors
Thorne Moor
Thorne
Hemsworth
South Elmsall
Adwick le Street
Hatfield Moor
Bentley
Thurnscoe
Denby Grange Colliery Ponds
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Appendix B Test of Likely Significant Effects (ToLSEs) Screening Tables

Table 7: Screening table of the policies included in the Selby Local Plan. Where a policy is shaded green, there are no linking impact pathways to European sites and LSEs can be excluded. Where the screening outcome is shaded orange, LSEs cannot be excluded and the policy is screened in for Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
Section 4: Strategic Growth Policies		
Policy SG1 - Achieving Sustainable Development (Strategic Policy)	A. When considering proposals for new development the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work positively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area. B. Planning applications that accord with the policies in the Local Plan (and, where relevant, with policies in Neighbourhood Plans) will be approved without delay, unless material considerations indicate otherwise. C. In the absence of a five-year housing supply or where policies are out of date (as defined by the National Planning Policy Framework) or not being able to meet the requirements of the Housing Delivery Test at the time of making the decision then the Council will grant permission, which is consistent with the role of the settlement hierarchy as set out in Policy SG2 unless material considerations indicate otherwise, taking into account whether: 1. Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; and 2. Specific policies in that Framework indicate that development should be restricted; and 3. The site is well related to the existing built form and is of a scale and nature that is in keeping with the form and scale of the settlement; and 4. The development contributes to meeting the Visions and Objectives of the Local Plan. D. The Council will support proposals which seek to mitigate and adapt to the causes and effects of climate change, through the creation of well-designed development, which optimises opportunity of active travel and public transport to support sustainable transport corridors and movement.	LSEs of this policy on European Sites can be excluded. This is a development management policy that aims for sustainable development in Selby District. It specifies that planning applications in line with the National Planning Policy Framework and the policies in the Selby Local Plan will be approved. However, the policy does not provide a quantum and / or location of employment development. There are no impact pathway present. Overall, Policy SG1 is screened out from Appropriate Assessment.
Policy SG2 - Spatial Approach (Strategic Policy)	A. In order to meet the Council's Vision to build on North Yorkshire's strong local economy and resilient communities, a minimum of 91.2 hectares of employment land and at least 7,728 new homes will be delivered through: 1. The allocation of land for new housing and employment growth to support the growth of Selby Urban Area reflecting its role as the former Selby district's Principal Town, with a range of services, whilst recognising the opportunities for the regeneration of the town centre due to its rail connectivity and the availability of previously developed land. Special Policy Areas are also designated at the Selby Station Quarter and the Selby Gateway recognizing opportunities for the redevelopment of these specific locations. 2. The allocation of land for new housing in Tadcaster to reflect its role as a Local Service Centre and to support a heritage-led approach to the regeneration of the historic brewing centre. 3. The limited further expansion of Sherburn in Elmet supporting its role as a Local Service Centre with a range of employment opportunities, shops and facilities. 4. The allocation of land representing a large expansion of the settlement of Eggborough (to deliver approximately 945 dwellings in the Plan period) reflecting its sustainable location, railway access to Leeds and proximity to the emerging employment locations at Konect (the former Kellingley Colliery) and Core 62 (the former Eggborough Power Station). 5. The allocation of land for new housing in the Tier 1 and Tier 2 Villages as defined in the Settlement Hierarchy of an appropriate scale reflecting each settlement's role. 6. Supporting small scale-windfall development within and adjacent to the main built-up area of Smaller Villages as defined in the Settlement Hierarchy where it is considered appropriate to their scale, form and character to support their continued vitality.	Likely Significant Effects (LSEs) of this policy cannot be excluded. This policy specifies the preferred spatial development approach for Selby District. The policy sets out the broad development to be delivered across the district, including at least 7,728 new homes and a minimum of 91.2ha of employment land. The Preferred Approach SG2 also provides detail on where this development will be delivered, which will mostly occur as redevelopment of existing brownfield sites in Selby Town and Tadcaster. However, an expansion of Sherburn and Eggborough are also provided for. Some growth will occur in Tier 1 and Tier 2 villages. The following impact pathways on European sites are linked to this policy: • Recreational Pressure • Loss of Functionally Linked Habitat • Water Quality • Water Quantity, Level and Flow • Atmospheric Pollution

<table>
<tr><th>Policy number/ name</th><th>Policy detail</th><th>Likely Significant Effects Screening Assessment.</th></tr>
<tr><td></td><td>7. Providing support for the redevelopment of previously developed land for new rail focused employment opportunities at Gascoigne Wood rail interchange- and the opportunity to redevelop Olympia Park for employment use making the most of the site’s sustainable location on the edge of Selby Urban Area.

8. Development in the countryside to support agriculture, the local rural economy, tourism and recreation where it does not detract from the intrinsic character of the surrounding area.

B. Development will be supported in line with the Settlement Hierarchy below. Hamlets and other groups of buildings that are not identified within the settlement hierarchy will be treated as part of the countryside.

<table><tr><th>Hierarchy</th><th>Settlement</th></tr><tr><td>Principal Town</td><td>Selby Urban Area</td></tr><tr><td>Local Service Centre</td><td>Sherburn in Elmet and Tadcaster</td></tr><tr><td>Tier 1 Villages</td><td>Barlby & Osgodby; Brayton; Byram and Brotherton; Carlton, Eggborough & Whitley; Hambleton; Hemingbrough; Riccall; South Milford; and Thorpe Willoughby</td></tr><tr><td>Tier 2 Villages</td><td>Appleton Roebuck; Camblesforth; Cawood; Church Fenton; Cliffe; Escrick; Fairburn; Hensall; Kellington; Monk Fryston & Hillam; North Duffield; Ulleskelf and Wistow</td></tr><tr><td>Smaller Villages</td><td>Barkston Ash; Barlow; Beal; Bilbrough; Bolton Percy; Burn; Burton Salmon; Biggin; Birkin; Chapel Haddlesey; Church Fenton Airbase; Colton; Cridling Stubbs; Drax; Gateforth; Healaugh; Heck; Hirst Courtney; Kelfield; former Kellingley; ; Kirk Smeaton; Little Fenton; Little Smeaton; Lumby; Newland; Newton Kyme; Ryther cum Ossendyke; Saxton; Skipwith; South Duffield; Stillingfleet; Stutton; ; Thorganby; Towton; West Haddlesey and Womersley.</td></tr></table></td><td>Overall, Policy SG2 is screened in for Appropriate Assessment.</td></tr>
<tr><td>Policy SG3 - Development Limits (Strategic Policy)</td><td>Development Limits are:

A. Defined around the Selby Urban Area, Tadcaster, Sherburn in Elmet and the Tier 1 and Tier 2 Villages as defined in the Settlement Hierarchy. Within Development Limits proposals will be supported (subject to other relevant planning policies) for infill development, the re-development of previously developed land and the conversion/change of use of existing buildings, in accordance with Policy HG2 for housing development and EM3 for economic development.

Outside the Development Limits;

B. Development will be supported, in the Smaller Villages, as defined in the Settlement Hierarchy, for very small-scale development commensurate with the character of the individual settlement, in accordance with Policy HG2 for residential, EM4 for economic development and other relevant policies.

C. Hamlets and groups of buildings not identified within the Settlement Hierarchy will be treated as part of the Countryside and proposals for development will be determined in accordance with Policy SG4 (Development in the Countryside), an adopted Neighbourhood Plan and other local and national policies.</td><td>LSEs of this policy on European Sites can be excluded.

This is a development management policy that defines developments limits in key areas of the settlement hierarchy. Importantly, proposals outside these set boundaries will have to be in accordance with National Policy as well as policies in this Local Plan.

The policy does not provide a quantum or location of residential or employment development. There are no impact pathway present that link to European sites.

Overall, Policy SG3 is screened out from Appropriate Assessment.</td></tr>
<tr><td>Policy SG4 - Development in the Countryside (Strategic Policy)</td><td>The Council will seek to ensure that the former The former Selby districtarea remains a special place to live by supporting development which protects and enhances the intrinsic character and beauty of the countryside, recognising the important role it plays in the local economy, for the health and well-being of local residents and as a biodiversity resource.

Development in the countryside as defined in Policy SG2 (Spatial Approach) will be limited to activities which have an essential need to be located in the countryside as set out in national policy and will not adversely harm the character, appearance and environmental qualities of the area in which it is located and are supported by other Development Plan policies including;</td><td>LSEs of this policy on European Sites can be excluded.

This is a policy that manages development in the countryside. The policy particularly relates to the protection of agricultural land (Grades 1 to 3a) and thus has no real bearing on European sites.</td></tr>
</table>

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	• EM4 The Rural Economy • EM5 Tourist, Recreation and Cultural Facilities • EM6 Holiday Accommodation • HG2 Windfall Development • HG3 Rural Workers Dwellings • HG4 Replacement Dwellings in the Open Countryside • HG5 Re-Use or Conversion of Rural Buildings in the Open Countryside • HG8 Rural Housing Exception Sites • HG9 Conversions to Residential Use and Changes of Use to Garden Land Best and Most Versatile Agricultural Land A. The best and most versatile land will be protected by; 1. Avoiding the irreversible loss of the best and most versatile agricultural land (Grade 1 to 3a) where possible; and 2. Avoiding the irreversible loss of Grade 1 agricultural land unless there are exceptional circumstances where the benefits of the proposal significantly outweigh the loss of land. B. Where the Council accepts that the applicant has demonstrated that there is a need for best and most versatile agricultural land to be developed and there is a choice between sites or areas of land in different grades; land of the lowest grade available should be used except where other policy or material considerations outweigh land quality issues. Proposals for development should demonstrate that soil resources have been protected and used sustainably in line with best practice.	The policy does not provide a quantum or location of residential or employment development. There are no impact pathways present that link to European sites. Overall, Policy SG4 is screened out from Appropriate Assessment.
Policy SG5 - Green Belt (Strategic Policy)	The extent of the West Yorkshire and City of York Green Belts is illustrated on the Policies Map. Development within the designated Green Belt, as identified on the Policies Map will be determined in accordance with the National Planning Policy Framework or its successor.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This is a development management strategy that establishes the Green Belts of West Yorkshire and the City of York. Establishing the development criteria for proposals in the Green Belt has no bearing on European sites. Overall, there are no impact pathways present and Policy SG5 is screened out from Appropriate Assessment.
Policy SG6 – Safeguarded Land (Strategic Policy)	The following sites, as shown on the Policies Map, are designated as Safeguarded Land to meet longer-term development needs beyond the Plan period. Location — Site size (hectares) Land west of Garden Lane, Sherburn in Elmet — 6.2 Land north of Springfield Road, Sherburn in Elmet — 2.66 Development of Safeguarded Land will be restricted to: 1. That which is necessary in relation to the operation of existing uses; or 2. Temporary uses that will not prejudice the possibility of the site's future comprehensive development; and 3. In all cases, where it is not detrimental to the character of the site and its surroundings. It is intended that the release of Safeguarded Land, if required, will be carried out as part of future Local Plan preparation.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This is a development management strategy that safeguards two land parcels for longer-term development needs beyond the plan period. However, given that such development would not occur within the current time period (the focus of assessment of this HRA), this has no relevance for this assessment. Overall, there are no impact pathways present and Policy SG6 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
Policy SG7 - Strategic Countryside Gaps (Strategic Policy)	Development within the Strategic Countryside Gaps, as defined on the Policies Map, will only be supported where it is demonstrated that it will maintain and enhance the open character of the countryside and where the gap will not be compromised.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This is a development management strategy that protects strategic countryside gaps from development. However, the protection of such gaps has no bearing on European sites. Overall, there are no impact pathways present and Policy SG7 is screened out from Appropriate Assessment.
Policy SG8 - Neighbourhood Planning (Strategic Policy)	The Council will support Neighbourhood Plans which are considered to be in general conformity to the Strategic Policies identified in the Local Plan. The following Neighbourhood Plans have been formally made: • Appleton Roebuck and Acaster Selby (2017) • Church Fenton (2021) • Escrick (2022) The Council will support development in accordance with up to date, made Neighbourhood Plans. The following are formal designated Neighbourhood Areas; • Brayton • Selby Town • Tadcaster • Ulleskelf **Housing development** The former The former Selby districtarea housing requirement will be met over the Plan period through a combination of implemented planning permissions since the base date of the Local Plan, the allocation of unimplemented planning permissions at 31 March 2023 and the allocation of new sites, including a 5% buffer to provide flexibility and an over-supply of sites to ensure that sufficient housing is delivered as set out in Policy HG1. There is no requirement for housing development to be allocated in Neighbourhood Plans to meet the identified housing needs for the District set out under Policy HG1. Emerging Neighbourhood Plans will be encouraged to plan positively for growth by considering additional sites to those identified through the site allocations in the Local Plan or alternative sites where it has been demonstrated that allocations will no longer be delivered.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy establishes the formal designated Neighbourhood Plan (NP) areas for which NPs will be forthcoming. However, the delineation of such areas has no relevance to European sites. Any additional development allocated in NPs would be subject to its own HRA. Overall, there are no impact pathways present and Policy SG8 is screened out from Appropriate Assessment.
Policy SG9 – Design (Strategic Policy)	A. In order to make the former The former Selby districtarea a great place to live and enjoy, all new development should be well designed and beautiful, responding positively to the special character and local distinctiveness of the area. In order to achieve this all new development should seek to reflect national and local policies and guidance which promotes high-quality design including Neighbourhood Plans,Conservation Area Appraisals and Village Design Statements. B. Development should, where appropriate, seek to: 1. Respond to its location in terms of the natural, historic and built environment reflecting important views and landscapes and reinforce the distinctiveness and character of the local area having regard to the existing form, scale, density, layout, building materials and detailing; 2. Facilitate social inclusion, promote user-friendly environments and provide safe and secure places to live and work by designing out antisocial behaviour through the creation of developments with natural surveillance having regard to Secured by Design principles. Development proposals which will generate crowds in public spaces should consider appropriate security measure in the design of buildings and spaces;	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy sets out various design criteria for new developments in Selby District, such as the provision of private amenity space, connections to open spaces and green infrastructure networks, and considerations of wildlife and local heritage. Much of the policy detail is positive, however there are unlikely to be any impacts on European sites. Specifically, the policy does not provide a quantum and / or location of residential or employment growth.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	3. Provide sufficient private amenity space which is appropriate to the type of development proposed ensuring proposals do not have an adverse impact on overlooking, loss of privacy, light or disturbance from noise, vibration, odour or fumes; 4. Make efficient use of land by not adversely affecting the potential development of a wider area of land which could otherwise be available for development. This can be achieved by ensuring that allocated sites which are built out in part, leave an access into the remainder of the site; 5. Ensure that the highest levels of sustainability are achieved through the design of buildings and by making efficient use of resources. Proposals should sufficiently consider the long-term implications of climate change such as flood risk, water supply, biodiversity and landscape, and the risk of over-heating from rising temperatures; 6. Promote active travel and healthy lifestyles through the promotion of walking and cycling links, access to areas for recreation and the principles of Building for Healthy Lives (or successor document). Proposals for Major Development should be accompanied by a Health Impact Assessment Screening Checklist which will determine whether a full assessment is required and where appropriate, a full Health Impact Assessment should be undertaken, and any design requirements accommodated into the scheme; 7. Make sure that adequate access and internal roads are provided to ensure safe internal vehicular movements; 8. Provide connections to existing open spaces, green infrastructure networks and Public Rights of Way outside of the development boundary; 9. Incorporate multi-functional green infrastructure within sites to provide carbon storage and Sustainable Drainage Systems (SuDS); 10. Provide specific and dedicated spaces for wildlife to encourage a more robust and connected network of habitats. Major Development should provide integrated swift or bat bricks and hedgehog holes whilst all development should be brought forward in accordance with Building for Nature Standards or its successor; 11. Integrate Public Art developed with the local community into all Major Development schemes; 12. Be configured to bring about an increase in the level of bus use, and the layout of streets and paths in new developments should facilitate direct and efficient bus operation, with direct and pleasant walking routes to bus stops. Masterplans and Design Codes may be required for large-scale development, which will be delivered in phases. Applicants will be expected to engage positively with the Council and the local community in developing Masterplans and Design Codes.	Overall, there are no impact pathways present and Policy SG9 is screened out from Appropriate Assessment.
Policy SG10 - Proposals for low carbon and renewable energy storage and generation (including hydrogen transportation networks).	A. Proposals for low carbon and renewable energy storage, transportation networks and generation will be supported where: 1. Planning impacts of the development and associated infrastructure, both individually and cumulatively, are, or can be made, acceptable; 2. Appropriate weight, consideration and mitigation has been given to the following where applicable: i. Landscape character and sensitivity; ii. Designated nature conservation sites, features, functionally-linked land, protected habitats and species; iii. Designated and non-designated heritage assets and their settings; iv. Hydrology and water quality; v. Impact on Infrastructure and Transport Networks including highways, rail, aviation operations, navigational systems, Public Rights of Way, television, radio, telecommunications systems; vi. Living conditions and amenity including due to noise, odour, dust, vibration, visual intrusion, shadowing or flicker. 3. Community engagement has been undertaken which demonstrates the delivery of environmental, social and economic benefits and how concerns will be addressed/mitigated for;	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy sets out a list of criteria that must be met by proposals aimed at developing new low carbon and renewable infrastructure and the delivery of community energy systems. However, while positive, this policy is unlikely to be relevant to European sites. Specifically, the policy does not provide a quantum and / or location of such developments. Overall, there are no impact pathways present and Policy SG10 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	4. The site will be recovered to a safe condition, with a suitable use, to a minimum of its original value and condition, within a defined and agreed period should the infrastructure cease to be operational. B. Proposals to facilitate heat recovery and delivery of community energy systems such as combined heat and power (CHP), combined cooling, heat and power (CCHP) and district heating networks should be explored where; 1. development is in proximity to existing sources of heat generations; or 2. there is sufficient heat density/demand to anchor loads; and 3. provision of combined heat and power systems does not cause significant harm to heritage assets.	
Policy SG11 - Flood Risk (Strategic Policy)	A. To enable communities to manage, be resilient and adapt to flood risk, development will only be supported where it can be demonstrated that: 1. The site falls within areas of lowest flood risk as set out in the most up-to-date Environment Agency flood risk maps and/ or Selby District's Strategic Flood Risk Assessment (SFRA) maps; or 2. The development is of a type that is exempt from the sequential and exceptions tests, as determined by national policy; or 3. The site has passed through a Sequential Test as set out by the Local Planning Authority; or 4. Where there are no sequentially preferable sites, the site has been assessed through the application of the Exception Test as set out in the National Planning Policy Framework and; 5. The proposal does not increase the risk of flooding off-site; 6. A scheme that has to be located in Flood Zone 3b (functional floodplain) involving essential infrastructure that has passed the Exception Test, or water-compatible uses, will be designed and constructed to: i. remain operational and safe for users in times of flood; and ii. result in no net loss of floodplain storage; and iii. not impede water flows and not increase flood risk elsewhere. B. If a site has passed the Sequential and Exception Tests the following criteria will need to be applied where viable and feasible to make it acceptable in detail: 1. Where the development is located in areas of flood risk such as Flood Zone 2 (or higher) and does not constitute Minor Development or a change of use the development layout within the site will be subject to the sequential approach, with the highest vulnerability development located in areas at lowest flood risk within the site; 2. Relevant flood resilience construction methods identified through an up to date site-specific Flood Risk Assessment (FRA) should be implemented to reduce the impact and likelihood of a flood event; 3. Where the development has existing trees, woodland and/or hedgerows these should be retained where the risk of flooding from surface water has been identified and it is possible, and if not retained the developer must agree a tree planting scheme in line with Policy NE6 where determined to be the best option to help reduce identified flood risk from surface water; 4. The features that manage surface water are commensurate with the design of the development in terms of size, form and materials and make a positive contribution to reducing flood risk. More specific development control guidance should incorporate comments from the Lead Local Flood Authority;	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy provides detailed criteria that development proposals will have to meet to minimize flood risk (both in the allocated themselves and adjacent parts of the district). Importantly, the policy stipulates that Sustainable Drainage Systems (SuDS) will have to be used and that hard surfaces should be permeable, where possible. This is particularly important for proposals in North Duffield, which have the potential to result in water quality and water quantity, level and flow impacts in the Lower Derwent Valley SPA / Ramsar / SAC and the River Derwent SAC. At its closest point, the SPA / Ramsar is only approx. 330m from the allocation 'Land North of A163, North Duffield'. The policy does not provide a quantum and / or location of residential or employment growth. Overall, there are no impact pathways linking this policy to European sites and Policy SG11 is therefore screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	5. Sustainable Drainage Systems (SuDS) where appropriate are incorporated in accordance with the National Planning Policy Framework and the non-statutory technical standards, but taking advice from those organisations that provide input through the planning process including the Lead Local Flood Authority, and in relevant areas the Internal Drainage Boards; 6. Wastewater and effluent should be disposed to dedicated treatment plants wherever possible and make the best use of existing sewerage networks. Infrastructure for new development should ensure that surface water is always drained and managed separately from foul water. It is considered that combined sewer systems, which carry both foul and surface water, have limited capacity and are more likely to lead to foul flooding and are therefore not supported for new development; 7. Hard surfaces on developments should be permeable where practicable in line with highways guidance from the Local Highways Authority unless proven not to be possible by site investigation; 8. Proposals involving building over existing culverts, or the culverting or canalisation of watercourses will not be permitted unless it can be demonstrated to be in the interests of public safety or to provide essential infrastructure and that there will be no detrimental effect on flood risk and biodiversity. Where feasible, development proposals should incorporate re-opening of culverts, modification of canalised watercourses and consideration of mitigation measures to achieve a more natural state; 9. All developments planning work in, on, under or near ordinary watercourses (including piped ordinary watercourses), or discharging surface water into a watercourse within the defined Drainage District require consent from the Internal Drainage Board and need to have regard to all relevant byelaws; 10. In terms of mitigation, sites should follow the relevant guidance detailed within the Strategic Flood Risk Assessment(s), including: i. Setting of finished floor levels; and ii. Management of residual depths, hazards, etc.; and iii. Consideration to the design flood event; and iv. Access and egress requirements. 11. In some developments (for example, commercial/industrial), raising floor levels may not be possible due to operational requirements. In these instances alternative measures should be considered and agreed with the Environment Agency before implementation. C. Where required by the National Planning Policy Framework (NPPF) and set out in Planning Practice Guidance, proposals for development should be accompanied by a site-specific Flood Risk Assessment (FRA). The need for a FRA is described in the NPPF, however Footnote 55 of the NPPF also refers to the need for the SFRA to provide guiding details for sites where a FRA will be necessary; and not just relying on the Environment Agency flood zones. D. Development allocated in the Local Plan will not be subject to the Sequential/Exception Tests identified in Part A as it has already been determined through the Local Plan process that they have passed these Tests.	
Policy SG12: Valuing the Historic Environment (Strategic Policy)	The former The former Selby districtarea's heritage assets will be preserved and where appropriate enhanced in a manner commensurate to their significance. Developments which will help in the management, conservation, understanding and enjoyment of the area's historic environment, especially for those assets which are at risk, will be encouraged. Particular attention will be paid to the conservation of those elements which contribute most to the former The former Selby districtarea's distinctive character and sense of place. These Include: • The archaeology and historic landscapes of the Magnesian Limestone Ridge and the Humberhead Levels; • The significant ritual and funerary sites and archaeological remains associated with Newton Kyme Henge and Skipwith Common; • The Roman heritage of the Tadcaster area; • Medieval sites – particularly moated and manorial sites; • The registered Battlefield at Towton and its setting; • The former The former Selby districtarea's historic Parks and Gardens • The former The former Selby districtarea's significant ecclesiastical history, as exemplified by Selby Abbey, • Cawood Castle and the Bishop's Canal; • The formet The former Selby districtarea's strong industrial heritage, relating principally to mining and shipbuilding,	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy provides protection to heritage environments and assets. It stipulates that such assets should be conserved or enhanced through development proposals. However, the preservation of historic environments has no relevance to European sites. Overall, there are no impact pathways linking this policy to European sites and Policy SG12 is therefore screened out from Appropriate Assessment.

<table>
<tr><th>Policy number/ name</th><th>Policy detail</th><th>Likely Significant Effects Screening Assessment.</th></tr>
<tr><td></td><td>• in contrast with its largely rural character;
• The 19th Century farming heritage of the area;
• 20th Century military remains, most notably the airfields of former RAF Riccall and
• RAF Church Fenton; and
• The designated heritage assets of the former Selby district. .</td><td></td></tr>
<tr><td>Policy SG13: Planning Applications and the Historic Environment (Strategic Policy)</td><td>In order to preserve and/or enhance the historic environment, a development scheme will be supported which meets the following;

A. Development affecting a heritage asset should preserve, and where appropriate, enhance those elements which contribute to its significance.

B. Harm to elements which contribute to the significance of a designated heritage asset (or an archaeological site of national importance) will only be supported where this is clearly justified and outweighed by the public benefits of the proposal. Substantial harm or total loss to the significance of a designated heritage asset (or an archaeological site of national importance) will be permitted only in those circumstances set out in the National Planning Policy Framework.

C. Development affecting a Conservation Area should preserve and where appropriate
enhance those elements which make a positive contribution to the character or appearance of the area, including its setting, and should be in accordance with the guidance set out in adopted Conservation Area Appraisals.

D. Development which would remove, harm, or undermine the significance of a non-designated heritage asset will only be permitted where the benefits are considered sufficient to outweigh the harm, having regard to the scale of any harm and the significance of the asset.

E. Proposals for the sympathetic re-use of vacant and “at risk” buildings will be supported where they prevent further deterioration of the buildings condition, maintain, or enhance their significance, and support their long-term conservation.

F. In order to satisfy the requirements of this policy, a Heritage Statement must be undertaken by suitably qualified expertise and submitted in support of any proposals which effect the historic environment.
G. Where there is potential for archaeological remains, applicants will be required to undertake an archaeological field evaluation commensurate to the likelihood and/or significance of the archaeology.</td><td>There are no Likely Significant Effects (LSEs) of this policy on European Sites.

This policy provides protection to heritage environments and assets. It stipulates that such assets should be conserved or enhanced through development proposals.

However, the preservation of historic environments has no relevance to European sites.

Overall, there are no impact pathways linking this policy to European sites and Policy 13 is therefore screened out from Appropriate Assessment.</td></tr>
<tr><td colspan="3">Section 5: Supporting a Diverse Local Economy and Thriving Town Centres</td></tr>
<tr><td>Policy EM1 - Meeting Employment Needs (Strategic Policy)</td><td>The Council will support sustainable economic growth through the allocation of economic development proposals at the following sites as shown on the Policies Map:

<table><tr><th>Site Ref.</th><th>Settlement</th><th>Location</th><th>Area to be developed as employment land (Hectares)</th></tr><tr><td>EGGB-AA</td><td>Eggborough</td><td>Eggborough Power Station</td><td>40</td></tr><tr><td>SHER-AA</td><td>Sherburn in Elmet</td><td>Gascoigne Wood</td><td>57.35</td></tr><tr><td>SELB-CA</td><td>Selby</td><td>Olympia Park</td><td>33.6</td></tr><tr><td></td><td></td><td>TOTAL</td><td>130.95ha</td></tr></table></td><td>Likely Significant Effects (LSEs) of this policy cannot be excluded.

This policy supports economic growth in three employment allocations in Eggborough, Sherburn in Elmet and Selby town respectively, totaling 130.95ha in area.

The allocation of new employment land could potentially lead to the loss of supporting habitats for SPA / Ramsar birds (such as from the Lower Derwent Valley SPA / Ramsar or the Humber Estuary SPA / Ramsar). Furthermore, it is likely to increase commuter traffic within Selby District, as well as contributing to the volume of potable water used and treated sewage produced.

The following impact pathways on European sites are linked to this policy:
• Loss of Functionally Linked Habitat
• Water Quality
• Water Quantity, Level and Flow
• Atmospheric Pollution

Overall, Policy EM1 is screened in for Appropriate Assessment.</td></tr>
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<table>
<tr><th>Policy number/ name</th><th>Policy detail</th><th>Likely Significant Effects Screening Assessment.</th></tr>
<tr>
<td>Policy EM2 - Protection of Employment Land (Strategic Policy)</td>
<td>A. The following defined Key Employment Areas, as shown on the Policies Map, will be protected in order to safeguard existing or potential jobs:

<table>
<tr><th>Site</th><th>Status</th></tr>
<tr><td>Core 62 (Former Eggborough Power Station), Eggborough</td><td>Permitted</td></tr>
<tr><td>Church Fenton Creative Studios, Church Fenton</td><td>Permitted</td></tr>
<tr><td>Konect (Former Kellingley Colliery), Kellingley</td><td>Permitted</td></tr>
<tr><td>Sherburn 2, Sherburn in Elmet</td><td>Permitted</td></tr>
<tr><td>Drax Power Station, Drax</td><td>Existing employment site</td></tr>
<tr><td>Selby Business Park, Bawtry Road, Bayton</td><td>Existing employment site</td></tr>
<tr><td>Access 63, East Common Lane, Selby</td><td>Existing employment site</td></tr>
<tr><td>Station Road, Tadcaster</td><td>Existing employment site</td></tr>
<tr><td>York Road, Tadcaster</td><td>Existing employment site</td></tr>
<tr><td>Sherburn Enterprise Park, Sherburn in Elmet</td><td>Existing employment site</td></tr>
<tr><td>North Point Business Park, Selby Road (North), Eggborough</td><td>Existing employment site</td></tr>
<tr><td>Selby Road (South), Eggborough</td><td>Existing employment site</td></tr>
</table>

B. Proposals for the expansion, intensification or redevelopment of a Key Employment Area for employment uses will be supported where it does not harm the amenity of the surrounding area. The use of conditions will be considered for applications for office, research and development and light industrial uses (Use Class Eg) to ensure that they remain within that use in perpetuity.

C. The development of Key Employment Areas for non-employment uses will only be supported where:

1. The proposal is for an ancillary use; and

2. The proposal is not for residential use; and

3. Development would not result in a significant loss of existing jobs or employment potential.

D. On all other existing employment sites / premises (i.e. those not in defined Key Employment Areas) a change of use to non-employment uses will be resisted unless it can be demonstrated that:

1. There will still be an adequate supply of employment land in the locality as defined by the latest Housing & Economic Development Needs Assessment; and

2. The land or premises cannot satisfactorily support continued employment use as demonstrated by the submission of evidence which demonstrates that the site or premises has been actively marketed for a period of 12 consecutive months.</td>
<td>There are no Likely Significant Effects (LSEs) of this policy on European Sites.

This policy protects existing employment land across The former Selby districtto ensure that existing or future jobs are safeguarded. While the allocation of employment land is associated with various impact pathways, this policy relates to existing or permitted employment land, which would have already been assessed in a previous HRA. Therefore, there are no additional impact pathways present

Overall, Policy EM2 is screened out from Appropriate Assessment.</td>
</tr>
<tr>
<td>Policy EM3 - Economic Development (Strategic Policy)</td>
<td>A. New employment development, including change of use, on land not allocated for employment development, will be supported within the Development Limits of existing settlements.

B. Proposals for the expansion of existing employment uses will be permitted within and immediately adjacent to the Development Limits of existing settlements.

C. In all cases the following criteria must be met:

1. Development is of a scale appropriate to the hierarchy of the settlement in which it is proposed;</td>
<td>There are no Likely Significant Effects (LSEs) of this policy on European Sites.

This policy defines more general criteria that must be met by successful development proposals. Among the criteria is that such development should not cause harm to ecological features.

However, the policy does not provide a quantum and / or location of employment growth. The quantum and broad location of employment development has already been assessed in Policy EM1.</td>
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</table>

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	2. Development is of a type and design sympathetic to the location within which it is proposed; 3. Development would not have an unacceptable impact on highways or other forms of infrastructure and provides electric vehicle charging points; 4. Development would not cause harm to local amenity, landscape, ecology, historic environment or other environmental and cultural heritage considerations; and 5. Development is supported by a landscaping scheme and boundary details which appropriately respond to the locality and setting.	Overall, there are no linking impact pathways present and Preferred Approach EM3 is screened out from Appropriate Assessment.
Policy EM4 - The Rural Economy (Strategic Policy)	A. A prosperous rural economy will be supported by allowing development in Smaller Villages and Countryside, including farm diversification, if it: 1. Expands existing businesses through either the conversion of existing buildings or well-designed new buildings; or 2. Redevelops an existing or former employment site or premises; or 3. Supports the sustainable diversification of agricultural and other land-based businesses; or 4. Is related to tourism or recreation, subject to the requirements of Policy EM5 or Policy EM6. B. Development within Smaller Villages and Countryside will be expected to: 1. Be of a scale commensurate with an existing use, or that reasonably required for a new use, and with the rural character of the location; and 2. Successfully mitigate any harmful impacts on the countryside, biodiversity, landscape or local character of the area; and 3. Comply with Policy IC6 (Sustainable Transport, Highway Safety and Parking) and not adversely impact on the local road network.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy generally supports small-scale economic proposals in the countryside, provided they meet certain criteria. Development proposals should not have harmful effects on biodiversity. However, the policy does not provide a quantum and / or location of employment growth. The quantum and broad location of employment development has already been assessed in Policy EM1. Overall, there are no linking impact pathways present and Policy EM4 is screened out from Appropriate Assessment.
Policy EM5 - Tourist, Recreation and Cultural Facilities (Strategic Policy)	Proposals for tourist, recreation and cultural facilities will be permitted provided: A. The nature and scale of the proposal would be appropriate to the locality; B. The proposal would not have a significant adverse effect on the character and appearance of the area; C. The proposal would not create conditions prejudicial to highway safety or which would have a significant adverse effect on local amenity; D. Proposals that come forward within the countryside, subject to compliance with Policy EM4 (The Rural Economy), will require suitable justification to be provided that the use requires a rural location and that it cannot be accommodated within the Development Limits of an existing settlement; and E. Proposals affecting the Lower Derwent Valley Area of Restraint meet the requirements of Policy NE1 (Protecting Designated Sites and Species).	Likely Significant Effects (LSEs) of this policy cannot be excluded. This policy supports development proposals for tourist and recreation opportunities. Several European sites in The former Selby districtare sensitive to recreational pressure and, depending on the nature and location of tourism proposals, this could increase the recreational footfall in sensitive areas. Tourism development is also associated with other impact pathways (see below). The following impact pathways on European sites are linked to this policy: • Recreational Pressure • Loss of Functionally Linked Habitat • Water Quality • Water Quantity, Level and Flow • Atmospheric Pollution Overall, Policy EM5 is screened in for Appropriate Assessment.
Policy EM6 - Holiday Accommodation (Strategic Policy)	A. Proposals for serviced and non-serviced holiday accommodation, including hotels, guest houses, holiday cottages, static caravans and lodges, will be permitted where: 1. The development is located within the Development Limits of an existing settlement; or 2. If located in the Countryside the proposal represents:	Likely Significant Effects (LSEs) of this policy cannot be excluded. This policy links to Policy EM5, which provided for tourism development within the district. Policy EM6 provides support to serviced and non-serviced holiday accommodation, potentially in the open countryside.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	i. An extension or replacement to existing holiday accommodation; or ii. The reuse of an existing building which is structurally capable of conversion; or iii. Static caravans or holiday lodges, where development can demonstrate the highest possible standards of siting, design and landscaping. 3. All proposals will be required to meet the following criteria: i. The size and scale of the proposal would be appropriate to the locality; ii. The development does not create an over-concentration of properties in use as tourist accommodation to the detriment of local amenity; iii. Development would not have an unacceptable impact on highways or other forms of infrastructure; iv. Development would not have a harmful impact on the countryside, biodiversity, landscape or local character of the area; and v. Where the development is for a hotel, the proposal should demonstrate compliance with the sequential approach in accordance with national policy and Policy EM7 (Town Centres and Retailing). B. Proposals for touring caravans, motorhomes, Aires and camping facilities will be supported where: 1. The proposal would not have a significant impact on the character and open appearance of the countryside or harm recognised nature conservation interests; 2. The proposal would be well screened and would not have a significant adverse impact on local amenity; 3. The site would have good access to the primary road network and would not have an unacceptable impact on highways; 4. Any ancillary buildings or structures are demonstrably essential to providing basic services on the site; and 5. The number of pitches proposed are in proportion to the size of the locally resident population so as not to disrupt community life. C. To ensure that holiday accommodation does not result in the creation of permanent living accommodation, conditions may be imposed which restrict the use and / or period of occupation. D. Proposals affecting the Lower Derwent Valley Area of Restraint meet the requirements of Policy NE1 (Protecting Designated Sites and Species). E. Proposals would not have detrimental impact on sites of historical or archaeological importance or their setting in accordance with Policy SG13 (Planning Applications and the Historic Environment).	As highlighted in relation to the previous policy, the Lower Derwent Valley SPA / Ramsar / SAC and the Skipwith Common are sensitive to recreational pressure. Depending on the scale and location of holiday accommodation, the recreational footfall in these sites could increase. Holiday accommodation would also contribute to other impact pathways (see below). The following impact pathways on European sites are linked to this policy: • Recreational Pressure • Loss of Functionally Linked Habitat • Water Quality • Water Quantity, Level and Flow • Atmospheric Pollution Overall, Policy EM6 is screened in for Appropriate Assessment.
Policy EM7 - Town Centres and Retailing (Strategic Policy)	A. Support will be given to maintaining and enhancing the vitality and viability of the following retail hierarchy of defined Town Centres: 1. Selby - Principal Town Centre 2. Tadcaster and Sherburn in Elmet - Minor Towns Centres This will be achieved by ensuring that proposals for main town centre uses will be supported (within the defined Town Centre boundaries as shown on the Policies Map) in line with their respective roles in the retail hierarchy as follows: a. Selby Town Centre is the dominant centre in the former district area. Its role as the Principal Town Centre will be supported through a focus for town centre uses including retail, commercial, leisure, entertainment, food and drink, recreation, arts and cultural uses. The continued renaissance of the Town Centre will be promoted through the diversification of uses, including the re-purposing of upper floors to residential use, sensitive conservation work, improved pedestrian and cycle linkages and an enhanced evening and visitor economy. A Town Centre Design Guide Supplementary Planning Document will be prepared with a view to help improve the visual character of the high street. Opportunities will be taken to enhance the town's weekly market and promote town centre spaces for events and leisure activities. b. Tadcaster and Sherburn in Elmet Minor Town Centres have an important role serving more localised catchments:	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This is an economic policy that maintains the Selby, Tadcaster and Sherburn town centres. However, the provision of retail outlets, entertainment and arts in town centres has no bearing on European sites. Policy EM7 does not provide a quantum and / or location of employment growth. Overall, there are no linking impact pathways present and Policy EM7 is thus screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	i. In Tadcaster, priority will be given to the regeneration of the Town Centre in a way which utilises the town's high-quality built heritage and attractive riverside location. ii. Improvements to the retail offer and range of facilities will be encouraged in Sherburn in Elmet Town Centre to ensure that the local community is supported by a wider range of shops and services, including an enhanced evening economy. This may be achieved through an extension or remodelling of the existing Town Centre. B. Retail development and proposals for other main town centre uses, outside the Town Centre boundaries of Selby, Tadcaster and Sherburn in Elmet will be required to: 1. Meet a purely localised need and conform with Policy EM8 (Local Shops); or 2. Demonstrate compliance with the Sequential Approach; and 3. Provide an Impact Assessment for proposals that have a floorspace in excess of 400 square metres gross (280 square metres net).	
Policy EM8 - Local Shops	Outside defined Town Centre boundaries (as shown on the Policies Map), the health and well-being of local shops will be promoted. A. Planning permission for the change of use of a local shop, including post offices, pubs and petrol stations, to other uses will only be permitted if it can be shown that: 1. The business is no longer financially viable; or 2. There is an appropriate alternative within the same village or community. B. Proposals for new local shops within existing settlements will be permitted where: 1. The shop is small scale (no more than 280 square metres net) and of a type and in a place that would meet localised daily needs including on strategic housing sites where a need for a Local Centre has been identified; 2. The shop is located and designed to encourage trips by pedestrians and cyclists; and 3. The proposal would not create conditions prejudicial to highway safety or which would have a significant adverse effect on local amenity.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy promotes local shops outside established Town Centres. Positively, new local shops should encourage sustainable travel modes (e.g. walking and cycling). The policy does not provide a quantum and / or location of employment growth. Overall, there are no linking impact pathways present and Policy EM8 is thus screened out from Appropriate Assessment.
Policy EM9 - Hot Food Takeaways	A. Proposals for hot food takeaways will only be permitted in locations where they satisfy other relevant policies of the Plan and the following criteria: 1. They do not lead to clustering or proliferation of such uses where they undermine objectives to promote healthy living and the vitality and viability of the defined Town Centres; and 2. They do not have a negative impact upon the amenity and safety of residents and other businesses in the area; to include highway safety and parking, hours of operation, control of odours, and litter and waste disposal; and B. Subject to meeting the above criteria, hot food takeaways which are located within 400 metres of a secondary school or further education college will not be supported unless the opening hours are restricted until after 17:00 on weekdays.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy restricts the delivery of hot food takeaways by specifying further criteria that such businesses must fulfill. However, the provision of takeaways has no bearing on European sites. Overall, there are no linking impact pathways present and Policy EM9 is thus screened out from Appropriate Assessment.
Policy EM10 - Advertisements	A. Applications for consent to display advertisements will be permitted where the size of the sign and the materials used are appropriate to the street scene and will not have an adverse effect on either the amenity of the area or on public and road safety B. Proposals for the display of advertisements within Conservation Areas and on, or affecting, a Listed Building will be granted consent provided the advertisement would not detract from the architectural and historic character of the street scene and would accord with the provisions of Policy SG13 (Planning Applications and the Historic Environment). The proposed advertisement should use a high standard of materials and if it is proposed that the advertisement be illuminated, the design, method and degree of illumination should not detract from	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy relates to the permissiveness of advertisements across Selby District. However, the provision of advertisements has no bearing on European sites.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	the overall character of the area.	Overall, there are no linking impact pathways present and Policy EM10 is thus screened out from Appropriate Assessment.
Section 6: Providing the Right Infrastructure To Support Local Communities		
Policy IC1- Infrastructure Delivery (Strategic Policy)	The Council will work with infrastructure providers and developers to ensure that additional capacity is delivered to meet the requirements of the Plan Area by ensuring that: A. The development of new or improvements to existing infrastructure will be supported where it can be demonstrated that: 1. There is an identified need; 2. The proposal is located close to where the need arises; 3. The proposal will be accessible to all potential users; 4. There are no adverse impacts on the surrounding highway network; 5. The location and design considers long-term climate resilience and will not detract from the character of the local area; 6. Satisfactory areas for amenity and circulation are provided to support the scheme. B. All new development will provide new or improved infrastructure, as necessary and evidenced, either on-site or through proportionate contributions towards the overall costs of off-site provision. Consideration of what infrastructure is required and how it will be delivered, should: 1. Have regard to the infrastructure requirements set as out in the Local Plan evidence base and Infrastructure Delivery Plan; 2. Assess whether existing infrastructure has sufficient capacity to support the new development; 3. Calculate and request proportionate financial contributions from the developer, for any off-site provision and towards the costs of adoption and ongoing maintenance of the new infrastructure to be provided where relevant; 4. Require the delivery of the new, or improved infrastructure to be operational prior to the occupation of the appropriate phase of development which it is required to support.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This Strategic Policy stipulates that the Council will cooperate with infrastructure providers in securing the delivery of appropriate infrastructure. It also ensures that developers will need to provide financial contributions towards appropriate infrastructure. This is an important policy because it means that appropriate potable water provisioning and wastewater treatment infrastructure will be in place prior to the occupation of residential developments. This is important for protecting the integrity of European sites that are dependent on good water quality or natural flow regimes. Overall, there are no linking impact pathways present and Policy IC1 is therefore screened out from Appropriate Assessment.
Policy IC2 - Protection of Existing Community Facilities (Strategic Policy)	Development which results in the loss of existing community facilities will only be supported where: A. An assessment has been undertaken which has clearly shown the facility and its land is surplus to requirements; or B. It is no longer financially viable; or C. The resulting loss would be replaced by equivalent or better provision for the relevant community, in terms of size, quality and accessibility in a suitable location; or D. The redevelopment of the site is for alternative community use, the benefits of which clearly outweigh the loss of the current or former use. In cases where replacement facilities are to be provided elsewhere, a clear commitment to replace them in a timely manner must be evidenced, in order for planning permission to be granted.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy protects existing community facilities from conversion to other uses. However, this has no relevance for European sites. Overall, there are no linking impact pathways present and Policy IC2 is screened out from Appropriate Assessment.
Policy IC3 Protection and Creation of New Open Space, Sport and Recreation Provision (Strategic Policy)	The Council will seek to protect all open space, Local Green Space and sport and recreation facilities as defined on the Policies Map which will be regularly updated using the most recent evidence base.	There are no Likely Significant Effects (LSEs) of this policy on European Sites.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.

A. Protecting and Enhancing existing provision

Development which involves the whole or partial loss of open space, sports or recreation facilities, including playing fields, identified on the Local Plan Policies Map or a 'made' Neighbourhood Plan will only be supported where:

1. It can be demonstrated that existing open space or recreational facilities are surplus to requirements in line with the most recent evidence base; or

2. A satisfactory replacement facility is provided, and available for use before the existing facility is lost, in a suitable location, accessible to current users, and at least equivalent, or better provision, in terms of its size, function, attractiveness and quality; or

3. Sports and recreational facilities or open space are to be replaced for alternative sports and recreational provision or open spaces which aligns with the quantitative and qualitative requirements of the latest Green Space Audit where the benefits clearly outweigh the loss of the current provision; or

4. Sports and recreation facilities or open space can best be retained or enhanced through the redevelopment of a smaller part of the site.

B. Residential Development

B. Residential development schemes of 10 dwellings or more will only be supported where they provide the necessary quantity, quality and accessibility of open space and sport and recreation by:

1. Providing open space, sport and recreation on-site to meet the needs arising from the development in line with the standards set out below:

Type	Quantity Standards (hectares (ha) per 1,00 population)*	Provision
Informal Green Space5	0.6ha	Amenity green space Village greens Common land Wide grass verges Green Corridors
Parks and Recreation Grounds	0.8 ha	Parks Recreation grounds Informal playing fields
Equipped Areas of Play	0.25 ha 1 area of equipped play	Local Areas for Play (LAP)(i)
		Local Equipped Areas for Play (LEAP)(ii)
		Neighbourhood Equipped Areas of Play (NEAP)(iii)
Other outdoor play provision	0.3 ha	Multi Use Games Areas (MUGAs) / skate park
Allotments	0.25 ha	

Access to a network of high-quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities, while also bringing wider nature benefits and supporting efforts to address climate change.

A wide range of accessible open spaces helps reduce conflicts between recreation, biodiversity and agricultural management with additional open space provision to help avoid and mitigate recreational impacts on sensitive designated sites such as Skipwith Common SAC and the Lower Derwent Valley SAC. This policy is likely to be beneficial for European sites in the long-term.

Overall, there are no linking impact pathways present and Policy IC3 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.

Natural & Semi-Natural	1.8 ha	Areas of woodland in built up areas Scrub Heathland Grasslands
Indoor and Outdoor Sports	1.6 ha	Refer to the playing Pitch Strategy and Action Plan for details of where new provision or improvement enhancement is required.

(* the standards set out above are derived from evidence in the Green Space Audit (2022) and Playing Pitch Strategy and Action Plan (2020) and should be implemented in accordance with the details in Appendix D (Developer Contributions for New Open Space, Sport and Recreation). New development under Part B of this Policy will be required to meet these standards or any updated standards derived from the most recent Green Space Audit or Play Pitch Strategy/Action Plan or equivalent).
i. LAP (Local Area for Play) required for all sites of 10 dwellings or more.
ii. LEAP (Local Equipped Area for Play) required for all sites of 20 dwellings or more.
iii. NEAP (Neighbourhood Equipped Area for Play) required for all sites of 200+ dwellings.
iv. Other outdoor provision (Multi Use Games Areas (MUGAs)/skate parks) required for all sites of 200 or more dwellings.

Or, where the Council accepts that it is not practical or desirable to provide open space,
sport and recreation provision on-site for a particular scheme:

2. The Council will seek financial contributions through S106 agreements for either new off-site open space, sport and recreation provision or improvements to existing local open space, sport and recreation provision within the parish or related locality where services are shared between closely related parishes as identified in the most recent Green Space Audit and Playing Pitch Strategy and Action Plan or equivalent;

3. A S106 agreement will be used to secure the long-term maintenance and management of new open space, sport and recreation created as part of new development (also including inspection, maintenance and management of sport and play facilities, pitches and equipped play areas) both on-site and off-site.

C Local Green Space
Development within Local Green Space sites designated in a Neighbourhood Plan or through this Local Plan will be determined in accordance with national policy for Green Belts.

D. New Recreation and Sports Provision
The provision of new recreation and sports facilities will be supported where proposals are proportionate and relative to their purpose and catchment area. Schemes should be designed so that they are physically accessible to all members of the community and, where feasible, should prioritise and promote access by walking, cycling and public transport. Care should be taken to ensure that the new facilities can be operated without causing adverse harm to the amenity of neighbouring residents.

Policy IC4 - Water Supply, Wastewater Treatment and Drainage Infrastructure (Strategic Policy)	The Council will work with statutory water infrastructure providers, prospective developers and key stakeholders to identify where strategic solutions to water supply, wastewater treatment and drainage-related infrastructure investment may be required or where phasing is necessary to ensure there is sufficient headroom within existing facilities in order to support the strategic aims and expectations of this Plan. Development must incorporate satisfactory measures in line with the following: A. Adequate water infrastructure to existing, new, or improved, facilities with capacity must be secured prior to first occupation a development. This includes but is not limited to water supply, wastewater and sewage infrastructure and surface water run-off considerations.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This Strategic Policy stipulates that the Council will cooperate with infrastructure providers in securing the delivery of appropriate infrastructure. It also ensures that developers will need to provide financial contributions towards appropriate infrastructure. This is an important policy because it means that appropriate potable water provisioning and wastewater treatment infrastructure will be in place prior to

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	B. Where new water-related infrastructure (including but not limited to water supply. Wastewater treatment and surface water run-off) is needed to serve development, this must: 1. Consider the requirements of Policy NE5 (Protecting and Enhancing Rivers and Waterbodies) and contribute towards an improvement in water quality; 2. Consider the potential effects on European designated nature conservation sites, demonstrating no adverse effects, if necessary, utilising mitigation to achieve this conclusion as set out in Policy NE1 (Protecting Designated Sites and Species); 3. Consider the potential effects upon the natural and historical environment (including but not limited to local archaeology, existing ecosystems, and nationally and locally designated nature conservation sites 4. Ensure an appropriate distance between development and wastewater treatment works, sufficient to allow for operational needs, including any potential expansion of the works, and in order to avoid any odour or noise issues for sensitive neighbouring uses; 5. Be carried out in compliance with British Standard BS EN 12566, or any future appropriate standards. C. Where non-mains sewerage solutions such as package treatment plants are proposed, it must be demonstrated, in addition to the above, that: 1. Development is sufficiently remote from the existing sewerage network and it is not able to connect to a public sewer; and 2. Include tertiary treatment of the effluent to substantially reduce phosphates such as through the installation of a phosphate removal unit as part of the development, use of multi-function constructed wetlands or discharge of water from the package treatment plant to reedbed system; and 3. Ensure, through siting and design that there will be no adverse impact upon residential amenity. D. Septic tanks should only be used in exceptional circumstances.	the occupation of residential developments. This is important for protecting the integrity of European sites that are dependent on good water quality or natural flow regimes. Overall, there are no linking impact pathways present and Policy IC4 is screened out from Appropriate Assessment.
Policy IC5 – Digital and Communications Infrastructure (Strategic Policy)	A. New residential and commercial development will be supported where: 1. High quality digital and communications infrastructure is integrated into the design; 2. Provision will be available at first occupation; and 3. Schemes are designed to support access to Full Fibre to Premises (FTTP) Broadband as a minimum, or the fastest technical available emerging technology where viable. Where this is not feasible, developers will be required to: i. Demonstrate that connections are not deliverable including through consultation with broadband providers and; ii. Incorporate infrastructure for full future connectivity e.g. through laying of ducting, cabling and all necessary built infrastructure. B. Development for new digital and telecommunications equipment will be supported where: 1. Existing masts, communication infrastructure, buildings or street furniture is utilised; 2. New equipment is the minimum size possible; 3. The siting, scale and design of the apparatus does not have a significant adverse impact on the character of the host building or wider local area; and	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This is a development management policy that supports the delivery of improved telecommunications and digital infrastructure, such as broadband. However, it does not identify a location or a quantum (or the nature of the infrastructure in question) and thus has no relevance for European sites. Specific proposals will need to be considered on their own merits as part of the planning application process in the usual manner. Overall, there are no linking impact pathways present and Policy IC5 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	4. The significance of heritage assets are preserved or, where appropriate enhanced. C. Mobile Network Operators (MNOs) and Internet Service Providers (ISPs) should be notified of development proposals, and works should be co-ordinated to minimise disruption to the highways network and local communities.	
Policy IC6 - Sustainable Transport, Highway Safety and Parking (Strategic Policy)	The Council will work with other authorities, stakeholders, transport providers and developers to deliver a suitable transport network and associated infrastructure which supports sustainable travel, accessible to all, and helps to deliver net zero carbon emission across the Plan Area. This will be achieved by: A. Safeguarding the long-term opportunities for waterborne and rail-freight transhipment B. Supporting development which is located in areas: 1. Well-served by existing walking, cycling and public transport infrastructure; 2. Accessible to all sections of the community; and 3. Provides linkages to and between developments in order to promote active travel. C. Supporting development which incorporates into its design and layout: 1. Safe pedestrian, cycling, vehicular, emergency and refuse vehicle access; 2. Appropriate measures to avoid, mitigate and manage any significant impacts on highway capacity, congestion or safety, including any contribution to cumulative impacts, measures for network and traffic management, suitable crossing points, footways and dedicated provision for cyclist, equestrian and disabled users where necessary; 3. High-quality walking and cycling networks and connections to support the objectives of the Local Cycling Walking Infrastructure Plans; 4. Improvements to the capacity and accessibility of public transport between settlements in the Plan Area and to the cities of York, Leeds and Hull; 5. A reduction in transport carbon emissions such as through the use or support of low and ultra-low emission vehicles, car clubs and rail or waterborne freight; 6. New and improved transport facilities associated with the Local and Strategic Road Networks and imrovements to accessibility of rural areas in line with identified and evidenced needs. D. Supporting development which incorporates adequate provision for parking, including: 1. Car, cycle, disabled and operational parking, in line with the requirements of the Highways Authority Interim Guidance on Transport Issues (2015) and any subsequent updates; 2. Parking with infrastructure provision for low-emission vehicles; 3. Where development is in close proximity to existing town centres or transport hubs, lower parking requirements may be considered where: i. It can be demonstrated that other active or sustainable travel uptake can be delivered; or ii. Enhancements to existing public car parking can be delivered to improve the vitality of local centres, public transport hubs or public use low carbon vehicle infrastructure; and iii. It can be shown that there will be no additional unauthorised or detrimental on-street parking within the locality of the development as a result of fewer parking spaces being provided. E. Supporting development which would not result in the loss of off-street or on-street car parking spaces unless:	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This Strategic Policy provides strong support for sustainable transport modes, such as walking, cycling and public transport. The policy stipulates that development proposals with good access to alternative travel modes will be prioritized. It also states that individual developments having a significant impact on road traffic, are expected to provide on- and off-site mitigation. This policy is important because it is likely to help reduce the car-based commuter traffic resulting from the SLP. This could benefit European sites that are sensitive to atmospheric pollution (e.g. the Lower Derwent Valley SAC), as it may help reduce nitrogen deposition along the A163. Overall, there are no linking impact pathways present and Policy IC6 is therefore screened out from Appropriate Assessment.

<table>
<tr><th>Policy number/ name</th><th>Policy detail</th><th>Likely Significant Effects Screening Assessment.</th></tr>
<tr><td></td><td>1. Alternative provision, for at least the same number of spaces, can be made at an appropriate location; or

2. It can be demonstrated that there is no longer a requirement for the existing level of car parking.

F. Contributions may be sought from all development to on and off-site mitigation and where necessary Transport Statements, Assessments Travel Plans and post-development monitoring may be required.</td><td></td></tr>
<tr><td>Policy IC7 - Public Rights of Way</td><td>Development which may have an impact on a Public Right of Way network will only be supported where it can be demonstrated that:

A. Satisfactory and alternative routes are provided, with adequate signage and the new access is of the same or better standard; and

B. Where appropriate and viable, all reasonable opportunities for enhancement have been taken up. Enhancements can include:

1. New or improved links to the existing Public Right of Way or sustainable travel network, including public transport, especially where routes can minimise conflict.

2. The provision of improved facilities to make routes more accessible or attractive to users.</td><td>There are no Likely Significant Effects (LSEs) of this policy on European Sites.

This policy protects the Public Rights of Way (PRoWs). It specifies that development proposals can only impact PRoWs if adequate alternative routes or new links are provided.

The protection of PRoWs is integral to maintaining the attractiveness of local greenspaces. Well-connected local outdoor spaces are likely to help alleviate recreational pressure in more sensitive sites, such as the Lower Derwent Valley SPA / Ramsar and the Skipwith Common SAC. Therefore, this is a positive policy from an HRA perspective.

Overall, there are no linking impact pathways present and Policy IC7 is screened out from Appropriate Assessment.</td></tr>
<tr><td colspan="3">Section 7: Creating High Quality Places to Live</td></tr>
<tr><td>Policy HG1- Meeting Local Housing Needs (Strategic Policy)</td><td>The Council will meet its housing requirements over the Plan period through:

A. The completion of 1328 dwellings on sites with planning permissions, as listed in Appendix A, and;

B. The allocation of new sites in the table below and identified on the Policies Map to provide 5,307 dwellings over the plan period. They will be developed in accordance with the relevant Local Plan policy requirements and the development requirements identified for each site.

C. Outside of the planned supply outlined above, it is expected that approximately 920 dwellings could be delivered as windfall over the Plan period.

<table>
<tr><th>Site Ref</th><th>Settlement</th><th>Location</th><th>Proposed Dwellings over the Plan Period</th></tr>
<tr><td>AROE-I</td><td>Appleton Roebuck</td><td>Land Adjacent to Malt kiln Lane</td><td>36</td></tr>
<tr><td>AROE-K</td><td>Appleton Roebuck</td><td>Land adjacent to Hillcrest House, Colton Lane</td><td>28</td></tr>
<tr><td>AROE-N</td><td>Appleton Roebuck</td><td>Therncroft, Malt Kiln Lane</td><td>4</td></tr>
<tr><td>BARL-K</td><td>Barlby & Osgodby</td><td>Land at Turnhead Farm, York road</td><td>30</td></tr>
<tr><td>OSGB-C</td><td>Barlby & Osgodby</td><td>Land East of St Leonards Avenue</td><td>20</td></tr>
<tr><td>OSGB-D</td><td>Barlby & Osgodby</td><td>Osgodby Nurseries, Hull Road</td><td>25</td></tr>
<tr><td>OSGB-G</td><td>Barlby & Osgodby</td><td>Lake View Farn, The Hollies</td><td>21</td></tr>
</table>
</td><td>Likely Significant Effects (LSEs) of this policy cannot be excluded.

This policy expands on the Spatial Strategy provided in Policy SG2 - Spatial Approach. It provides a detailed breakdown of how the housing need will be satisfied (i.e. implementations of existing planning permissions and new allocations). Furthermore, the policy specifies where 5,314 new residential dwellings will be allocated.

The spatial distribution of new housing is important in determining the magnitude of recreational pressure in European sites. For example, allocating sites in the north-eastern part of the authority could place additional burden on the Skipwith Common SAC or the Lower Derwent Valley SPA / Ramsar / SAC. Therefore, the distribution of development will have to be examined further in the Appropriate Assessment.

The following impact pathways on European sites are linked to this policy:

• Recreational Pressure
• Loss of Functionally Linked Habitat
• Water Quality
• Water Quantity, Level and Flow
• Atmospheric Pollution

Overall, Policy HG1 is screened in for Appropriate Assessment.</td></tr>
</table>

Policy number/ name	Policy detail				Likely Significant Effects Screening Assessment.
	OSGB-I	Barlby & Osgodby	Land east of Sand Lane	72	
	BRAY-X	Brayton	Land north of Mill Lane	188	
	BRAY-Z	Brayton	Land south of St Wildfrid's Close	20	
	CARL-G	Carlton	Land north of Mill Lane	150	
	CLIF-B	Cliffe	Land at Bon Accord Farm, Main Street	16	
	CLIF-O	Cliffe	Land north of Cliffe Primary School, Main Street	56	
	EGGB-B	Eggborough	Land West of White House Farm, Low Eggborough Road	109	
	EGGB-S	Eggborough	Teasle Hall Farm, Weeland Road	35	
	EGGB-Y	Eggborough	Land West of Kellington Lane	1,015	
	HAMB-A	Hambleton	Manor Farm, Chapel Street	128	
	HAMB-F	Hambleton	Land south of Scalm Lane	103	
	HAMB-N	Hambleton	Land east of Gateforth Lane	56	
	HEMB-G	Hemingbrough	Land to the rear of Plinthstones, School Road	123	
	HEMB-K	Hemingbrough	Land south of School Road	8	
	HENS-A	Hensall	Land to North of Weeland Road	24	
	HENS-L	Hensall	Land to North of Wand Lane	54	
	HENS-P	Hensall	Land South of Station Road	22	
	KELL-B	Kellington	Land south of Lunn Lane	60	
	HILL-A	Monk Fryston / Hillam	Land West of Main Street / Lumby Hill, Hillam	33	
	NDUF-D	North Duffield	Land north of the A163	40	
	NDUF-O	North Duffield	Land north of Gothic Farm, Back Lane	70	
	RICC-J	Riccall	Land at Landing Lane	25	
	SELB-AG	Selby Urban Area	Land on the Former Rigid Paper site	330	
	SELB-B	Selby Urban Area	Industrial Chemicals Ltd	450	
	SELB-BZ	Selby Urban Area	Cross Hills Lane	1,015	
	SELB-CR	Selby Urban Area	Former Ousegate Maltings	14	

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.

SHER-H	Sherburn in Elmet	Land adjacent to Prospect Farm, Milford Road	380
TADC-AD	Tadcaster	'Fircroft' and Former Barnardo's Home, Wighill Lane	5
TADC-AE	Tadcaster	Land off Hillcrest Court	30
TADC-H	Tadcaster	Chapel Street/ Central Area Car Park	43
TADC-I	Tadcaster	Land at Mill Lane	180
TADC-J	Tadcaster	Land at Station Road	104
TADC-L	Tadcaster	Land to rear of 46 Wighill Lane and Former Coal Yard	10
THRP-K	Thorpe Willoughby	Land South of Leeds Road	127
THRP-V	Thorpe Willoughby	Land at Swallowvale Leeds Road	14
ULLE-K	Ulleskelf	Land east of Bell Lane	29
		Total Dwellings	5,302

Policy HG2 -Windfall Development (Strategic Policy)

Residential developments on sites not allocated in Policy HG1 (Meeting Local Housing Needs) will be supported:

A. In the Selby Urban Area, Sherburn in Elmet, Tadcaster and the Tier 1 and 2 Villages, providing they are within the Development Limits of these settlements. The types of housing developments supported includes conversions, replacement dwellings, redevelopment of previously-developed land, and appropriate scale development on greenfield land, including the conversion and redevelopment of farmsteads

B. In the Smaller Villages, providing they are for conversions, replacement dwellings, redevelopment of previously-developed land and the in-filling of small gaps within the main built-up area of the settlement. Very small-scale development, adjacent to the main built-up area, will be supported where:

1. the development represents incremental growth of the village commensurate to its size and role; and

2. the development is of a high-quality design which reflects the character and form of that part of the village; and

3. respects the intrinsic character and setting of the countryside; and

4. it does not in itself, or in association with other developments, result in a cumulative level of development which is harmful; and

5. it provides for a mix of housing types which meets the Local Plan housing requirements as set out in the Housing and Economic Development Needs Assessment (HEDNA) or successor document.

C. On sites adjacent to the main built-up area of any settlement to meet rural affordable housing need, which meets the provisions of Policy HG8 (Rural Housing Exception Sites).

D. Sites in the Countryside will need to comply with the provisions set out in SG4 (Development in the Countryside).

E. Where relevant, regard should also be taken of the design principles contained in adopted Village Design Statements and Neighbourhood Plans.

Likely Significant Effects (LSEs) of this policy cannot be excluded.

This policy potentially adds to the volume of housing delivered under Policy HG1. It supports windfall housing development, in principle, in the urban areas and smaller villages of Selby District. While it is acknowledged that most housing to be delivered in the district is specified in other policies, individual housing developments could still add to the identified impact pathways.

The following impact pathways on European sites are linked to this policy:

- Recreational Pressure
- Loss of Functionally Linked Habitat
- Water Quality
- Water Quantity, Level and Flow
- Atmospheric Pollution

Overall, Policy HG2 is screened in for Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
Policy HG3 - Rural Workers Dwellings	A. Development of new dwellings to meet the essential needs of rural worker(s) to live permanently at or near their place of work in the Countryside, will be supported where it meets all of the following criteria: 1. There is a clearly established functional need to support a rural enterprise that has been operational for a minimum period of three years and is demonstrated to be commercially viable; and 2. The need relates to a full-time worker who is employed in rural employment; and 3. The need could not be met through an existing dwelling or through conversion of a suitable building on the operational unit, or any other existing accommodation in the area which is suitable and available for occupation by the rural worker(s); and 4. The new dwelling is of a size which is commensurate with the established functional requirement of the enterprise and is appropriately sited within or adjacent to an existing complex of buildings unless it can be clearly established that the requirements of the enterprise necessitate a more isolated location. B. Where a new enterprise has an essential functional need but the business is not fully established, or an expanding business can demonstrate it has an essential functional need for a second rural worker's dwelling, it should be granted for a temporary basis, and should for the first three years, be provided by a caravan, a wooden structure which can be easily dismantled, or other temporary accommodation. It will however, still need to comply with criteria A 1 to 4 of this Policy. C. Any permission granted will be subject to an occupancy condition restricting the use of the dwelling for the required purpose. The removal of an occupancy condition will only be supported where it can be demonstrated that there is no longer a need for the accommodation in the locality. D. No additional rural workers' dwellings will be permitted where a former rural worker's dwelling has been approved and then been converted to market housing.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy, in principle, supports the development of new dwellings in the countryside to accommodate rural workers near their place of work. However, the policy does not in itself provide a quantum or location of housing growth. As such, the policy has no bearing on European sites. Individual proposals will need to be considered on their own merits through the planning consent process in the usual manner. Overall, there are no linking impact pathways present and Policy HG3 is screened out from Appropriate Assessment.
Policy HG4 - Replacement Dwellings in the Countryside	Development of replacement dwellings on a one for one basis in the Countryside will be supported where; A. The original dwelling is permanent and not the result of a permission for a temporary dwelling; B. The original dwelling has not been abandoned or has fallen into such as state of dereliction that it no longer has the appearance of a dwelling; C. The original dwelling is not of architectural or historic merit (where restoration and renovation will be preferred to replacement); D. The proposed replacement dwelling is located within the existing curtilage and on the site or within close proximity to the existing dwelling and is not in close proximity to intensive livestock uses or industrial uses that could result in unacceptable levels of noise, amenity or access for the occupiers of the dwelling. Where it is demonstrated that a re-positioning is more beneficial to the character, location and use of the site, a condition will be applied to ensure the demolition of the original dwelling on completion or occupation of the new dwelling; E. The design and materials to be used complement and reflect the local buildings and architectural detailing and are appropriate to the character and landscape setting in terms of scale, height, massing and density; architectural detailing and are appropriate to the character and landscape setting in terms of scale, height, massing and density; F. The replacement dwelling and ancillary works within the curtilage will not have a significant adverse effect on the intrinsic character or appearance of the surrounding countryside or on neighbouring properties, and G. The design complies with Policy SG9 (Design).	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy supports the provision of replacement dwellings, provided these don't impact on wildlife designations. As this is also relevant to Policy HG5, the provision of replacement dwellings will reduce the overall loss of greenfield sites, which may benefit European sites designated for mobile bird species. Furthermore, the policy does not provide a quantum or location of housing growth. As such, the policy has no bearing on European sites. Overall, there are no linking impact pathways present and Policy HG4 is screened out from Appropriate Assessment.
Policy HG5 - Reuse or Conversion of Rural Buildings in the Countryside	A. The conversion of existing buildings in the countryside to new housing (which would not be dealt with through "prior approval/notification") will be supported, where;	There are no Likely Significant Effects (LSEs) of this policy on European Sites.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	1. It would reuse a structurally sound building without significant reconstruction, alteration or extension and the preservation of the building will enhance the immediate setting; and 2. The building is not in close proximity to intensive livestock uses or industrial uses that could result in unacceptable levels of noise, amenity or access for the occupiers of the dwelling; and 3. The conversion of the rural building and ancillary works within the curtilage will not have a significant adverse effect on the intrinsic character or appearance of the surrounding countryside; and not have a significant adverse effect on the intrinsic character or appearance of the surrounding countryside; and 4. Any new materials to be used respect and complement the existing building; and 5. The boundary treatments of the residential development are appropriate to the rural landscape character and use materials which respect and positively contribute to the rural setting. B. Permitted Development Rights may be withdrawn for development under this Policy where a future alteration or extension could have a detrimental effect on the character or setting of the converted building or area.	This policy supports the conversion of existing dwellings into new housing. This is generally a positive approach, as the conversion of brownfield sites minimizes the potential for loosing functionally linked habitats (e.g. for the Lower Derwent Valley SPA / Ramsar or the Humber Estuary SPA / Ramsar). Furthermore, this policy does not provide a quantum or location of housing growth. As such, the policy has no bearing on European sites. Overall, there are no linking impact pathways present and Policy HG5 is screened out from Appropriate Assessment.
Policy HG6 - Creating the Right Type of Homes (Strategic Policy)	All new residential development should provide an appropriate type and size of new homes to meet the current and future housing requirements of local people. New residential development will be supported where: A. A range of house types and sizes, both market and affordable, is provided that reflects the identified housing needs and demands of local communities shown in the latest Housing and Economic Development Needs Assessment, or in the case of affordable housing, information from North Yorkshire Home Choice (or successor documents/systems); and B. Dwellings meet the Nationally Described Space Standards (2015) or any successor standards or policy; and C. On developments of 10 or more dwellings, 6% (rounded up) of new homes are built to M4(3) 'wheelchair user' standard; and D. They are built with sustainable design, in accordance with Policy SG9 (Design); and E. Development promotes the effective use of land on windfall sites by achieving minimum densities of; 1. 35 dwellings per hectare within the Selby Urban Area, Tadcaster, Sherburn in Elmet. 2. 30 dwellings per hectare in Tier 1 Villages 3. 25 dwellings per hectare in Tier 2 Villages. 4. 20 dwellings per hectare in the Smaller Villages and the Countryside.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This housing management policy provides detail on the type, density and capacity of new housing. However, this will not impact the overall quantum of housing to be delivered. As such, the policy has no bearing on European sites. Overall, there are no linking impact pathways present and Policy HG6 is screened out from Appropriate Assessment.
Policy HG7 - Affordable Housing (Strategic Policy)	The Council will work with a range of public and private sector partners in order to deliver affordable housing across the Plan Area to meet the needs of local people. A. In order to achieve this the Council will seek on-site provision of affordable homes on windfall developments of 10 or more dwellings, or where the site area is greater than 0.5 hectares. The minimum affordable housing requirement for each allocated site is set out in the individual site policies in Part 3 of this Plan. For windfall sites, the following on-site minimum provision will be sought; • High Value Area - Greenfield / Brownfield - 20% • Low Value Area – Greenfield – 10%	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This housing management policy specifies the amount of affordable housing to be delivered in different types of housing development. However, the policy does not provide a quantum or location of housing growth. As such, the policy has no bearing on European sites.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	• Low Value Area – Brownfield – 5% (Proposals for Extra Care/Sheltered Housing in Class C will be exempt) B. In exceptional circumstances, all or part of the affordable housing provision may be acceptable off-site or through a commuted sum in lieu of built provision, where the agreed approach contributes to the objective of creating mixed and balanced communities. An applicant may only vary from the affordable dwelling target if they can provide compelling up-to-date evidence which demonstrates that a site is not viable with the prescribed affordability rate. C. In all cases where affordable housing is provided it must: 1. reflect the appropriate type and size of homes to meet local needs as informed by the Council's latest evidence on local housing need; and by the Council's latest evidence on local housing need; and 2. meet the minimum bedroom and space standards required by the nominated affordable housing provider; and 3. be distributed throughout the market housing in any development and the design and layout of the affordable homes should also be indistinguishable from the market housing. D. At least 25% of the affordable dwellings must be First Homes (unless the development is one of the types listed as an exception under paragraph 66 of the National Planning Policy Framework, December 2023) and a mix of affordable rent, shared ownership and home ownership. E. On large sites with multiple phases of development, the amount of affordable housing must be proportional to the size of each phase. Proposals on sites which have sub divided into smaller sites to avoid affordable housing contributions will not be supported. F. Where vacant buildings are being reused or redeveloped, affordable housing contributions due should be reduced by a proportionate amount. The precise amount of affordable housing, or commuted sum payment to be provided is a matter for negotiation at the time of a planning application, having regard to any abnormal costs, economic viability and other requirements associated with the development. G. Further guidance on providing affordable housing will be provided through an Affordable Housing Supplementary Planning Document.	Overall, there are no linking impact pathways present and Policy HG7 is screened out from Appropriate Assessment.
Policy HG8 - Rural Housing Exception Sites (Strategic Policy)	Rural Exceptions Sites A. Development for affordable housing in rural areas will be supported as an exception to normal planning policy, provided all of the following criteria are met: 1. The site is within or adjoining the Development Limits/main built form of a Tier 1 Village, Tier 2 Village or a Smaller Village. 2. The scale and design of the development is sympathetic to the layout and character of the main built form and landscape setting of the village; and 3. A local need has been identified through a local housing needs survey, the nature of which is met by the proposed development; and 4. An appropriate agreement will be secured, at the time of the granting of planning permission to secure the long-term future of the affordable housing in perpetuity B. Small numbers of market homes may be allowed on rural exception sites at the Local Planning Authority's discretion, for example where essential to enable the delivery of affordable units without grant funding, in accordance with the National Planning Policy Framework. Community-Led Exception Sites C. Ent Community Led proposals instigated and taken forward by a not-for profit organisation set up and run primarily for the purpose of meeting the housing needs of its members and the wider local community will be acceptable, provided all of the following criteria are met:	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This housing management policy allows for rural exception sites outside development limits or the built form of settlements. However, the policy does not provide a quantum or location of housing growth. As such, the policy has no bearing on European sites. Individual proposals will need to be considered on their own merits through the planning consent process in the usual manner. Overall, there are no linking impact pathways present and Policy HG8 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	1. The need for the homes has been evidenced; 2. The site is within or adjoining the Development Limits/main built form of a settlement listed in Policy SG2 (Spatial Approach); 3. They are not larger than one hectare in size and which do not exceed 5% of the size (in dwellings) of the existing settlement at the time of determination; 4. They consist of affordable housing types suitable for first time buyers and/or first time renters, and; 5. The scale and design of the development is sympathetic to the layout and character of the main built form and landscape setting of the settlement. D. In all cases sites must not compromise the protection given to areas or assets of particular importance such as Green Belts, Sites of Special Scientific Interest, Sites of Importance for Nature Conservation, Ancient Woodlands or National Nature Reserves.	
Policy HG9 - Conversions to Residential Use and Changes of Use to Garden Land	A. Conversion of existing buildings for new housing and changes of Use to garden land will be supported where: 1. The development is appropriate to the setting in terms of the relationship to adjoining buildings, spaces around buildings, landscape features and local character; 2. The materials to be used respect and complement existing buildings; 3. The development respects and positively contributes to any applicable wildlife, landscape character or heritage designations; 4. There is no unacceptable impact on any neighbouring property in terms of amenity, noise or access; 5. There is no unacceptable loss of parking, garden or amenity area; 6. The development will not undermine the retention of any occupancy condition; 7. The conversion and ancillary works within the curtilage will not have a significant adverse effect on the intrinsic character or appearance of the surrounding environment; 8. The boundary treatments of the development are appropriate to the landscape character and use materials which respect and positively contribute to the setting; and B. Conversions of existing buildings for new housing will be supported where, in addition to A1 to A8 above: 1. the preservation of the building will enhance the immediate setting and 2. it would reuse a structurally sound redundant or disused building without significant reconstruction, alteration or extension. Permitted Development Rights may be withdrawn for development under this Policy where a future alteration or extension could have a detrimental effect on the character or setting of the converted building or area.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy supports the conversion of existing dwellings into new housing and change of use to garden land. This is generally a positive approach, as the conversion of brownfield sites minimizes the potential for loosing functionally linked habitats (e.g. for the Lower Derwent Valley SPA / Ramsar or the Humber Estuary SPA / Ramsar). Furthermore, this policy does not provide a quantum or location of housing growth. As such, the policy has no bearing on European sites. Overall, there are no linking impact pathways present and Policy HG9 is screened out from Appropriate Assessment.
Policy HG10 - Self Build and Custom Build Housing	In order to meet local needs for self-build and custom-build housing; A. Sites providing 50 or more residential dwellings will be required to supply up to 3% (rounded up) of the total plots to self-builders or to custom housebuilders subject to appropriate demand being demonstrated through the Local Planning Authority's Self-Build and Custom-Build Register at the time the planning approval is considered and the proposal being demonstrated as viable. B. Support for self-build and custom-build housing proposals will also be given in accordance with Policy HG2 (Windfall Development).	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy relates to the provision of self and custom build housing. However, the type of housing provided in allocations (i.e. whether self-built or not) has no bearing on European sites. Furthermore, the policy does not in itself provide a quantum or location of housing growth. As such, the policy has no bearing on European sites.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	C. All self-build/custom-build plots are to be occupied as homes by the self/custom-builders for a period of three years. Where plots which have been appropriately marketed for self-build and have not sold within a 12-month time period, then, upon approval by the Council, these plots may be built out as conventional market housing by the developers. D. Communities preparing Neighbourhood Plans will be encouraged to consider the identification of sites specifically for self and custom-build projects within their Neighbourhood Plan Area.	Overall, there are no linking impact pathways present and Policy HG10 is screened out from Appropriate Assessment.
Policy HG11 - Older Persons and Specialist Housing	Development specifically designed to meet the accommodation needs of 'older people' and / or 'people with disabilities' will be supported where: A. It supports the right mix of housing as identified in the most up to date Housing and Economic Development Needs Assessment; and B. It is in a location accessible by public transport, or within a reasonable walking distance, of essential facilities which include grocery shops, medical services; and public open spaces. C. Where proposals are in the form of apartments/flats a satisfactory standard of communal areas for occupants will be sought; D. Where developments fall within Use Class C3, affordable housing will be required in accordance with the preferred approach of Policy HG7 (Affordable Housing) and; E. Where the development is for older persons, there is to be a condition limiting the reoccupation of residences to those who are classed as older people in the National Planning Policy Framework.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy relates to the accommodation needs of older people or people with disabilities. However, the type of housing provided in allocations has no relevance to European sites. The policy does not in itself provide a quantum or location of housing growth. As such, the policy has no bearing on European sites. Overall, there are no linking impact pathways present and Policy HG11is screened out from Appropriate Assessment.
Policy HG12 - Householder Applications	Householder development will be supported where it meets the following criteria: A. The design, layout and architectural detail of the development, new buildings or extensions are appropriate to their setting in terms of scale, height, massing and density, as well as in their relationship to adjoining buildings, spaces around buildings, landscape features and local character; B. The development needs to be well related to the original dwelling and will not visibly or physically dominate or cumulatively adversely impact the original dwelling; C. The materials to be used respect and complement existing buildings; D. Where applicable, the development meets the requirements of other Local Plan Polices regarding wildlife, landscape character or heritage designations; E. There is no unacceptable impact on any neighbouring property in terms of amenity, noise or access; F. There is no unacceptable loss of parking, garden or amenity area, and; G. The development will not undermine the retention of any occupancy condition.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy specifies that householder applications for extensions, gardens etc. will be permitted, provided they do not impact on wildlife designations. While this is positive, it is unlikely that any householder applications would directly impact European sites. The policy does not provide a quantum or location of housing growth. As such, the policy has no bearing on European sites. Overall, there are no linking impact pathways present and Policy HG12 is screened out from Appropriate Assessment.
Policy HG13 - Residential Annexees	Residential Annexes will be supported where: A. The residential annex is within the curtilage of the principal dwelling, shares the same vehicular access, and adequate off-street parking for the occupants of the main house and the annexe can be provided; B. The residential annexe has a functional link with the principal dwelling and will remain in the same ownership of the principal dwelling; C. The conversion, extension or new building(s) are not designed to be fully self-contained to facilitate the subdivision of the original dwelling into separate dwellings. D. The design, layout and architectural detail of the development, new buildings or extensions are appropriate to their setting in terms of scale, height, massing and density, as well as in their relationship to adjoining buildings, spaces around buildings, landscape features and	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy provides further criteria that applications of householders need to fulfill in order to be accepted. However, the policy does not provide a quantum or location of housing growth. As such, the policy has no bearing on European sites. Overall, there are no linking impact pathways present and Policy HG14 is screened out from Appropriate Assessment.

<table>
<tr><th>Policy number/ name</th><th>Policy detail</th><th>Likely Significant Effects Screening Assessment.</th></tr>
<tr><td></td><td>local character;

E. The development needs to be well related to the original dwelling and will not visibly or physically dominate or cumulatively adversely impact the original dwelling;

F. The materials to be used respect and complement existing buildings;

G. Where applicable, the development meets the requirements of other Local Plan Policies regarding wildlife, landscape character or heritage designations;

H. There is no unacceptable impact on any neighbouring property in terms of amenity, noise or access;

I. There is no unacceptable loss of parking, garden or amenity area, and;

J. The development will not undermine the retention of any occupancy condition.</td><td></td></tr>
<tr><td>Policy HG14 - Gypsy and Traveller Sites</td><td>A. The following site, as shown on the Policies Map, is allocated for Gypsy and Traveller uses to ensure a deliverable supply of pitches during the Plan period:

<table><tr><th>Site Ref</th><th>Location</th><th>Number of Pitches</th></tr><tr><td>NTHP-A</td><td>Land at Hillcrest, Old Great North Road, Newthorpe</td><td>12</td></tr></table>
B. Proposals for Gypsy and Traveller pitches on non-allocated sites, including new sites or extensions to existing sites, should meet the following criteria:

1. Priority will be given to the extension of established sites which benefit from a permanent planning consent;

2. Not be located in the Green Belt unless very special circumstances can be demonstrated;

3. Be in an area of low flood risk;

4. Be unaffected by contamination, unless the site can be adequately remediated;

5. Have good access to facilities, including schools and healthcare facilities;

6. Provide a good safe living environment with appropriate standards of residential amenity;

7. Be located where there would not be a detrimental impact on highway safety or the flow of traffic;

8. Not materially harm the natural and historic environment; and

9. In rural areas, not be of a size that dominates the nearest settled community.

C. Proposals that would involve the loss of authorised Gypsy and Traveller pitches will not be permitted unless new replacement pitches are provided in a suitable location that meets the above criteria.</td><td>Likely Significant Effects (LSEs) of this policy cannot be excluded.

This policy provides for 12 gypsy and traveller pitches in Newthorpe over the plan period. While this is a very small amount of residential growth, negative impacts cannot be excluded in-combination with the housing provided through other policies.

The following impact pathways on European sites are linked to this policy:

• Recreational Pressure
• Loss of Functionally Linked Habitat
• Water Quality
• Water Quantity, Level and Flow
• Atmospheric Pollution

Overall, Policy HG14 is screened in for Appropriate Assessment.</td></tr>
<tr><td colspan="3">Section 8: Maintaining a High Quality Natural Environment</td></tr>
<tr><td>Policy NE1 – Protecting Designated Sites and Species (Strategic Policy)</td><td>Internationally, nationally, and locally important sites, habitats and species and irreplaceable habitats will be protected through the following principles:

A. Proposals that result in the loss or deterioration of irreplaceable habitats such as historic wetlands and species-rich grasslands, ancient woodland, and aged or veteran trees, will be refused unless:
1. there are wholly exceptional reasons; and</td><td>There are no Likely Significant Effects (LSEs) of this policy on European Sites.

This policy provides the main protective policy mechanism regarding European site and species. It places European sites at the top of the conservation hierarchy and specifies that development proposals must not</td></tr>
</table>

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	2. a suitable compensation strategy exists; B. Proposals that may directly, indirectly or cumulatively impact on a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site, both within and outside of the Plan Area will only be supported where it can be demonstrated that there will be no adverse effects on the integrity of the sites, if necessary, utilising mitigation to achieve this conclusion. Compensation measures will only be considered in the context of Imperative Reasons Overriding Public Interest assessment (IROPI) and no alternatives, in line with the requirements of the Habitats Regulations. In line with the outcomes of the Local Plan Habitats Regulations Assessment, this part of the Policy relates to development which: 1.Is located within the 1km Lower Derwent Valley Area of Restraint. Such development must also consider the guidance set out in the Lower Derwent Valley Supplementary Planning Document or its successor. 2. Is located within 5 Km of the Lower Derwent Valley SAC/SPA/Ramsar and Skipwith Common SAC, and 10 km of the Humber Estuary SAC/ SPA/ Ramsar. Such development must have regard to up-to-date visitor monitoring data and where necessary apply appropriate mitigation to reduce recreational pressure from development, including any necessary financial contributions towards the delivery of measures identified in the Lower Derwent Valley Supplementary Planning Document. 3. Is located within 10 Km of Special Protection Area (SPA)/SAC/Ramsar and Humber Estuary SPA/SAC/Ramsar designations. Such development must provide evidence that proposals will not result in adverse effects on site integrity through the loss/disturbance of functionally linked land for designated qualifying features, either through: i. Evidence that the proposed development site habitat is unsuitable for SPA/Ramsar designated species, or ii. Assessment of the proposed development sites use by SPA/Ramsar designated species, including through the provision of wintering and passage bird surveys, and if necessary, appropriate mitigation. 4. Has the potential to affect water quality, levels or flow within designated SACs/SPAs/Ramsars. Such development must consider potential impacts on hydrological regimes which could affect the integrity of designated habitats, applying appropriate mitigation where deemed necessary, including through measures set out in IC4 and NE5. 5. Has the potential to affect notified features of designated SACs/SPAs/Ramsars. Such development must consider generation of emissions or particulates and their impacts on air quality and potential deposition and the impacts that may occur, applying mitigation where necessary in line with policy NE7. C. Proposals that may either directly or indirectly negatively impact the features for which a Site of Special Scientific Interest has been notified will not be supported. The only exception will be where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites; D. Development which would harm a Site of Importance for Nature Conservation (SINC) (also known as Local Wildlife Sites-LWS), Local Nature Reserve or a Regionally Important Geological/geomorphological site will not be permitted unless i. There are no reasonable alternative means of meeting the development need, and ii. It can be demonstrated that there are benefits for the proposal which clearly outweigh the need to safeguard the intrinsic local nature conservation value of the site or feature and its contribution to wider biodiversity objectives and connectivity in its location. E. Development affecting biodiversity and geodiversity, including designated sites, species and habitats or non-designated sites or features of biodiversity interest will only be permitted where the proposal: i. Is justified against the relevant criteria above; and ii. Has minimised impact, avoiding significant harm through location or design and demonstrated that where significant harm cannot be avoided, it has been demonstrated that adverse impacts will be adequately mitigated or as a last resort compensated; and	have negative impacts on the Lower Derwent Valley, Skipwith Common and the River Derwent. The policy also clarifies that planning applications with the potential to affect internationally designated sites must be accompanied by a HRA that demonstrates adequate mitigation of impacts. The detailed requirement for this assessment will by definition ensure that no adverse effects on site integrity would arise. Overall, there are no linking impact pathways present and Policy NE1 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	iii. It can be demonstrated that the proposed mitigation or compensatory measures are of an equivalent of better value than assigned to the original site / asset in the ecological assessment.	
Policy NE2 - Protect and Enhance Green and Blue Infrastructure (Strategic Policy)	The Council will seek to protect, maintain, enhance and, where possible, restore and extend the Plan AreasThe former Selby districtgreen and blue infrastructure assets (GBI) supporting the creation of an integrated network for the benefit of nature, people's health and well-being and the economy including landscapes, ecological networks, natural environment, open spaces, Public Rights of Way, geodiversity, biodiversity, river and waterway assets. A. This will be achieved by supporting development which: 1. Protects and enhances the functionality and connectivity of green and blue infrastructure and corridors having regard to the latest green and blue infrastructure (GBI) audits and strategies. The GBI should principally benefit the development and enhance or create or facilitate links to connect to the wider network. 2. Increases connectivity of habitats by locating features which enlarge, connect or support natural and semi-natural green spaces and protected sites for nature conservation in line with Policies NE1 (Protecting Designated Sites and Species) and NE3 (Biodiversity Net Gain). 3. Improves access to green space for recreation and leisure for the health and well-being of users having regard to the latest Green Space Audit and in line with Policy IC3 (Protection and Creation of New Open Space, Sport and Recreation Provision). 4. Are in line with Policy NE5 (Protecting and Enhancing Waterbodies) where they are near to waterways, including those which contribute towards delivering identified opportunities and priorities in the latest green and blue infrastructure audit or strategy. B. Major residential development (proposals of 10 dwellings or more and non-residential development proposals of 0.5 hectares or more) will be required to provide a Green and Blue Infrastructure Masterplan, (the detail required will be commensurate with the scale of the development) as part of the overall masterplan for the development site, to be agreed with the Planning Authority. The Green and Blue masterplan should have regard to the latest green and blue infrastructure audit or strategy, Local Nature Recovery Strategy, and relevant Catchment Management Plans and demonstrate how the development: 1. Avoids loss, damage or deterioration to green and blue infrastructure; and 2. Addresses deficiencies of green and blue infrastructure; and 3. Creates or enhances green and blue infrastructure; and 4. Provides links or access to green and blue infrastructure.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy aims at protecting and enhancing Selby District's green and blue infrastructure, such as fields, parks, forests and water features. Emphasis is also made on the importance of connectivity between different habitats. While the policy is likely to have beneficial effects for wildlife and biodiversity, it also ensures the provision of greenspaces with high connectivity for local residents. As stated in relation to other policies, this is likely to help mitigate recreational pressure in European sites that are sensitive to recreational pressure. Therefore, this is a positive policy from an HRA perspective. Overall, there are no linking impact pathways present and Policy NE2 is screened out from Appropriate Assessment.
Policy NE3 - Biodiversity Net Gain (Strategic Policy)	The former The former Selby districtarea's natural environment will be enhanced by ensuring that development delivers a net gain in biodiversity for ecological networks in line with government requirements and result in a positive contribution to the protection, creation and enhancement of habitats and species. This will be achieved by requiring; A. All eligible development proposals to provide delivery of net gain in biodiversity, by: 1. Using the Department for Environment, Food and Rural Affairs (Defra) Biodiversity Metric (or other equivalent standard as amended by national guidance or legislation) to assess the original biodiversity value of the site prior to any clearance or modification. 2. Presenting a Biodiversity Net Gain Plan as part of the planning application process which details either on-site, or off-site habitat enhancement, in line with priorities for recovering or enhancing biodiversity habitats and species as set out through the Local Plan evidence bases or Local Nature Recovery Strategy; and 3. Demonstrating proposals will deliver a net gain for biodiversity across all unit types including habitat area, hedgerows and lines of trees, rivers and streams;	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This is positive policy that secures the Council's commitment to supporting development, and/or land management, that aims to leave the natural environment in a measurably better state than it was beforehand. Overall, there are no linking impact pathways present and Policy NE3 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	4. Commit to ensuring the delivery and maintenance / stewardship of the new habitats for at least 30 years through Section 106 agreements, conservation covenants and monitoring. B. In cases where there are no biodiversity opportunities identified or no land is available within the Plan Area, credits from a land bank organisation can be purchased, but must be evidenced as part of the pre-application process.	
Policy NE4 - Protect and Enhance Landscape Character (Strategic Policy)	Development which protects, enhances or restores the landscape character of the former The former Selby districtarea and the setting of settlements for its own intrinsic value and benefit to the economic, environmental and social well-being of the District, will be supported. A. All development must: 1. Promote high-quality designs that respond positively to, and where possible, enhance, the distinctive local landscape character as described in the latest 'Selby Landscape Character Assessment'; and 2. Give particular attention to the design, layout, landscaping of development and the use of materials in order to minimise its impact and to enhance the traditional character of buildings and landscape in the area, reflecting the 17 character areas defined the latest 'Selby Landscape Character Assessment'; and 3. Respect the overall development guidelines in the latest 'Selby Landscape Sensitivity Study'. B. In addition, development within the four areas designated on the Policies Map as Locally Important Landscape Areas: the Magnesian Limestone Ridge (north and south); Hambleton Hough and Brayton Barff; and Derwent Valley, will only be supported where they meet the following requirements, due to their high sensitivity to inappropriate development: 1. Avoid significant loss of key characteristics that contribute to the quality of the Locally Important Landscape Area; and 2. Respond to the specific recommendations for each Locally Important Landscape Area as set out in the The former Selby districtLandscape Designation Review 2019 (or subsequent update)	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy ensures the protection and enhancement of Selby District's Landscape Character, including the Derwent Valley. However, protection of the landscape character will have no direct relevance for European sites. Overall, there are no linking impact pathways present and Policy NE4 is screened out from Appropriate Assessment.
Policy NE5 - Protecting and Enhancing Rivers and Waterbodies (Strategic Policy)	The Council will work with designated organisations, developers, partners and communities to ensure opportunities for the restoration and enhancement of waterbodies are realised, by ensuring that: A. All development likely to impact on the water environment will have regard to the Water Framework Directive objectives set out in the Humber River Basin Management Plan and ensure: 1. There is no deterioration in the water quality and status of any surface or ground water body. 2. The ability of any surface or ground-water body to achieve Water Framework Directive status objectives is not compromised; 3. That an improvement to the water environment is secured where possible. B. Developments in proximity to waterbodies, frontages, corridors and environments, will protect and enhance their existing and potential functions and characteristics by ensuring they: 1. Include the waterbody or asset is an integral part of development design, 2. Avoid loss, damage or deterioration of water assets 3. Safeguard and improve the environmental quality and ecological value. 4. Protect and enhance amenity value and accessibility;	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy protects and enhances Selby District's waterways, particularly its riverbanks and their functioning as wildlife corridors. Importantly, the policy states that additional recreational facilities in the Lower Derwent Valley Area will not be supported. This is crucial, as this will preserve the rural character of the area surrounding the SPA / Ramsar / SAC and ensure recreational pressure in the site will not significantly increase. In the area around Barlby Bridge and the Selby Urban Area, riverside recreational facilities and additional wharfage will be supported. However, an increase in recreation and / or boating traffic in this area, will not affect the Lower Derwent Valley. Overall, there are no linking impact pathways present and Policy NE5 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	5. Contribute to the significance of heritage assets and landscape value and enhance where possible; 6. Consider opportunities to mitigate for climate change or flooding; 7. Avoid the loss of existing wharfs/associated infrastructure and safeguard long-term opportunities for alternative transport options, the development of port facilities and ships' turning basins; 8. Take into account the latest priorities and strategies for waterbodies, assets and all users, including the Humber River Basin Management Plan and Green and Blue Infrastructure Strategies; C. Development for riverside recreational facilities or waterborne transport such as wharfs, ships' turning basins and ancillary facilities will be supported, provided the proposal: 1. Will not jeopardise the commercial use of the waterway or the operation of existing businesses; 2. Provide appropriate landscape planting to safeguard the amenities of existing residents; 3. Is of a nature and scale appropriate to its location and its ability to absorb users or visitors without causing environmental damage;	
Policy NE6 – Protecting and Enhancing Trees, Woodland and Hedgerows	In order to increase and enhance the quality of trees and hedgerows: A. Developments will be supported where: 1. New streets are tree-lined and opportunities have been taken to incorporate trees within the development and appropriate measures are in place to secure the long-term maintenance of newly-planted trees. 2. There has been a suitable assessment of the woodland, trees and hedgerows (where deemed necessary), to a recognised professional standard which is able to demonstrate evaluation of these features for realistic long-term retention, and how this has positively informed the design process; 3. It has been clearly demonstrated how retained and new features will be protected during development; 4. There has been an appropriate replacement planting scheme agreed in writing with the Local Planning Authority, where the felling of trees or the removal of hedgerow is proved necessary; 5. It prevents the loss or deterioration of woodland unless part of an agreed forestry management scheme; 6. Any proposals for the removal of trees, woodland and/or hedgerows do not increase the risk of flooding; 7. Proposed works to trees under Tree Preservation Orders or within a Conservation Area are not detrimental to the public realm, the character of the designated area, or to the detriment of the health and sustainability of the trees; 8. Proposals promote and enhance the rural and urban tree coverage of the The former Selby districtPlan Area in line with the most recent strategies relating to trees, woodland and hedgerows (for example, the White Rose Forest Partnership Scheme and Conservation Area Appraisals).	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This is a positive policy, supporting the preservation of trees (particularly mature, veteran and ancient trees). However, while positive for wildlife and the integrity of ecological networks, the policy has no direct relevance for European sites. Overall, there are no linking impact pathways present and Policy NE6 is screened out from Appropriate Assessment.
Policy NE7 - Air Quality	A. Development will not be supported where it; 1. Results in further significant air quality deterioration, or the need to declare further Air Quality Management Areas (AQMAs); and 2. Results in any increase in the number of people exposed to poor air quality; and 3. Conflicts with elements of an Authority Air Quality Action Plan (AQAP).	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy stipulates that planning applications with a potential to affect the air quality in SAC, SPA or SSSI, or to create a significant amount of traffic will have to be accompanied by an Air Quality Assessment. The policy also requires that mitigation measures to be provided should be in line with the HRAs of individual planning applications.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	B. Developments will only be permitted if the impact on air quality is acceptable and mechanisms are in place to mitigate adverse impacts and prevent further exposure to poor air quality. This will help to protect human health. C. This will be achieved by: 1. All developments promoting the uptake of low emission mitigation (such as through electric vehicle charging provision) and supporting sustainable travel to reduce air quality impacts. 2. Developments in or affecting an Air Quality Management Area or where pre-application discussions have indicated that the development could result in the designation of an Air Quality Management Area or where the grant of planning permission would conflict with, or render unworkable, elements of the Authority Air Quality Action Plan, applicants must submit an Air Quality Assessment and/or a Dust Assessment Report and identify mitigation measures to ensure no significant adverse effects where development may: i. Involve agricultural or industrial developments which have the potential to produce emissions and particulates which could affect residents; or ii. Create emissions of dust during demolition, earth moving and construction, or through site operations associated with mineral extraction, waste disposal or agriculture; or iii. Impact on the air quality of a Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar or Site of Special Scientific Interest (SSSI), or on a non-statutory site where there is a relevant sensitivity; or iv. Create significant amounts of traffic (the level at which it has the potential to increase local air pollution or nitrogen deposition, either individually or cumulatively), as determined through a Transport Assessment and/or air quality modelling specific to a planning application. D. Mitigation measures should ensure consistency with the Council's Air Quality Action Plan and the Habitats Regulations Assessment where impacts are related to the diversity of ecosystems, and where impacts are traffic related, the North Yorkshire Local Transport Plan.	This policy is important because it will prevent adverse effects on the site integrity of the River Derwent Valley SAC, which is the only European site identified in relation to the SLP, which lies within 200m of a potential major commuter route. Overall, there are no linking impact pathways present and Policy NE7 is screened out from Appropriate Assessment.
Policy NE8 - Pollution and Contaminated Land	A. Development which could present noise pollution, light pollution, groundwater pollution, contamination of land or water and other environmental pollution or unstable land will not be permitted unless satisfactory remedial or preventative measures are incorporated. This will be considered an integral element of the scheme. Measures should be carried out before the use of the site commences and sufficient consideration provided to both human and environmental receptors of any potential impact. Planning applications must be accompanied by the appropriate assessments in line with the Council's Validation Checklist. B. Where evidence exists that a site might be contaminated, as identified through a preliminary risk assessment, or using the Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG) screening assessment form, planning permission may be granted subject to conditions to prevent the commencement of development until a site investigation and assessment has been carried out and development has incorporated all measures shown in the assessment to be necessary. C. Development proposals should be designed to minimise the risk of erosion, subsidence and further instability, while maximising the opportunities for the reclamation, restoration and reinstatement of contaminated land. D. Proposals for the redevelopment or reuse of land which is known or suspected to be contaminated and also development or activities which present a significant new risk of land contamination will be assessed having regard to: 1. The findings of a preliminary land contamination or land stability risk assessment; 2. The compatibility of the intended use with the condition of the land; 3. The environmental sensitivity of the site; 4. The identification of human receptors and necessary mitigation. E. Proposals that fail to demonstrate that the intended use would be compatible with the condition of the land or which fail to secure appropriate opportunities for remediation will not be supported.	There are no Likely Significant Effects (LSEs) of this policy on European Sites. This policy relates to development proposals on polluted or contaminated land. However, such proposals have no direct relevance for European sites. Overall, there are no linking impact pathways present and Policy NE8 is screened out from Appropriate Assessment.

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
Site Allocations Policies		
Policy S1 - Selby Station Quarter Special Policy Area	Development located in the Selby Station Quarter (as shown on the Policies Map) will be supported where it helps deliver the Council's objectives to: 1. Improve pedestrian and cycle access to Selby town centre and to the rail and sus stations; 2. Improve the public realm around the stations and the Ousegate riverside corridor; 3. Promote opportunities to increase active travel into Selby town and improve access to the wider Leeds City Region, including through the provision of adequate railway station parking; 4. Promote opportunities to bring residential uses back into the Special Policy Area; 5. Develop a sustainable new community; and 6. Conserve and enhance the significance of Selby Town Conservation Area and other heritage assets in the area, including their setting, ensuring that development references local character.	Likely Significant Effects (LSEs) of this policy cannot be excluded. This policy supports economic growth in Selby. This policy potentially adds to the volume of housing delivered under Policy HG1. While it is acknowledged that most housing to be delivered in the district is specified in other policies, individual housing developments could still add to the identified impact pathways. The following impact pathways on European sites are linked to this policy: • Recreational Pressure • Loss of Functionally Linked Habitat • Water Quality • Water Quantity, Level and Flow • Atmospheric Pollution Overall, Policy S1 is screened in for Appropriate Assessment.
Policy S2 – Selby Gateway Special Policy Area	Development located in the Selby Gateway (as shown on the Policies Map) will be supported where it helps to deliver: 1. An attractive landscaped gateway to the town of Selby along both sides of Barlby Road, which promotes and improves the walking and cycling routes in this area. 2. The redevelopment of the Olympia Mills site on the southern side of Barlby Road and north of the railway line for employment purposes. 3. Redevelop the land south of the railway, on the Olympia Park West site, for solar energy generation, which will power the Mill and supply carbon-free energy to the National Grid.	Likely Significant Effects (LSEs) of this policy cannot be excluded. This policy supports economic growth in Selby. The redevelopment of land for employment purposes could potentially lead to the loss of supporting habitats for SPA / Ramsar birds (such as from the Lower Derwent Valley SPA / Ramsar or the Humber Estuary SPA / Ramsar). Furthermore, it is likely to increase commuter traffic within Selby District, as well as contributing to the volume of potable water used and treated sewage produced. The following impact pathways on European sites are linked to this policy: • Loss of Functionally Linked Habitat • Water Quality • Water Quantity, Level and Flow • Atmospheric Pollution Overall, Policy S2 is screened in for Appropriate Assessment.
Policy T1 - Tadcaster Town Centre Regeneration Area – Special Policy Area	Proposals within the Tadcaster Town Centre Regeneration Area (as shown on the Policies Map) will be supported where they help to deliver the regeneration of the town centre as a whole and the Council's objectives to: 1. Meet the Vision for Tadcaster by 2040 as set out in Part 1 of the Local Plan which in essence is to deliver a heritage-led regeneration of Tadcaster for it to be a sustainable, prosperous and vibrant market town reflecting its historic environment, brewing heritage, attractive open riverside setting and sense of community; 2. Reintroduce housing into the town centre through a high-quality, heritage-led scheme on the Central Area Car Park (TADC-H) and new housing at Mill Lane (TADC-I); 3. Provide a new publicly-accessible Town Green, which will serve the amenity and recreation needs of the new residents of the car park redevelopment housing scheme and provide space for the health and well-being of town centre users. The Town Green will also protect and enhance Tadcaster Conservation Area and the setting of the Grade II* Listed Old Vicarage and other Listed Buildings which surround the site;	Likely Significant Effects (LSEs) of this policy cannot be excluded. This policy potentially adds to the volume of housing delivered under Policy HG1. While it is acknowledged that most housing to be delivered in the district is specified in other policies, individual housing developments could still add to the identified impact pathways. The following impact pathways on European sites are linked to this policy: • Recreational Pressure • Water Quality • Water Quantity, Level and Flow • Atmospheric Pollution

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	4. Provide a new underground car park, as part of the TADC-H allocation to replace Central Area Car Park for town centre users and to provide parking for the new housing site residents and other replacement on and off-street parking to meet the total identified needs for approximately 227 spaces (short and long-stay use) or suitable, like-for-like alternative sites as agreed with the Local Planning Authority to meet Local Highways Authority requirements; 5. The development of the town centre scheme and the wider site allocations will be subject to a Developer Agreement(s) to secure the delivery of each element of the overall regeneration scheme; 6. Provide a new multi-functional green space in Robin Hood Yard (and safe access to it for all users), for the purposes of linking the town centre to the riverside for pedestrians and cyclists. Part of the area could provide some limited parking and servicing for surrounding residents and businesses subject to proven highway safety and high-quality design; 7. Bring back into use derelict or vacant properties and sites for residential uses (at least 30 dwellings) or other appropriate town centre uses. In particular, but not restricted to: The White Swan, High Street; 8-10 Kirkgate; Shann House; and 24-26 High Street; 8. Enhance the town centre experience for its users by undertaking highways and junction alterations to accommodate an improved two-way through-traffic route along St. Joseph's Street; re-configured junctions at its north and south ends; improvements to Chapel Street; physical and restricted vehicle access, subject to appropriate Traffic Regulation Orders (TROs) along Westgate and Kirkgate to provide a new safe and attractive pedestrian-priority and low-traffic area; and provide sufficient and suitably-located off-street and on-street parking bays throughout the Town Centre Regeneration Area to meet existing residents' needs and the needs of other town centre users including those with impaired mobility in the interests of highways safety; 9. Enhance walking and cycling routes within the town centre and increase opportunities for sustainable transport by providing walking, cycling and bus infrastructure to link the town centre to residential and employment areas around the town and to allow longer distance, wider links to higher order centres for jobs and leisure activities for local residents but also to attract visitors to support the town's services and facilities and cultural, tourist and shopping offers; 10. Preserve and where appropriate enhance those elements which make a positive contribution to the character of Tadcaster Conservation Area and other heritage assets, including their setting, and key views within the town ensuring that development references detailing, styles and building methods and local materials and should be in accordance with the guidance set out in the adopted Tadcaster Conservation Area Appraisal; and 11. Ensure high-quality design of new developments, bringing back into use empty buildings and sites, and highways schemes by ensuring the design and layout of schemes and use of locally distinctive materials reflects the requirements of a new Design Code developed with the community and agreed with the Local Planning Authority, to ensure an exemplar heritage-led regeneration scheme of the highest quality.	Overall, Policy T1 is screened in for Appropriate Assessment
Policy T2 - London Road Special Policy Area	Proposals within the London Road Special Policy Area (as shown on the Policies Map) will be supported for a mix of uses including multi-functional green space, commercial, retail, parking or residential where they help to deliver the regeneration of the town centre as a whole. In addition to satisfying the requirements of relevant planning policies, development proposals within the Special Policy Area will be required to: 1. Follow a comprehensive, phased approach to development in accordance with a masterplan to be approved by the Local Planning Authority. 2. Provide a new primary access for vehicles, cycles and pedestrians onto the A162 London Road to the east. 3. Provide safe cycle and pedestrian routes linking to the surrounding residential areas and the town centre. 4. Ensure the design and layout is informed by the rural landscape character and takes account of the overhead power lines . 5. Avoid light pollution from flood lights and to orientate buildings to minimise noise disturbance to protect residential amenity.	Likely Significant Effects (LSEs) of this policy cannot be excluded. This policy potentially adds to the volume of housing delivered under Policy HG1. While it is acknowledged that most housing to be delivered in the district is specified in other policies, individual housing developments could still add to the identified impact pathways. The following impact pathways on European sites are linked to this policy: • Recreational Pressure • Loss of Functionally Linked Habitat • Water Quality • Water Quantity, Level and Flow • Atmospheric Pollution Overall, Policy T2 is screened in for Appropriate Assessment

Policy number/ name	Policy detail	Likely Significant Effects Screening Assessment.
	6. Protect the trees covered by a Tree Preservation Order, and retain and enhance the strong landscape buffers along all the site boundaries. 7. Address potential contamination associated with the former railway land to the west of the site.	

Appendix C Air quality modelling results

	Total Annual Mean NO_X (µg/m^3)				Total Annual Mean ammonia NH_3 (µg/m^3)				Total Annual Mean N Dep (kgN/ha/yr)			
Road Link and distance from road	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**
E01_0.199053586m	13.56	6.90	7.03	7.06	2.26	2.21	2.23	2.23	18.26	16.18	16.29	16.31
E01_10m	9.95	6.44	6.49	6.50	2.16	2.15	2.15	2.15	17.48	15.81	15.85	15.85
E01_20m	9.26	6.36	6.39	6.39	2.14	2.14	2.14	2.14	17.33	15.74	15.77	15.77
E01_30m	8.96	6.32	6.34	6.34	2.14	2.13	2.13	2.13	17.27	15.72	15.73	15.73
E01_40m	8.79	6.30	6.32	6.32	2.13	2.13	2.13	2.13	17.23	15.70	15.71	15.71
E01_50m	8.69	6.29	6.30	6.30	2.13	2.13	2.13	2.13	17.21	15.69	15.70	15.70
E01_60m	8.62	6.28	6.29	6.29	2.13	2.13	2.13	2.13	17.20	15.69	15.69	15.69
E01_70m	8.56	6.27	6.28	6.28	2.13	2.12	2.13	2.13	17.19	15.68	15.69	15.69
E01_80m	8.52	6.27	6.27	6.28	2.13	2.12	2.13	2.13	17.18	15.68	15.68	15.68
E01_90m	8.49	6.26	6.27	6.27	2.13	2.12	2.12	2.12	17.17	15.67	15.68	15.68
E01_100m	8.46	6.26	6.26	6.27	2.12	2.12	2.12	2.12	17.17	15.67	15.68	15.68
E01_110m	8.44	6.25	6.26	6.26	2.12	2.12	2.12	2.12	17.16	15.67	15.67	15.68
E01_120m	8.42	6.25	6.26	6.26	2.12	2.12	2.12	2.12	17.16	15.67	15.67	15.67
E01_130m	8.40	6.25	6.26	6.26	2.12	2.12	2.12	2.12	17.16	15.67	15.67	15.67
E01_140m	8.39	6.25	6.25	6.25	2.12	2.12	2.12	2.12	17.16	15.67	15.67	15.67
E01_150m	8.38	6.25	6.25	6.25	2.12	2.12	2.12	2.12	17.15	15.67	15.67	15.67
E01_160m	8.37	6.25	6.25	6.25	2.12	2.12	2.12	2.12	17.15	15.66	15.67	15.67
E01_170m	8.36	6.24	6.25	6.25	2.12	2.12	2.12	2.12	17.15	15.66	15.67	15.67
E01_180m	8.35	6.24	6.25	6.25	2.12	2.12	2.12	2.12	17.15	15.66	15.67	15.67
E01_190m	8.34	6.24	6.25	6.25	2.12	2.12	2.12	2.12	17.15	15.66	15.66	15.67
E01_200m	8.34	6.24	6.25	6.25	2.12	2.12	2.12	2.12	17.15	15.66	15.66	15.66
E02a_0.26314243431m	24.61	8.47	8.90	8.99	2.67	2.50	2.55	2.56	21.20	17.78	18.08	18.14
E02a_10m	14.54	7.24	7.40	7.43	2.36	2.31	2.32	2.33	18.87	16.68	16.79	16.81
E02a_20m	12.23	6.95	7.05	7.07	2.30	2.26	2.28	2.28	18.34	16.44	16.51	16.52
E02a_30m	11.22	6.83	6.90	6.92	2.27	2.25	2.25	2.26	18.12	16.34	16.38	16.39
E02a_40m	10.64	6.76	6.81	6.83	2.25	2.24	2.24	2.24	17.99	16.28	16.32	16.32
E02a_50m	10.26	6.71	6.76	6.77	2.24	2.23	2.23	2.24	17.91	16.25	16.27	16.28
E02a_60m	10.00	6.68	6.72	6.73	2.24	2.23	2.23	2.23	17.86	16.22	16.24	16.25
E02a_70m	9.81	6.65	6.69	6.70	2.23	2.22	2.23	2.23	17.81	16.20	16.22	16.23
E02a_80m	9.66	6.64	6.67	6.67	2.23	2.22	2.22	2.22	17.78	16.19	16.21	16.21
E02a_90m	9.55	6.62	6.65	6.66	2.23	2.22	2.22	2.22	17.76	16.18	16.19	16.20
E02a_100m	9.45	6.61	6.64	6.64	2.22	2.22	2.22	2.22	17.74	16.17	16.18	16.19
E02a_110m	9.37	6.60	6.62	6.63	2.22	2.22	2.22	2.22	17.72	16.16	16.17	16.18
E02a_120m	9.31	6.59	6.61	6.62	2.22	2.21	2.22	2.22	17.71	16.16	16.17	16.17
E02a_130m	9.25	6.59	6.61	6.61	2.22	2.21	2.22	2.22	17.70	16.15	16.16	16.16
E02a_140m	9.21	6.58	6.60	6.60	2.22	2.21	2.21	2.21	17.69	16.15	16.16	16.16
E02a_150m	9.17	6.58	6.59	6.60	2.22	2.21	2.21	2.21	17.68	16.14	16.15	16.15
E02a_160m	9.13	6.57	6.59	6.59	2.22	2.21	2.21	2.21	17.67	16.14	16.15	16.15

	Total Annual Mean NO_X (µg/m^3)				Total Annual Mean ammonia NH_3 (µg/m^3)				Total Annual Mean N Dep (kgN/ha/yr)			
Road Link and distance from road	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**
E02a_170m	9.10	6.57	6.58	6.59	2.22	2.21	2.21	2.21	17.67	16.14	16.15	16.15
E02a_180m	9.07	6.56	6.58	6.58	2.21	2.21	2.21	2.21	17.66	16.14	16.14	16.14
E02a_190m	9.05	6.56	6.57	6.58	2.21	2.21	2.21	2.21	17.66	16.13	16.14	16.14
E02a_200m	9.02	6.56	6.57	6.57	2.21	2.21	2.21	2.21	17.65	16.13	16.14	16.14
E02b_0.26994339597m	21.21	8.06	8.39	8.46	2.56	2.43	2.47	2.48	20.41	17.40	17.64	17.69
E02b_10m	13.00	7.05	7.17	7.19	2.32	2.28	2.29	2.29	18.52	16.52	16.60	16.62
E02b_20m	11.24	6.83	6.90	6.92	2.27	2.25	2.25	2.26	18.12	16.34	16.39	16.40
E02b_30m	10.47	6.74	6.79	6.80	2.25	2.23	2.24	2.24	17.95	16.26	16.30	16.30
E02b_40m	10.04	6.68	6.72	6.73	2.24	2.23	2.23	2.23	17.86	16.22	16.25	16.25
E02b_50m	9.76	6.65	6.68	6.69	2.23	2.22	2.22	2.23	17.80	16.20	16.22	16.22
E02b_60m	9.57	6.63	6.65	6.66	2.23	2.22	2.22	2.22	17.76	16.18	16.19	16.20
E02b_70m	9.43	6.61	6.63	6.64	2.22	2.22	2.22	2.22	17.73	16.17	16.18	16.18
E02b_80m	9.33	6.60	6.62	6.62	2.22	2.21	2.22	2.22	17.71	16.16	16.17	16.17
E02b_90m	9.24	6.59	6.60	6.61	2.22	2.21	2.22	2.22	17.70	16.15	16.16	16.16
E02b_100m	9.18	6.58	6.59	6.60	2.22	2.21	2.21	2.21	17.68	16.14	16.15	16.15
E02b_110m	9.12	6.57	6.59	6.59	2.22	2.21	2.21	2.21	17.67	16.14	16.15	16.15
E02b_120m	9.08	6.56	6.58	6.58	2.21	2.21	2.21	2.21	17.66	16.14	16.14	16.14
E02b_130m	9.04	6.56	6.57	6.58	2.21	2.21	2.21	2.21	17.65	16.13	16.14	16.14
E02b_140m	9.01	6.56	6.57	6.57	2.21	2.21	2.21	2.21	17.65	16.13	16.14	16.14
E02b_150m	8.98	6.55	6.56	6.57	2.21	2.21	2.21	2.21	17.64	16.13	16.13	16.13
E02b_160m	8.95	6.55	6.56	6.56	2.21	2.21	2.21	2.21	17.64	16.12	16.13	16.13
E02b_170m	8.93	6.55	6.56	6.56	2.21	2.21	2.21	2.21	17.63	16.12	16.13	16.13
E02b_180m	8.91	6.54	6.55	6.56	2.21	2.21	2.21	2.21	17.63	16.12	16.13	16.13
E02b_190m	8.89	6.54	6.55	6.55	2.21	2.21	2.21	2.21	17.63	16.12	16.12	16.12
E02b_200m	8.88	6.54	6.55	6.55	2.21	2.21	2.21	2.21	17.62	16.12	16.12	16.12
E02c_0.38550736079m	21.40	8.08	8.42	8.49	2.57	2.44	2.48	2.49	20.45	17.42	17.66	17.71
E02c_10m	13.09	7.06	7.18	7.21	2.32	2.28	2.29	2.30	18.54	16.53	16.61	16.63
E02c_20m	11.31	6.84	6.92	6.93	2.27	2.25	2.26	2.26	18.14	16.35	16.39	16.40
E02c_30m	10.54	6.75	6.80	6.81	2.25	2.23	2.24	2.24	17.97	16.27	16.30	16.31
E02c_40m	10.11	6.69	6.73	6.74	2.24	2.23	2.23	2.23	17.88	16.23	16.25	16.26
E02c_50m	9.83	6.66	6.69	6.70	2.23	2.22	2.23	2.23	17.82	16.20	16.22	16.23
E02c_60m	9.64	6.63	6.66	6.67	2.23	2.22	2.22	2.22	17.78	16.18	16.20	16.20
E02c_70m	9.49	6.62	6.64	6.65	2.22	2.22	2.22	2.22	17.75	16.17	16.19	16.19
E02c_80m	9.38	6.60	6.63	6.63	2.22	2.22	2.22	2.22	17.72	16.16	16.17	16.18
E02c_90m	9.30	6.59	6.61	6.62	2.22	2.21	2.22	2.22	17.71	16.15	16.16	16.17
E02c_100m	9.23	6.58	6.60	6.61	2.22	2.21	2.21	2.22	17.69	16.15	16.16	16.16
E02c_110m	9.17	6.58	6.59	6.60	2.22	2.21	2.21	2.21	17.68	16.14	16.15	16.15
E02c_120m	9.12	6.57	6.59	6.59	2.22	2.21	2.21	2.21	17.67	16.14	16.15	16.15
E02c_130m	9.08	6.56	6.58	6.58	2.21	2.21	2.21	2.21	17.66	16.13	16.14	16.14
E02c_140m	9.04	6.56	6.57	6.58	2.21	2.21	2.21	2.21	17.65	16.13	16.14	16.14
E02c_150m	9.01	6.56	6.57	6.57	2.21	2.21	2.21	2.21	17.65	16.13	16.14	16.14

	Total Annual Mean NO_X (µg/m^3)				Total Annual Mean ammonia NH_3 (µg/m^3)				Total Annual Mean N Dep (kgN/ha/yr)			
Road Link and distance from road	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**	**2019 Baseline**	**2040 Future Baseline assuming no traffic growth**	**2040 Do Minimum (without Selby Local Plan)**	**2040 Do Something (with Selby Local Plan)**
E02c_160m	8.98	6.55	6.56	6.57	2.21	2.21	2.21	2.21	17.64	16.13	16.13	16.13
E02c_170m	8.96	6.55	6.56	6.56	2.21	2.21	2.21	2.21	17.64	16.12	16.13	16.13
E02c_180m	8.93	6.55	6.56	6.56	2.21	2.21	2.21	2.21	17.63	16.12	16.13	16.13
E02c_190m	8.91	6.54	6.55	6.56	2.21	2.21	2.21	2.21	17.63	16.12	16.13	16.13
E02c_200m	8.90	6.54	6.55	6.55	2.21	2.21	2.21	2.21	17.63	16.12	16.12	16.13
E03a_2.5m	32.00	9.84	10.35	10.52	2.67	2.46	2.52	2.55	21.60	17.55	17.92	18.06
E03a_10m	21.75	8.59	8.86	8.96	2.39	2.28	2.31	2.32	19.37	16.51	16.70	16.78
E03a_20m	17.16	8.02	8.20	8.26	2.26	2.20	2.22	2.22	18.39	16.06	16.17	16.22
E03a_30m	15.07	7.77	7.89	7.94	2.21	2.16	2.18	2.18	17.95	15.86	15.94	15.97
E03a_40m	13.87	7.62	7.72	7.75	2.18	2.14	2.15	2.16	17.70	15.75	15.81	15.84
E03a_50m	13.09	7.52	7.61	7.64	2.16	2.13	2.14	2.14	17.54	15.67	15.73	15.75
E03a_60m	12.55	7.46	7.53	7.55	2.15	2.12	2.13	2.13	17.43	15.62	15.67	15.68
E03a_70m	12.14	7.41	7.47	7.49	2.14	2.12	2.12	2.13	17.34	15.59	15.63	15.64
E03a_80m	11.83	7.37	7.42	7.44	2.13	2.11	2.12	2.12	17.28	15.56	15.59	15.61
E03a_90m	11.58	7.34	7.39	7.40	2.12	2.11	2.11	2.11	17.23	15.54	15.57	15.58
E03a_100m	11.38	7.31	7.36	7.37	2.12	2.10	2.11	2.11	17.19	15.52	15.55	15.56
E03a_110m	11.21	7.29	7.33	7.35	2.12	2.10	2.11	2.11	17.16	15.51	15.53	15.54
E03a_120m	11.07	7.28	7.31	7.32	2.11	2.10	2.10	2.11	17.13	15.50	15.52	15.52
E03a_130m	10.95	7.26	7.29	7.31	2.11	2.10	2.10	2.10	17.11	15.48	15.50	15.51
E03a_140m	10.84	7.25	7.28	7.29	2.11	2.10	2.10	2.10	17.09	15.48	15.49	15.50
E03a_150m	10.75	7.24	7.27	7.28	2.10	2.10	2.10	2.10	17.07	15.47	15.49	15.49
E03a_160m	10.67	7.23	7.25	7.26	2.10	2.09	2.10	2.10	17.05	15.46	15.48	15.48
E03a_170m	10.60	7.22	7.24	7.25	2.10	2.09	2.10	2.10	17.04	15.46	15.47	15.48
E03a_180m	10.54	7.21	7.23	7.24	2.10	2.09	2.10	2.10	17.03	15.45	15.46	15.47
E03a_190m	10.48	7.20	7.23	7.23	2.10	2.09	2.09	2.09	17.02	15.45	15.46	15.46
E03a_200m	10.43	7.20	7.22	7.23	2.10	2.09	2.09	2.09	17.01	15.44	15.45	15.46

Selby District Council - Air Quality Modelling

Selby District Council - Regulation 19

Selby District Council

Project number: 60618556

January 2024

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Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
V1	22/01/2024	Draft	AS	Anna Savage	Technical Director

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Figures

Tables

1. Introduction

1.1 Selby District Council (SDC) is preparing a Draft Local Plan 2040 which represents a full review of the adopted Local Plan. Once the Local Plan has been through a number of statutory stages of preparation, it will be examined and if found to be sound, it can be adopted. The Council has commissioned AECOM Limited to conduct an air quality assessment to inform the Habitats Regulations Assessment (HRA) of the Regulation 19 preparation of the Local Plan 2040 and to form part of the evidence base. This assessment constitutes an update to the assessment previously carried out in 2022.

1.2 The work presented in this report is to be used to inform the Appropriate Assessment of the HRA. It focuses on the impact of traffic related emissions due to planned development during the Local Plan period on sensitive ecosystems within the Skipwith Common, Lower Derwent Valley, River Derwent and Humber Estuary Special Areas of Conservation (SACs). The SACs are mainly designated for heathland, grassland and marine habitats, in which there are habitats that are sensitive to nitrogen and acid deposition due to several reasons, such as soil acidification and toxicity to species (Natural England, 2018). More specifically, in terms of nitrogen sensitive habitats, Skipwith Common contains European dry and Northern Atlantic wet heaths; Lower Derwent Valley contains lowland hay meadows; River Derwent contains Ranunculion fluitantis and Callitricho-Batrachion vegetation; and Humber Estuary contains salt meadows, coastal dunes, mudflats and sandflats, amongst others.

1.3 This assessment considers the following four key pollutants shown to affect sensitive ecosystems: ammonia (NH_3), oxides of nitrogen (NO_X), total nitrogen deposition and total acid deposition. All pollutants are considered at receptor points, within transects, up to 200m of the roadside, within each of the four SACs considered in the assessment.

1.4 The main aims of this study are to:

- Identify potentially sensitive ecological receptor locations within the SACs within 200m of roads that are expected to be affected by the Local Plan 2040;
- Predict annual mean NO_x and NH_3 concentrations and nitrogen and acid deposition rates for the following scenarios at selected ecological receptors;
    - Baseline year (2019): represents air quality in a recent past year (2019);
    - Future Baseline (2040): uses the traffic data from the ‘current baseline’ in 2019, but applies future assessment year vehicle emission factors and background pollutant concentrations to allow for the ‘in combination’ assessment required for the HRA;
    - 2040 ‘Do Minimum’ (DM) Reference Case: future assessment year, which does not include the influence of planned development from the Local Plan 2040, but does allow for strategic planned development in neighbouring local authorities;
    - 2040 ‘Do Something’ Scenario (DS): future assessment year, which includes the influence of planned development from the Selby District Council Local Plan 2040, and from strategic planned development in neighbouring local authorities.
- Determine if there are any exceedances of NO_x and NH_3 critical levels, and nitrogen and acid deposition critical loads within the four SACs.

1.5 The results and implications of the modelling outputs are presented in the accompanying report ‘Habitats Regulations Assessment (HRA) of the Selby Local Plan Review’. More detail on the Transport Assessment and associated modelling are available separately.

2. Policy Context

Clean Air Strategy

2.1 In 2019, the UK government released its Clean Air Strategy 2019 (Defra, 2019) as part of its 25 Year Environment Plan (Defra, 2018). These documents include targets to reduce emissions of ammonia

from farming activities, and nitrogen oxides from combustion processes, and thus reduce the deposition of nitrogen to sensitive ecosystems.

Environment Act

2.2 The Environment Act 2021 (HM Government, 2021) amends the Environment Act 1995 (HM Government, 1995). On 9th November 2021, the Act received Royal Assent after being first introduced to Parliament in January 2020 to address environmental protection and the delivery of the Government's 25 Year Environment Plan. It includes provisions to establish a set of statutory environmental principles to ensure environmental governance through an environmental watchdog, the Office for Environmental Protection (OEP).

2.3 The Secretary of State must publish a review report every five years (as a minimum and with yearly updates to Parliament). The 25 Year Environment Plan has been adopted as the first Environmental Improvement Plan (EIP) of the Environment Act 2021, with long-term legally binding targets being finalised by Defra[1]. The EIP 2023 was published in January 2023 (updated February 2023), building on the 25 Year Environment Plan, and setting out how the delivery of environmental goals will be coordinated with landowners, communities and businesses.

Habitats Regulations Assessment

2.4 While the UK is no longer a member of the EU, a requirement for HRA will continue as set out in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

2.5 The HRA process applies the 'Precautionary Principle'[2] to European sites[3]. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the European site(s) in question. To ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the Plan or project in question.

2.6 Following evidence gathering, the first stage of any Habitats Regulations Assessment is the screening for Likely Significant Effects (LSEs), a high-level assessment to decide whether the Appropriate Assessment is required. Where it is determined that a conclusion of 'no Likely Significant Effects' cannot be drawn, the analysis proceeds to the Appropriate Assessment.

Other Guidance documents

2.7 Best practice and advice / guidance contained within documents from Natural England (Natural England, 2018), the Institute of Air Quality Management (IAQM) (IAQM, 2020), the Chartered Institute of Ecology and Environmental Management (CIEEM) (CIEEM, 2021) and National Highways (Design Manual for Roads and Bridges DMRB LA105) (DMRB, 2019) have been used to determine the methodology applied, and in the accompanying ecological interpretation of the results.

Critical Levels

2.8 Annual mean critical levels of NO_x and NH_3 are summarised in Table 1. These are concentrations above which adverse effects on ecosystems may occur based on present knowledge. The critical level for NO_x is taken from the EU Ambient Air Quality Directive 2008/50/EU (EU Directives, 2008) which has also been set as the Air Quality Strategy objective for the protection of vegetation and ecosystems, and has been incorporated into English legislation.

2.9 The EU Directive (EU Directives, 2008) states that the sampling point to determine compliance should be sited more than 20 km away from agglomerations or more than 5 km away from other built-up areas, industrial installations or motorways or major roads with traffic counts of more than 50,000 vehicles per day, which means that a sampling point must be sited in such a way that is representative of an area of

[1] https://www.gov.uk/government/news/update-on-progress-on-environmental-targets

[2] The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: *"When human activities may lead to morally unacceptable harm* [to the environment] *that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis".*

[3] https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site - "*A European site is protected by the Conservation of Habitats and Species Regulations 2017 as amended (known as the Habitats Regulations)*". These include Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar sites (wetlands of international importance).

at least 1,000 km^2. Applying the critical level for NO_x to designated nature conservation sites that are located close to busy roads is therefore precautionary.

2.10 The critical levels for NH_3 have not been incorporated into legislation and are a recommendation made by the United Nations Economic Commission for Europe (UNECE) Executive Body for the Convention on Long-Range Transboundary Air Pollution (CLRTAP) (UNECE, 2013).

Table 1: Annual Mean Critical Levels (NO_x and NH_3)

Pollutant	Critical Level
Oxides of nitrogen (NO_x)	30 µg/m^3
Ammonia (NH_3)	3 µg/m^3 for higher plants 1 µg/m^3 for lichens and bryophytes

3. Methodology

3.1 The Local Plan will significantly increase the population and employment opportunities within Selby District, which may result in more commuter journeys being undertaken within 200m of sensitive habitats. Therefore, LSEs cannot be excluded, and four European sites are screened in for Appropriate Assessment regarding this impact pathway. This is in accordance with Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (Natural England, 2018).

3.2 As such, the air quality modelling methodology and analyses presented in this report have been undertaken to inform the HRA for the Skipwith Common, Lower Derwent Valley, River Derwent and Humber Estuary SACs. These SACs have been considered in the assessment as they contain habitats and species that are sensitive to N deposition. More information on these sites is provided in the introduction section.

3.3 The following sections outline the methodology used to model air quality in the four SACs as listed above, affected by changes to traffic associated with the Selby Local Plan 2040. The following sources of information and data have been used to form the basis of the air quality assessment:

- Department for Environment, Food and Rural Affairs' (Defra) Air Quality Background Concentration Maps based on a 2018 base year (Defra, 2020a);
- Defra's Vehicle Emission Factors (Defra, 2020b);
- Driver Vehicle Licencing Agency (DVLA) statistics on licensed road-using cars and light goods vehicles dataset for 2022 (DVLA, 2022);
- Department for Transport's (DfT) Transport Decarbonisation Plan of future vehicle fleet projections (DfT, 2022);
- Emission rates as published in the Calculator for Road Emissions of Ammonia (CREAM) tool (Air Quality Consultants, 2020);
- 1x1 km modelled nitrogen and acid deposition data and ammonia background concentrations from the Air Pollution Information System (APIS, 2022);
- Traffic count and speed data used to inform the Transport Assessment for 2019 and 2040.

3.4 The modelling assessment was conducted following methodology within Defra's Local Air Quality Management Technical Guidance (LAQM.TG(22) (Defra, 2022), and guidance contained within documents from Natural England (Natural England, 2018), the Institute of Air Quality Management (IAQM) (IAQM, 2020) and the Chartered Institute of Ecology and Environmental Management (CIEEM) (CIEEM, 2021).

Pollutants of Interest

3.5 The pollutants of interest with regard to sensitive ecosystems for which critical levels and critical loads exist, and which are included in the air quality modelling and assessment of impacts on the four SACs listed above, are NO_x, NH_3, and nitrogen and acid deposition. Modelling of these pollutants is undertaken to assess the air quality impacts of planned development in the Local Plan on the SACs alone, and 'in combination' with existing plans within surrounding authorities.

3.6 Whilst emissions of NO_x from road vehicles are regulated according to Euro standards, emissions of NH_3 are not. This means that emissions of NH_3 from individual vehicle types are highly uncertain, particularly as measurements are rarely made (as this is not required for regulatory purposes). The uncertainty associated with the predicted nitrogen deposition rates from NH_3 is also greater than for NO_2, with the NH_3 derived nitrogen deposition rates representing an upper estimate.

3.7 There is currently no tool publicly available for the assessment of road traffic emissions of NH_3 from National Highways, Defra, Natural England, or other nature conservation bodies. However, there is evidence that exclusion of NH_3 from assessments leads to an underestimate of deposited nitrogen (Air Quality Consultants, 2020).

3.8 The methodology used to model NH_3 concentrations from road traffic, using ADMS Roads, and the subsequent contribution to nitrogen deposition within the SACs (described below), is considered the most appropriate that is available at this time. The methodology has been applied by AECOM in several Appropriate Assessments to inform HRA including that for Tunbridge Wells Borough Council, Epping Forest, Wealden and Mid Sussex District Councils.

Nitrogen Oxides

3.9 Detailed dispersion modelling of road traffic emissions of NO_x has been undertaken using the latest version of ADMS Roads (currently v5), combined with the latest version – at the time of assessment – of Defra's Emissions Factor Toolkit (EFT v11). Defra released an update to the EFT (version 12) in December 2023 after the modelling had been carried out, and has therefore not been used in this assessment. The subsequent contribution of emitted NO_x to nitrogen deposition within the SAC has been assessed.

3.10 Future fleet predictions were updated in EFT v11 (November 2021) for the fleet operating outside of London. However, the UK government's policy to ban the sale of new petrol and diesel cars and vans by 2035 (recently postponed from 2030) are not accounted for in the fleet information within this version of the EFT. As such, a more up-to-date fleet projection for the future year fleet has been used, in line with recent DfT policy, which is discussed in more detail below in the "Modelled Vehicle Fleet" subsection. This takes account of the fact that a significant shift in the constitution of the UK vehicle fleet will arise during the 2030s.

3.11 As the latest year for which emission factors are available in EFT v11 is 2030, AECOM has used 2030 information for any later modelled years. This therefore offers a precautionary approach for Local Plan modelling as it would not account for any improvements in vehicle emission factors in the latter part of the plan period (even though such improvements are likely with the introduction of Euro 7 from c.2025 or the ban on the sale of new petrol and diesel cars and vans from 2035, recently postponed from 2030).

Ammonia

3.12 In February 2020, Air Quality Consultants developed and published the Calculator for Road Emissions of Ammonia (CREAM) tool, '*in order to allow tentative predictions regarding trends in traffic-related ammonia emissions over time*'. The tool is based upon remotely sensed pollutant measurements, published real-world fuel consumption data, and ambient measurements of ammonia recorded in Ashdown Forest (2014-2016).

3.13 The report that was published alongside the CREAM tool states that:

"*It should be recognised that these emissions factors remain uncertain. Using them to make future year predictions will clearly be an improvement on any assessment which omits ammonia. They are also considered to be more robust than the emissions factors contained in the EEA Guidebook, which risk significantly under-predicting ammonia emissions. The emissions factors contained in the CREAM model can be considered to provide the most robust estimate of traffic-related ammonia possible at the present time, but they may be updated in the future as more information becomes available*."

3.14 The CREAM tool currently uses vehicle fleet information from Defra's EFT v9 which has now been superseded. AECOM has therefore applied the ammonia emission factors, as derived by Air Quality Consultants and in the current version of CREAM, with the average vehicle fleet on rural roads from EFT v11 to estimate emissions in the SAC.

3.15 The latest version of ADMS Roads has been employed to model the dispersion of emissions of NH_3 from road traffic, consistent with the approach for modelling emissions of NO_x.

Traffic Data

3.16 The traffic data used for this assessment was provided by the client's transport consultants: WSP. Data was provided for York Road and A163 near Skipwith (covering transects E01 and E02a/b/c), and additionally for A63 Knedlington Road / Hull Road (transect E03a/b), A614 Boothferry Road and the M62 near Howden for additional transects (E04a/b and E05a/b) modelled in this update to the original assessment. Due to the height of the M62 Ouse road bridge above the riverbank, the road was modelled at 30m height above ground level.

3.17 The traffic data were provided for a series of road links within 200m of the Skipwith Common, Lower Derwent Valley, River Derwent and Humber Estuary SACs. These links were chosen as they are located on the busiest roads in the area that are expected to experience the greatest increase in flows over the Local Plan period. As such, these are the roads where an air quality effect due to additional traffic growth is most likely to be observed. The modelled road links in each of the SACs are shown in Appendix C Figures 1 to 3.

3.18 Traffic data were provided for each of the road links, in the form of 24-hour Annual Average Daily Traffic (AADT) flows, with percentage heavy duty vehicle (HDV) flows and average speed for three scenarios – 2019 baseline (also used for the future baseline), future year 2040 'Do Minimum', and future year 2040 'Do Something' Scenario representing implementation of the Local Plan. A summary of the traffic data used in the air quality assessment is given in Annex A.1.

Modelled Vehicle Fleet

3.19 For the baseline modelling of the SACs, the nominal EFT v11 "Basic Split" rural fleet for the 2019 year was used, as this aligns well with the 2019 base year traffic data and 2019 meteorological data.

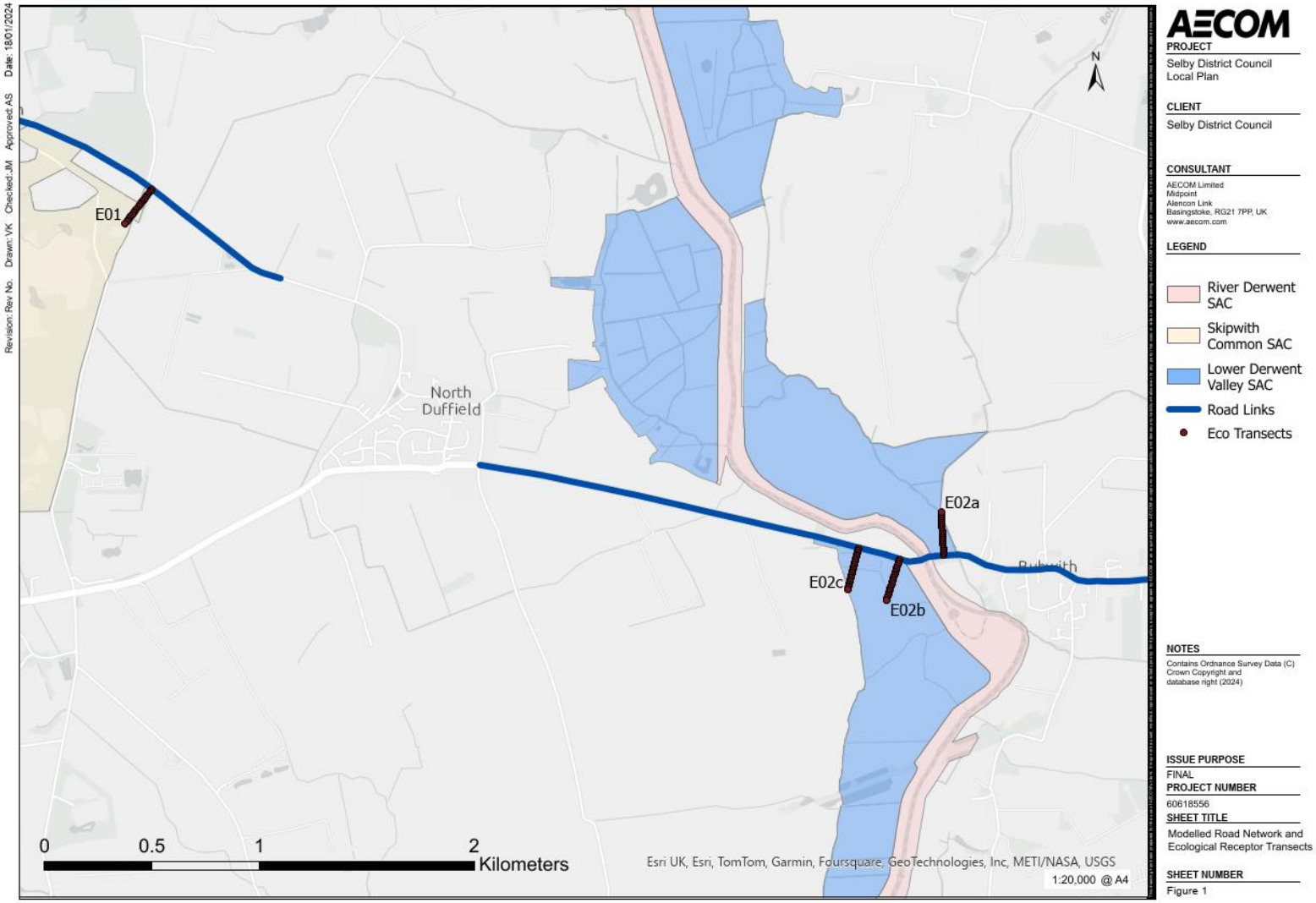
3.20 For the future year (2040) modelling, an approach has been taken to determine the vehicle fleet used in the modelling to apply a more up-to-date projection than that published in the EFT v11 in relation to the uptake of hybrid and zero emission / battery electric vehicles. A current vehicle fleet representative of the local area was determined, which was then projected forward to the future year (2040) following the methodology below.

3.21 The current (2022) fleet composition, from which the 2040 fleet projection is based, is derived from the most up-to-date available full-year dataset (2022) of registered light-duty vehicles (LDV) from DVLA (DVLA, 2022). A high-level review of the fleet characteristics was conducted for Selby District Council, neighbouring districts, and the East Riding of Yorkshire and North Yorkshire counties. Although Selby District resides in the county of North Yorkshire, it is adjacent to the East Riding of Yorkshire (ERoY) county and shows greater similarly to the ERoY fleet than that in North Yorkshire and other neighbouring districts. It was therefore decided to use the ERoY fleet, as it is also likely to be more representative of traffic in the model domain, given the proximity of the modelled roads to ERoY. In addition, the Selby and ERoY fleets contain a relatively high proportion of diesel cars, and relatively low electric cars, therefore use of the ERoY fleet as a starting point for the fleet projections constitutes a worst-case assessment.

3.22 Light Duty Vehicles (LDVs), which are mainly cars and light goods vehicles (LGVs), comprise the majority of vehicles in the overall fleet (approximately 95%), and therefore this dataset will give a robust and accurate starting point for future fleet projections. Heavy Duty Vehicles (HDVs) made up of buses, coaches and Heavy Goods Vehicles- HGVs), which comprise the remaining ~5% of the fleet (varying by link between ~1% - 10%), have been apportioned based on the EFT basic split for 2040. The exact LDV/HDV split varies according to the provided traffic data and depends on the road link, and the fleet breakdown for each road link takes this split into account.

3.23 Transport projections out to 2050 of UK's intended decarbonisation of the fleet and alignment with Net Zero became available from the DfT's Transport Decarbonisation Plan (TDP) (DfT, 2022). These projections are based on high and low ambition for rates of decarbonisation for every year up to 2050. These projections were adjusted to determine the breakdown of individual fuel types in line with the EFT v11.

3.24 To take a more cautious approach, the lower ambition "Decarbonising Transport Upper" projection was used to project the 2022-based current fleet out to the future year of 2040, by using the calculated year-on-year car, LGV and HDV growth rates for each vehicle fuel type. This projection was deemed to represent a more cautiously realistic scenario than either the EFT v11 or TDP baseline projections.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SHEET TITLE
Modelled Road Network and Ecological Receptor Transects
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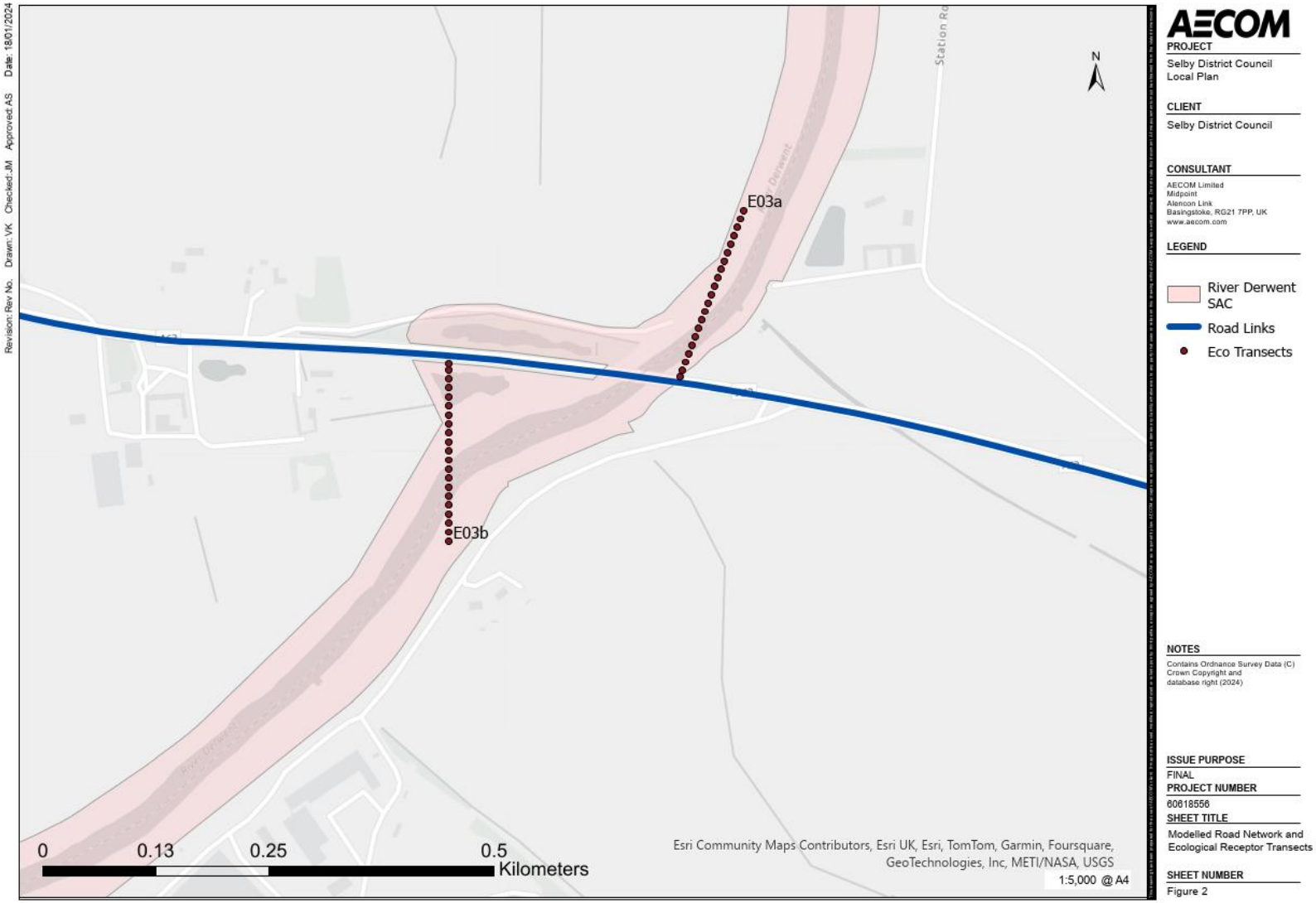
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SHEET NUMBER
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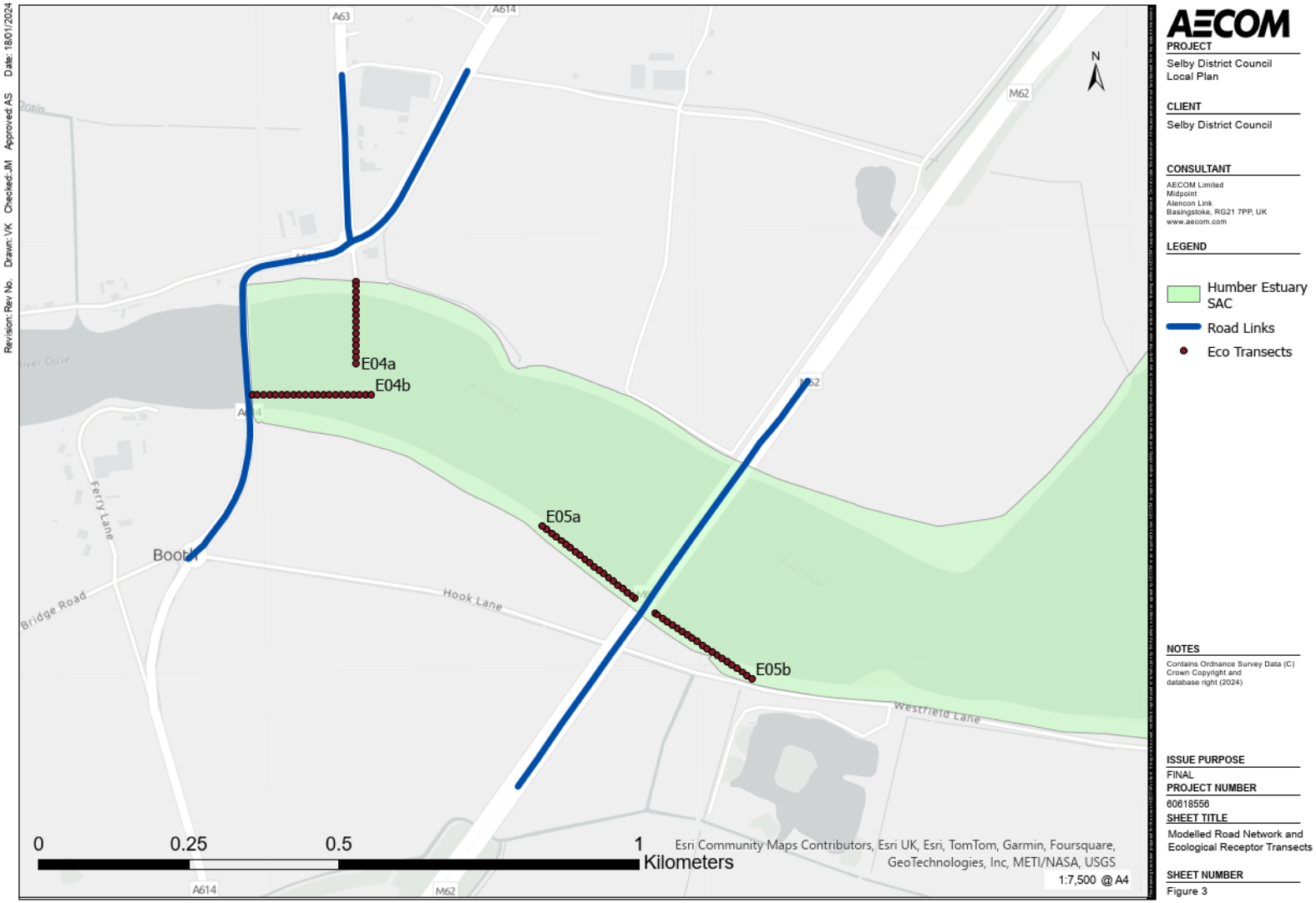

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Modelled Road Network and Ecological Receptor Transects

SHEET NUMBER
Figure 3

Receptors

3.25 Pollutant concentrations and deposition rates have been predicted along defined transects within the SAC within 200m of affected roads, in accordance with National Highways guidance for ecological assessments (LA105) (DMRB, 2019) and Natural England guidance (Natural England, 2018). The greatest impacts from changes in road traffic emissions will be observed and modelled closest to the roadside. Consideration of the road network within 200m of the SAC is therefore considered robust as background concentrations utilised in the assessment will account for all other sources that are not defined explicitly in the model.

3.26 The locations of the ecological transects relevant to this project were agreed with SDC and other stakeholders. The transects are situated at key locations where the greatest impacts upon each of the four SACs assessed are likely to occur. The locations are presented in Appendix C Figures 1 to 3 and further details are presented in Annex A.2.

3.27 For each SAC, the receptors are situated at the closest point to the road within the SAC, and spaced every 10m within the transects, up to 200m from the roadside. All receptors are modelled at ground level (0m height).

3.28 The greatest impacts will generally occur where both the greatest change in traffic flows is expected and the SAC habitats lies closest to the road. This information has been used to select transect locations. The usual approach is to place a transect on a modelled link (sometimes having a transect either side of the road to account for differences in the dispersion of emissions due to meteorology), with each link being defined as a stretch of road between changes in emissions i.e. where there are changes in traffic flows and/or speeds.

3.29 The modelled transects presented in Appendix C Figure 1 to Figure 3 provide good coverage of the SACs, match the previously modelled transects in the 2022 assessment, and avoid modelling in areas where there is only woodland within 200m of the road. This is based on confirmation from Natural England that woodland is not an SAC interest feature, only a Site of Special Scientific Interest (SSSI) interest feature.

Model Setup

3.30 As detailed above, road traffic emissions of NO_x were derived using Defra's EFT v11 and associated guidance and tools (Defra, 2022). For the base year (2019), the nominal EFT "Basic Split" rural vehicle fleet for 2019 was used, whereas for all the future year (2040) scenarios, the 2040 projected fleet as described in the methodology above was used with the default 2030 EFT emission factors. Road traffic emissions of NH_3 were derived using emission rates CREAM V1A (Air Quality Consultants, 2020) combined with the EFT v11 vehicle fleet for the relevant year, using the same vehicle fleet methodology as described above for NO_X.

3.31 Detailed dispersion modelling was undertaken using the current version of ADMS-Roads (v5.0) to model concentrations of NO_x and NH_3 using the parameters in Table 2 for the following scenarios:

- 2019 Baseline – 2019 AADT, 2019 emission factors and 2019 "Basic Split" fleet, and 2019 background concentrations;
- 2040 Future Baseline – 2019 AADT, 2030 emission factors (latest available year), 2040 projected vehicle fleet, and 2030 background concentrations (the latest projected year available from Defra);
- 2040 Do Minimum – 2040 AADT without Local Plan but with all committed development, 2030 emission factors, 2040 projected vehicle fleet, and 2030 background concentrations; and
- 2040 Do Something – 2040 AADT with Local Plan and all committed development using 2030 emission factors, 2040 projected vehicle fleet, and 2030 background concentrations.

3.32 A baseline year was modelled, using 2019 traffic data although it was not possible to undertake a model verification exercise due to a lack of suitable monitoring in the model domain. To support the assessment of the potential impact of the planned development in the Local Plan scenarios,

a ‘future baseline’ and future year ‘do minimum’ scenario were modelled. The ‘do minimum’ scenario includes the influence of development in neighbouring local authorities, whereas the ‘future baseline’ does not.

3.33 The future baseline is a hypothetical scenario as it applies improvements in vehicle emissions standards to the baseline vehicle fleet without allowing for any traffic growth. However, such an approach enables the ‘in combination’ effect of development and traffic growth to be seen unobscured by improvements in emissions technology / performance.

3.34 The difference between the ‘do something’ and the ‘do minimum’ scenarios provides the impact of the planned development within the Local Plan, alone. The difference between the ‘do something’ and the ‘future baseline’ scenarios provides a thorough and precautionary assessment of the impact of the planned development within the Local Plan ‘in combination’, as the ‘future baseline’ accounts for no future growth.

Table 2: General ADMS-Roads Model Conditions

Variables	ADMS-Roads Model Input
Surface roughness at source	0.5m
Surface roughness at Meteorological Site	0.2m
Minimum Monin-Obukhov length for stable conditions	30m
Terrain types	Flat
Receptor location	x, y coordinates determined by GIS, z = 0m for ecological receptors.
Emissions	NO_x – Defra’s EFT v11 NH_3 – CREAM V1A
Meteorological data	1 year (2019) hourly sequential data from Linton-on-Ouse meteorological station.
Receptors	Ecological transects
Model output	Long-term (annual) mean NO_x and NH_3 concentrations.

Plume Depletion

3.35 Plume depletion due to dry deposition onto vegetation was taken into account in the model. This was enabled by using the ADMS-Roads ‘Dry Deposition’ module, applying the ‘grassland’ deposition rates presented in the Air Quality Technical Advisory Group (AQTAG) deposition velocities that are cited in 2020 IAQM guidance (IAQM, 2020), as shown in Table 3.

3.36 The deposition velocity for NO_2 was applied to raw modelled NO_x. This assumes that 100% of NO_x is emitted as NO_2, and therefore represents an optimistic depletion of NO_x from the atmosphere.

Table 3: Nitrogen Deposition Velocities and Conversion Rates

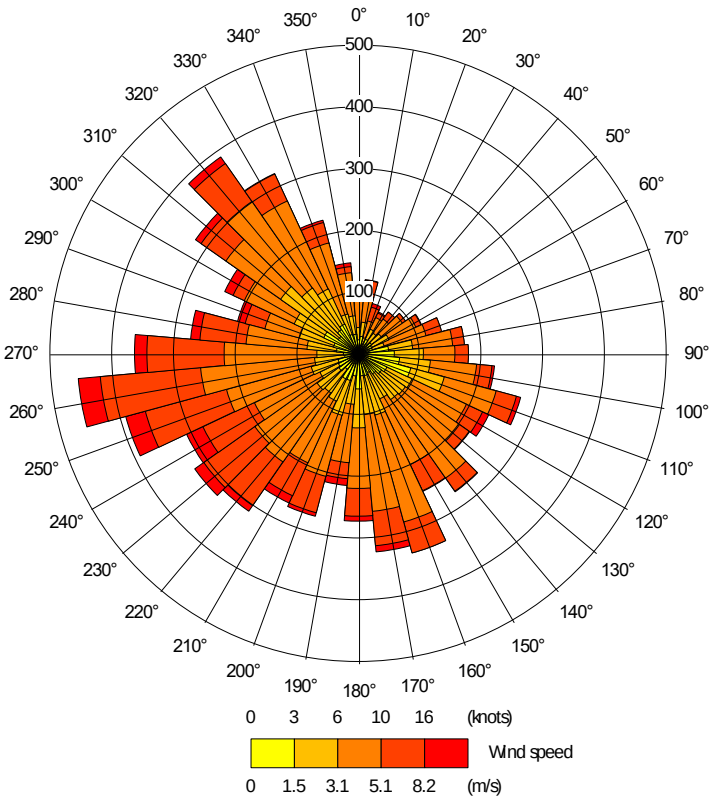
Pollutant	Habitat	Nitrogen deposition conversion rates	Deposition velocity
NO_2	Grassland / short vegetation	1 µg/m^3 NO_2 = 0.14 kgN/ha/yr	0.0015 m/s
NH_3	Grassland / short vegetation	1 µg/m^3 NH_3 = 5.2 kgN/ha/yr	0.020 m/s

Meteorological Data

3.37 One year (2019) of hourly sequential observation data from Linton-on-Ouse meteorological station has been used in this assessment to correspond with the baseline traffic data and emission factors. The station is located approximately 30km north-west of the study area and

experiences meteorological conditions that are representative of those experienced within the air quality study area. Appendix C Figure 4 shows that the dominant direction of wind was from the west/south-west, as is typical for the UK.

Appendix C Figure 4: Wind Rose, Linton-on-Ouse Meteorological Data, 2019



Background Data

3.38 Background concentrations of nitrogen dioxide (NO_2) and NO_x for 2019 and 2030 were sourced from Defra's 2018-based 1x1km background maps in the study area (Defra, 2020a).

3.39 It was decided to not remove explicitly modelled source sectors from the NO_2 and NO_x background concentrations, in order to align with the previous assessment and to give a worst-case assessment. The data presented in Table 4 show that the concentrations are predicted to decrease between 2019 and 2030, and that NO_2 concentrations are well below the annual mean objective value of 40 µg/m³.

3.40 The NH_3 background concentrations from APIS are presented in Table 5.

Table 4: Defra Mapped Background Pollutant Concentrations

Transects	Road Name	Grid Square (X, Y)	Annual Mean Concentrations (µg/m³)			
			2019 NO_2	2019 NO_x	2030 NO_2	2030 NO_x
E01	York Road	467500, 438500	6.4	8.2	5.0	6.2
E02a	A163	470500, 436500	6.7	8.6	5.2	6.5
E02b	A163	470500, 436500	6.7	8.6	5.2	6.5
E02c	A163	470500, 436500	6.7	8.6	5.2	6.5
E03a	A63 Hull Road	470500, 430500	7.4	9.6	5.6	7.1
E03b	A63 Hull Road	470500, 430500	7.4	9.6	5.6	7.1
E04a	A63 Knedlington Road	473500, 426500	9.4	12.3	6.8	8.6
E04b	A614 Boothferry Road	473500, 426500	9.4	12.3	6.8	8.6
E05a	M62	473500, 425500	12.3	16.3	8.0	10.4
E05b	M62	473500, 425500	12.3	16.3	8.0	10.4

Note: Modelled source sectors have not been removed from the total background.

Ecological Data

3.41 APIS provides 'a searchable database and information on pollutants and their impacts on habitats and species'. For each of the four SACs assessed, data for the appropriate habitat have been applied for each receptor along each transect in the study. Data applicable to short vegetation or grassland was used for all transects in each of the SACs considered. This includes critical loads of nitrogen and the average nitrogen and acid deposition rates to the habitat, as presented in Table 5. Note that Critical Load range estimates for N and acid deposition are not available for habitats within the River Derwent SAC (transects E03a/b).

3.42 Background concentrations of ammonia were also sourced from 5x5 km modelled maps available from APIS, whereas background concentrations of NO_x and NO_2 were sourced from Defra's latest 1x1 km maps, thereby accounting for all sources that are not explicitly defined in the model.

3.43 In order to create a robust and scientifically agreed projection for background nitrogen deposition trends in the UK, even allowing for growth, the Joint Nature Conservation Committee (JNCC) commissioned the Nitrogen Futures project, which reported in 2020 (JNCC, 2020). The JNCC Nitrogen Futures project investigated whether a net improvement in nitrogen deposition (including expected development over the same period) was expected to occur to 2030 under a range of scenarios ranging from the most cautious scenario (Business As Usual, BAU, reflecting simply existing emission reduction commitments /measures already in place) to much more ambitious scenarios that would require varying amounts of additional, currently uncommitted, measures from the UK government and devolved administrations.

3.44 The report concluded that *'The scenario modelling predicts a substantial decrease in risk of impacts on sensitive vegetation by 2030, under the most likely future baseline [a scenario called '2030 NAPCP+DA (NECR NO_x)']. This is estimated to achieve the UK Government's Clean Air Strategy (CAS) target for England, defined as a 17% decrease in total reactive N deposition onto protected priority sensitive habitats, with a predicted 18.9% decrease [for England] from a 2016 base year'*. The report predicted a fall in nitrogen deposition by 2030 under every modelled scenario, including the most cautious (2030 BAU). For the BAU scenario nitrogen deposition was forecast to decrease between 2017 and 2030 from 277.1 kt N to 239.5 kt N (i.e. a reduction of 37.6 kt N).

3.45 Background nitrogen deposition at Ashdown Forest was specifically discussed in Annex 5 of the report as a case study. The report predicted a 1-2 kgN/ha/yr reduction in background nitrogen deposition to low growing vegetation (i.e. the heathland interest feature) at the SAC between 2016 and 2030, depending on scenario, and noted that *'The emission reductions predicted between the 2017 and 2030 baseline scenarios cover a range of sectors, including road transport,*

and so improvements are predicted to occur over the whole site, including the worst-affected roadside locations'. This was the case under all modelled scenarios.

3.46 In summary, the Nitrogen Futures study forecast a minimum rate of improvement in background nitrogen of 0.07 kgN/ha/yr at Ashdown Forest, with other forecasts indicating a greater rate of reduction. In line with the forecast for Ashdown Forest, and therefore taking a precautionary approach, this study applies a projected decrease in background nitrogen of 0.07 kgN/ha/yr. The corresponding decrease is also reflected in the total average acid deposition rate for nitrogen in the future scenarios (reduction of 0.065 keq/ha/yr N.).

3.47 Over the 21-year period, this equates to a reduction in the APIS background nitrogen deposition rate presented in Table 5 (3-year average, 2019-21) of 1.47 kg N/ha/yr for the 2040 model scenarios. This decrease is also reflected in the total average acid deposition rate for nitrogen in the 2040 scenarios (reduction of 0.105 keq/ha/yr N).

3.48 No other changes to the APIS data have been made from those presented (3-year average, 2019-21) for any modelled scenario.

3.49 Not to make *any* allowance for improvements in emission factors or background concentrations would result in increased emissions and hence concentrations over the plan period as an increased number of vehicles is expected on the roads. This is not expected to occur as can be seen from previous long-term trends in the UK, which show slowing of improvements over extended periods, not worsening. Historical records (e.g., Defra monitoring trends) show that as increased vehicles enter the fleet that these increases are offset by the improvements in the emissions of the newer vehicles and the removal of older vehicles.

3.50 In 2018 the Court of Justice of the European Union (CJEU) ruled in cases C-293/17 and C-294/17 (often dubbed the Dutch Nitrogen cases). One aspect of that ruling concerned the extent to which autonomous measures (i.e., improvements in baseline nitrogen deposition that are not attributable to the Local Plan) can be taken into account in appropriate assessment, the CJEU ruled that it ***was*** legally compliant to take such autonomous measures into account provided the benefits were not 'uncertain' (paragraphs 130&132). Note that previous case law on the interpretation of the Habitats Directive has clarified that 'certain' does not mean absolute certainty but '*where no reasonable scientific doubt remains'*[4] [emphasis added].

3.51 The forecasts for improvements in NO_x emission factors, background concentrations and background deposition rates used in this report are considered to be realistic and have the requisite level of certainty. This is because a) data are used and to a large extent they build upon established historic trends in NO_x and oxidised nitrogen deposition and b) for total nitrogen deposition they are based on a cautious use of evidenced central government forecasts associated with uptake of technology that has either already been introduced or is widely expected within the professional community to be introduced and effective before 2030, as illustrated in the Nitrogen Futures project:

- When it comes to forecasting the NO_x emissions of additional traffic, it would overestimate those emissions to assume that by 2040 the emission factors will be no different to those in 2019; to make such an assumption would be to fail to take account of the expected continued uptake of Euro 6 compliant vehicles between 2019 and 2040 and would assume (putting it simply) that no motorists would replace their cars during the entire plan period. For example, the latest (Euro 6/VI) emissions standard only became mandatory in 2014 (for heavy duty vehicles) and 2015 (for cars) and the effects will not therefore be visible in the data available from APIS because relatively few people will have been driving vehicles compliant with that standard as early as 2019. Far more drivers can be expected to be using Euro 6 compliant vehicles by the end of the Local Plan period.
- The vehicle emission factors within the air quality modelling tools available only project out to 2030. While the fuel technology is projected out to 2040 following the DfT decarbonisation pathway, as described earlier, the breakdown of euro classifications published in the EFT extends to 2030, and so the 2040 assessment year does not recognise continued uptake of

[4] Case C-239/04 Commission v Portugal [2006] ECR 10183, para. 24; Holohan et al vs. An Bord Pleanála (C-461/17), para. 33

more stringent emissions standards. Therefore, the results are likely to be cautious in terms of emissions related to vehicle age.

Table 5: APIS Data for Ecological Transects for 2019-2021

Transect	Av. N Dep kgN/ha/yr[$]	Critical Load N Dep kgN/ha/yr	Total Av. Acid Dep keq/ha/yr N[$]	Critical Load N Acid Dep keq/ha/yr MaxCLMinN-MaxCLMaxN	Background NH_3 (µg/m^3)*
E01	17.1	5 – 15	1.2	0.80 - 0.64	2.1
E02a	17.6	10 – 20	1.3	4.86 - 0.86	2.2
E02b	17.6	10 – 20	1.3	4.86 - 0.86	2.2
E02c	17.6	10 – 20	1.3	4.86 - 0.86	2.2
E03a	16.8	-	1.2	-	2.1
E03b	16.8	-	1.2	-	2.1
E04a	16.8	5 - 10	1.2	4.86 - 0.86	2.0
E04b	16.8	5 - 10	1.2	4.86 - 0.86	2.0
E05a	16.6	5 - 10	1.2	4.86 - 0.86	2.0
E05b	16.6	5 - 10	1.2	4.86 - 0.86	2.0

Notes: Critical Load data for N and acid deposition were not available for River Derwent SAC (E03a/b transects).
[$] Average nitrogen deposition rate (kgN/ha/yr) projected to decrease by 1.47 kgN/ha/yr from base year to future year (i.e. 0.07 x 21 years = 1.47 kgN/ha/yr). This results in a corresponding decrease in acid deposition of 0.10 keq/ha/yr N.
* Average 2019 NH_3 background concentration applied in modelling assessment = 2.1 µg/m^3

Verification

3.52 Model verification is the process by which the performance of the model is assessed to identify any discrepancies between modelled and measured concentrations at air quality monitoring sites within the study area.

3.53 While there are local air quality monitoring locations located near to transects E04a/b, these are situated beyond the traffic model domain, and have therefore not been used to make an explicit comparison between modelled and measured concentrations. The monitored concentrations at roadside locations in the vicinity of the model domain have, however, been compared to modelled concentrations near the road along nearby transects, and have been considered when deciding on a verification factor to use. Verification factors of 2.5 for NO_X and 1.0 for NH_3 have thus been applied to the modelled concentrations, based upon professional judgement and previous project experience to verify and validate the EFT and CREAM tools.

Deposition velocities

3.54 Deposited nitrogen from road traffic derived NH_3 and NO_2 was estimated using the deposition velocities presented in Table 3. The conversion rates were applied to the final modelled NO_2 and NH_3 concentrations from road traffic, to provide kgN/ha/year. All of the transects across the four SACs considered were modelled and analysed as heathland / grassland i.e. ‘short vegetation’ was used at all locations.

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5. Annexes

Traffic Data

Link	SAC	Transect	2019 Base AADT	2019 Base HDV %	2019 Base Speed (kph)	2040 DM AADT	2040 DM HDV %	2040 DM Speed (kph)	2040 DS AADT	2040 DS HDV %	2040 DS Speed (kph)
York Road	Skipwith Common	E01	1,977	0.8%	66	2,396	0.7%	66	2,467	0.8%	66
A163	Lower Derwent Valley	E02a, E02b, E02c	4,576	7.1%	81	5,651	5.2%	81	5,867	4.9%	81
A63 Hull Road	River Derwent	E03a, E03b	9,363	5.6%	89	11,285	4.3%	88	11,963	4.1%	87
A614 Boothferry Road	Humber Estuary	E04a	10,456	4.6%	72	12,323	4.9%	69	12,622	5.1%	68
A63 Knedlington Road	Humber Estuary	E04a	11,046	6.9%	70	13,731	5.4%	68	14,558	5.2%	67
A614 Boothferry Road	Humber Estuary	E04a, E04b	13,508	7.0%	54	13,711	6.3%	52	13,743	6.3%	53
M62	Humber Estuary	E05a, E05b	71,481	10.7%	108	84,744	10.1%	106	85,947	10.0%	106

Modelled Ecological Receptor Locations

Transect E01	X co-ordinate (m)	Y co-ordinate (m)
E01_0m	467134	438147
E01_10m	467128	438139
E01_20m	467122	438131
E01_30m	467116	438123
E01_40m	467110	438115
E01_50m	467104	438107
E01_60m	467098	438099
E01_70m	467092	438091
E01_80m	467085	438083
E01_90m	467079	438076
E01_100m	467073	438068
E01_110m	467067	438060
E01_120m	467061	438052
E01_130m	467055	438044
E01_140m	467049	438036
E01_150m	467043	438028
E01_160m	467036	438020
E01_170m	467030	438012
E01_180m	467024	438004
E01_190m	467018	437997
E01_200m	467012	437989

Transect E02a	X co-ordinate (m)	Y co-ordinate (m)	Transect E02b	X co-ordinate (m)	Y co-ordinate (m)
E02a_0m	470822	436444	E02b_0m	470616	436422
E02a_10m	470821	436454	E02b_10m	470613	436413
E02a_20m	470821	436464	E02b_20m	470610	436404
E02a_30m	470820	436474	E02b_30m	470607	436394
E02a_40m	470819	436484	E02b_40m	470604	436384
E02a_50m	470819	436494	E02b_50m	470601	436375
E02a_60m	470818	436504	E02b_60m	470598	436365
E02a_70m	470818	436514	E02b_70m	470595	436356
E02a_80m	470817	436524	E02b_80m	470592	436346
E02a_90m	470816	436534	E02b_90m	470589	436337
E02a_100m	470816	436544	E02b_100m	470586	436327
E02a_110m	470815	436554	E02b_110m	470583	436318
E02a_120m	470815	436564	E02b_120m	470580	436308

E02a_130m	470814	436574	E02b_130m	470576	436299
E02a_140m	470813	436584	E02b_140m	470573	436289
E02a_150m	470813	436594	E02b_150m	470570	436280
E02a_160m	470812	436604	E02b_160m	470567	436270
E02a_170m	470812	436614	E02b_170m	470564	436261
E02a_180m	470811	436624	E02b_180m	470561	436251
E02a_190m	470811	436634	E02b_190m	470558	436241
E02a_200m	470810	436644	E02b_200m	470555	436232

Transect E02c	X co-ordinate (m)	Y co-ordinate (m)
E02c_0m	470426	436475
E02c_10m	470423	436465
E02c_20m	470421	436456
E02c_30m	470418	436446
E02c_40m	470416	436436
E02c_50m	470413	436427
E02c_60m	470411	436417
E02c_70m	470408	436407
E02c_80m	470406	436398
E02c_90m	470403	436388
E02c_100m	470401	436378
E02c_110m	470398	436369
E02c_120m	470396	436359
E02c_130m	470393	436349
E02c_140m	470391	436340
E02c_150m	470388	436330
E02c_160m	470386	436320
E02c_170m	470383	436311
E02c_180m	470380	436301
E02c_190m	470378	436291
E02c_200m	470375	436282

Transect E03a	X co-ordinate (m)	Y co-ordinate (m)	Transect E03b	X co-ordinate (m)	Y co-ordinate (m)
E03a_2.5m	470581	430088	E03b_3m	470325	430103
E03a_10m	470583	430095	E03b_10m	470325	430096
E03a_20m	470587	430105	E03b_20m	470325	430086
E03a_30m	470590	430114	E03b_30m	470325	430076
E03a_40m	470594	430123	E03b_40m	470325	430066
E03a_50m	470598	430133	E03b_50m	470325	430056

E03a_60m	470601	430142	E03b_60m	470325	430046
E03a_70m	470605	430151	E03b_70m	470325	430036
E03a_80m	470608	430161	E03b_80m	470325	430026
E03a_90m	470612	430170	E03b_90m	470325	430016
E03a_100m	470616	430179	E03b_100m	470325	430006
E03a_110m	470619	430189	E03b_110m	470325	429996
E03a_120m	470623	430198	E03b_120m	470325	429986
E03a_130m	470626	430207	E03b_130m	470325	429976
E03a_140m	470630	430217	E03b_140m	470325	429966
E03a_150m	470633	430226	E03b_150m	470325	429956
E03a_160m	470637	430235	E03b_160m	470325	429946
E03a_170m	470641	430245	E03b_170m	470325	429936
E03a_180m	470644	430254	E03b_180m	470325	429926
E03a_190m	470648	430264	E03b_190m	470325	429916
E03a_200m	470651	430273	E03b_200m	470325	429906

Transect E04a	X co-ordinate (m)	Y co-ordinate (m)	Transect E04b	X co-ordinate (m)	Y co-ordinate (m)
E04a_63m	473497	426366	E04b_1.5m	473325	426177
E04a_70m	473497	426359	E04b_10m	473333	426177
E04a_80m	473497	426349	E04b_20m	473343	426177
E04a_90m	473497	426339	E04b_30m	473353	426177
E04a_100m	473497	426329	E04b_40m	473363	426177
E04a_110m	473497	426319	E04b_50m	473373	426177
E04a_120m	473497	426309	E04b_60m	473383	426177
E04a_130m	473497	426299	E04b_70m	473393	426177
E04a_140m	473497	426289	E04b_80m	473403	426177
E04a_150m	473497	426279	E04b_90m	473413	426177
E04a_160m	473497	426269	E04b_100m	473423	426177
E04a_170m	473497	426259	E04b_110m	473433	426177
E04a_180m	473497	426249	E04b_120m	473443	426177
E04a_190m	473497	426239	E04b_130m	473453	426177
E04a_200m	473497	426229	E04b_140m	473463	426177
			E04b_150m	473473	426177
			E04b_160m	473483	426177
			E04b_170m	473493	426177
			E04b_180m	473503	426177
			E04b_190m	473513	426177
			E04b_200m	473523	426177

Transect E05a	X co-ordinate (m)	Y co-ordinate (m)	Transect E05b	X co-ordinate (m)	Y co-ordinate (m)
E05a_5m	473961	425839	E05b_5m	473995	425813
E05a_10m	473957	425842	E05b_10m	474000	425810
E05a_20m	473949	425848	E05b_20m	474008	425805
E05a_30m	473942	425854	E05b_30m	474016	425799
E05a_40m	473934	425860	E05b_40m	474024	425794
E05a_50m	473926	425866	E05b_50m	474033	425788
E05a_60m	473918	425873	E05b_60m	474041	425782
E05a_70m	473910	425879	E05b_70m	474049	425777
E05a_80m	473902	425885	E05b_80m	474058	425771
E05a_90m	473894	425891	E05b_90m	474066	425766
E05a_100m	473886	425897	E05b_100m	474074	425760
E05a_110m	473879	425903	E05b_110m	474082	425755
E05a_120m	473871	425910	E05b_120m	474091	425749
E05a_130m	473863	425916	E05b_130m	474099	425743
E05a_140m	473855	425922	E05b_140m	474107	425738
E05a_150m	473847	425928	E05b_150m	474116	425732
E05a_160m	473839	425934	E05b_160m	474124	425727
E05a_170m	473831	425940	E05b_170m	474132	425721
E05a_180m	473823	425947	E05b_180m	474140	425715
E05a_190m	473815	425953	E05b_190m	474149	425710
E05a_200m	473808	425959	E05b_200m	474157	425704

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