

Habitats Regulations Assessment of the Sandwell Local Plan

Issues and Options Consultation Preliminary HRA Report

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LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

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Abbreviations

AA	Appropriate Assessment
AADT	Annual Average Daily Traffic
ANGSt	Accessible Natural Greenspace Standards
AP	Assessment Point
APIS	Air Pollution Information System
BCCS	Black Country Core Strategy
BCP	Black Country Plan
CAMS	Catchment Abstraction Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CJEU	Court of Justice of the European Union
CSMG	UK Common Standards for Monitoring Guidance
DLUHC	Department for Levelling Up, Housing and Communities
DMRB	Design Manual for Roads and Bridges
DTA	David Tyldesley and Associates
EA	Environment Agency
GI	Green Infrastructure
HDV	Heavy Duty Vehicles
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management
IRZ	Impact Risk Zone
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
LPA	Local Planning Authority
LSE	Likely Significant Effect
NE	Natural England
NPPF	National Planning Policy Framework
pSAC	Possible / proposed Special Area of Conservation
pSPA	Potential Special Protection Area
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SIP	Site Improvement Plan
SLP	Sandwell Local Plan
SMBC	Sandwell Metropolitan Borough Council
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Urban Drainage
WFD	Water Framework Directive
SLP	Wolverhampton Local Plan
WRMP	Water Resources Management Plan
WRZ	Water Resource Zone
WwTW	Wastewater Treatment Works
ZoI	Zone of Influence

1 Introduction

1.1 Sandwell Local Plan

- 1.1.1 Sandwell Metropolitan Borough Council (SMBC) is working to produce a new Sandwell Local Plan (SLP) to cover their geographical area.
- 1.1.2 Sandwell is a metropolitan borough covering approximately 8,556ha, located within the Black Country, which is a predominantly urban sub-region of the West Midlands. The sub-region also includes the boroughs of Dudley, Walsall and the City of Wolverhampton. **Figure 1.1** shows the administrative boundary of Sandwell, which comprises the plan area for the SLP.
- 1.1.3 The SLP will include the overall strategy for development in Sandwell Borough, including a vision for the future, relevant objectives, site allocations and policies to deliver development to meet identified housing and employment needs, whilst striving to protect and enhance the environment and tackle climate change. At the time of writing, it is envisaged that the SLP will cover the period up to 2041.

1.2 Purpose of this report

- 1.2.1 Lepus Consulting has prepared this Preliminary Habitats Regulations Assessment (HRA) Report on behalf of SMBC (referred to hereafter as the Council) as part of the Issues and Options consultation stage (Regulation 18).
- 1.2.2 HRA is required in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended)¹, known as the Habitats Regulations. When a plan is not directly connected with, or necessary for, the conservation management of a Habitats site, a competent authority is required to carry out an assessment under the Habitats Regulations, known as an HRA, to test if that plan could significantly harm the designated features of a Habitats site².
- 1.2.3 The most effective way to deliver the outputs of HRA is to ensure that it is incorporated into the plan-making process as early as possible. This allows adverse impacts to be avoided in the first instance through strategic planning of options or, where this is not possible, effective mitigation. Mitigation measures can then be designed to avoid, cancel or reduce significant effects following the mitigation hierarchy. Such measures may take the form of guiding principles and policy requirements, drawing on existing best practice. Should mitigation not be possible, there may be a need to consider alternatives which may require some more complex changes to a plan.

¹ The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: <https://SLP.legislation.gov.uk/uksi/2017/1012/contents> [Date accessed: 24/01/23] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: <https://SLP.legislation.gov.uk/ukdsi/2019/9780111176573> [Date accessed: 24/01/23]

² Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment

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- 1.2.4 The purpose of this report is therefore to provide HRA guidance and advice to the Council at the early stages of the SLP preparation. This preliminary HRA aims to identify (or scope) those Habitats sites that will be considered in the HRA process through application of a 'source-pathway-receptor' model.
- 1.2.5 In addition, key constraints and opportunities at Habitats sites and likely pathways of impact from the SLP are set out. This report outlines HRA methodologies that will be taken forward alongside development of the SLP and the key issues for consideration. It also provides a preliminary screening of the issues considered through the SLP Issues and Options Consultation and recommendations to inform future policies.

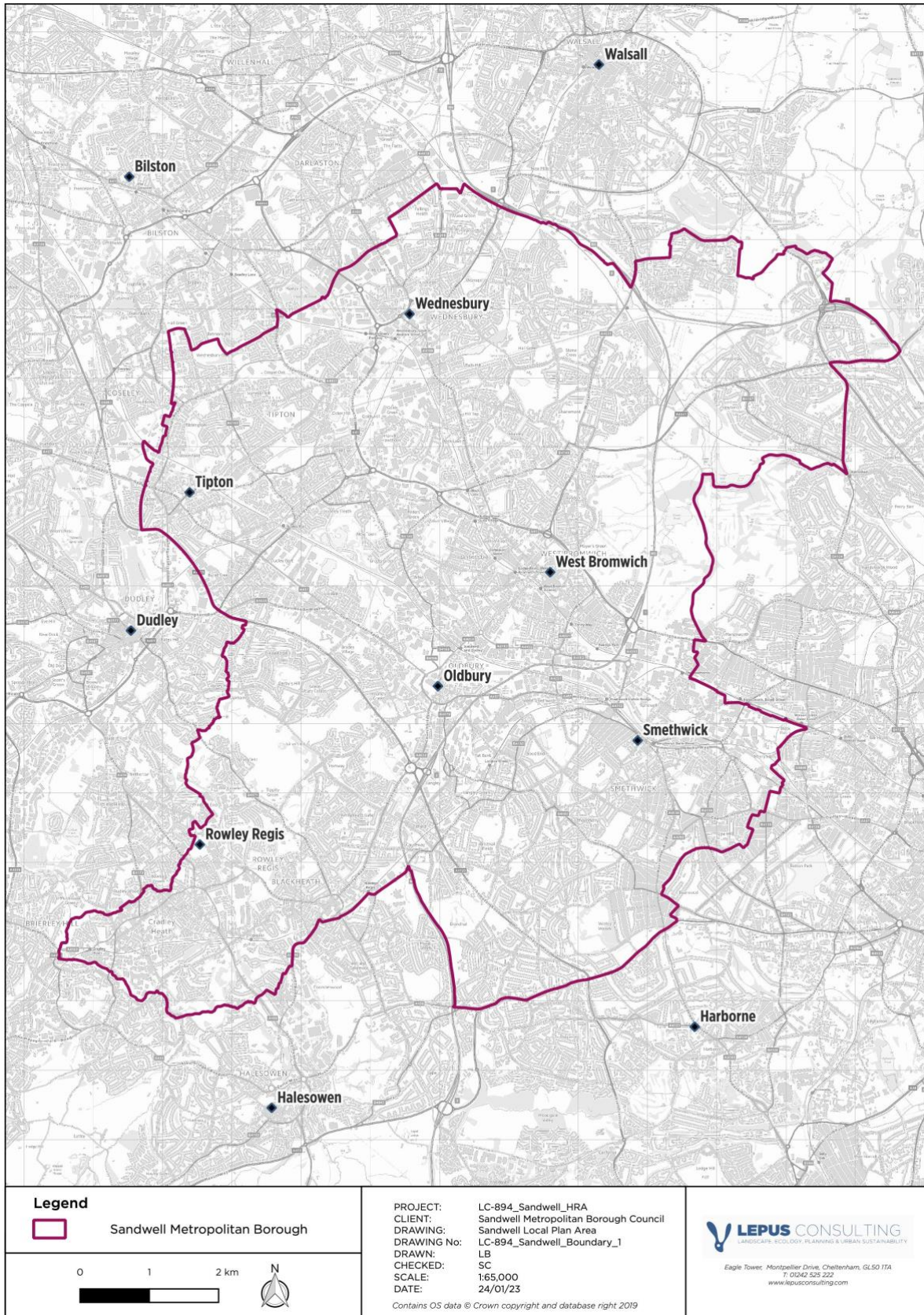


Figure 1.1: Sandwell Metropolitan Borough administrative area

2 The Sandwell Local Plan

2.1 Context

- 2.1.1 The SLP is being prepared by SMBC, after work ceased on the preparation of the Black Country Plan (BCP) in autumn 2022. The former BCP was being jointly produced by the four Black Country Authorities of Dudley Metropolitan Borough Council, Walsall Council, City of Wolverhampton Council and SMBC.
- 2.1.2 The SLP will seek to incorporate strategic policies, adapted from those presented in the draft BCP, to ensure that the SLP provides appropriate guidance at both the strategic and locally specific levels.
- 2.1.3 Once adopted, the SLP will form part of the statutory development plan for the borough covering a minimum of 15 years, replacing and updating the currently adopted Black Country Core Strategy (BCCS)³, Sandwell Site Allocation and Delivery Development Plan Document (SAD)⁴, and various Area Action Plans which cover the period from 2006 to 2026.
- 2.1.4 The new SLP will comprise a review of policies contained within the currently adopted local plan documents, as well as policies and evidence base documents prepared as part of the former BCP, taking into consideration the latest planning policy and practice guidance. The SLP will:
- Set out a long-term vision and objectives;
 - Provide a strategy for growth, new homes, employment, facilities and infrastructure to meet the area's needs; and
 - Include policies to manage change while protecting and enhancing the area's heritage and natural environment.

2.2 Progress to date

- 2.2.1 The SLP is currently at the plan making phase known as 'Issues and Options', which is the first consultation stage for the SLP process. Through the Issues and Options Consultation, the Council are seeking to involve local people, businesses and stakeholders in identifying what the emerging SLP should address.
- 2.2.2 An Issues and Options consultation document has been prepared by SMBC, which identifies key issues for the borough under a series of specific topic areas. A series of questions have been identified relating to each of the topic areas, whereby SMBC are seeking to gather views from consultees to help shape the emerging SLP.

³ Black Country Authorities (2011) Black Country Core Strategy. Available at: <https://blackcountryplan.dudley.gov.uk/t1/p2/> [Date accessed: 24/01/23]

⁴ Sandwell Metropolitan Borough Council (2012) Site Allocations and Delivery Development Plan Document. Available at: https://www.sandwell.gov.uk/info/200275/planning_and_buildings/676/site_allocations_and_delivery_development_plan_document [Date accessed: 24/01/23]

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- 2.2.3 The SLP Issues and Options document is intended to identify matters where SMBC feels more specific consideration is needed in a Sandwell context, and to get the broad views of local communities and stakeholders on issues of importance to them. It does not set out any policies, sites or development strategy options for consideration and this stage.
- 2.2.4 Subsequent stages of the local plan process will identify more detailed policies and site options.
- 2.2.5 This HRA has been undertaken based on the content of the Sandwell Local Plan Issues and Options Review Public Consultation document (Regulation 18).

3 The HRA process

3.1 Overview

3.1.1 The HRA process assesses the potential effects of a plan or project on the conservation objectives of sites designated under the Habitats⁵ and Birds⁶ Directives. These sites form a system of internationally important sites throughout Europe known collectively as the 'Natura 2000 Network'.

3.1.2 The Habitats Regulations⁷ provide a definition of a 'European site' at Regulation 8. These sites include Special Areas of Conservation (SAC), Sites of Community Importance, Special Protection Areas (SPA) and sites proposed to the European Commission in accordance with Article 4(1) of the Habitats Directive. Following Brexit, UK sites which were part of the Natura 2000 Network before leaving the EU have become part of the National Site Network.

3.1.3 In addition, policy in England and Wales notes that the following sites should also be given the same level of protection as a European site⁸. European sites together with sites set out in national policy (listed below) are referred to in England and Wales as a Habitats site⁹. These include:

- A potential SPA (pSPA);
- A possible / proposed SAC (pSAC);
- Listed and proposed Ramsar Sites (Wetland of International Importance under the Ramsar Convention); and

⁵ Official Journal of the European Communities (1992). Council Directive 92 /43 /EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

⁶ Official Journal of the European Communities (2009). Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

⁷ Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: <https://SLP.legislation.gov.uk/ukxi/2017/1012/contents> [Date accessed: 24/01/23] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: <https://SLP.legislation.gov.uk/ukdsi/2019/9780111176573> [Date accessed: 24/01/23]

⁸ Ministry of Housing, Communities & Local Government (2021). National Planning Policy Framework. Para 181. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf [Date accessed: 24/01/23]

⁹ "Habitats site: Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites". Ministry of Housing, Communities & Local Government (2021). National Planning Policy Framework. Para 181. Available in Annex 2 (Glossary) at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf[Date accessed: 24/01/23]

- In England, sites identified or required as compensation measures for adverse effects on statutory European sites, pSPA, pSAC and listed or proposed Ramsar sites.
- 3.1.4 This report refers to both statutory sites and sites protected through national planning policy as a 'Habitats site' for ease of reference.
- 3.1.5 Regulation 63 of the Habitats Regulations notes a competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project, must make an appropriate assessment of the implications of the plan or project for that site in view of its site conservation objectives. These tests are referred to collectively as a Habitats Regulations Assessment (HRA).
- 3.1.6 HRA applies to plans or projects which are likely to have a significant effect on a Habitats site (either alone or in combination with other plans or projects), and / or are not directly connected with or necessary to the management of that site.
- 3.1.7 There is no set methodology or specification for carrying out and recording the outcomes of the assessment process. The Habitats Regulations Assessment Handbook, produced by David Tyldesley Associates (referred to hereafter as the 'DTA Handbook'), provides an industry recognised good practice approach to HRA. The DTA Handbook, and in particular 'Practical Guidance for the Assessment of Plans under the Regulations'¹⁰, which forms part F, has therefore been used to prepare this report, alongside reference to Government Guidance on Appropriate Assessment¹¹. The DTA Handbook is widely considered to be an appropriate basis for the HRA of plans.
- 3.1.8 A step-by-step guide to the methodology adopted in this assessment, as outlined in the DTA Handbook, is illustrated in **Figure 3.1**.

¹⁰ Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (September) (2013) edition UK: DTA Publications Limited. Available at: <https://www.dtapublications.co.uk/> [Date accessed: 24/01/23]

¹¹ Department for Levelling Up, Housing & Communities and Ministry of Housing, Communities & Local Government (2019) Government Guidance on Appropriate Assessment. July 2019. Guidance on the use of Habitats Regulations Assessment. Available at: <https://slp.gov.uk/guidance/appropriate-assessment> [Date accessed: 24/01/23]

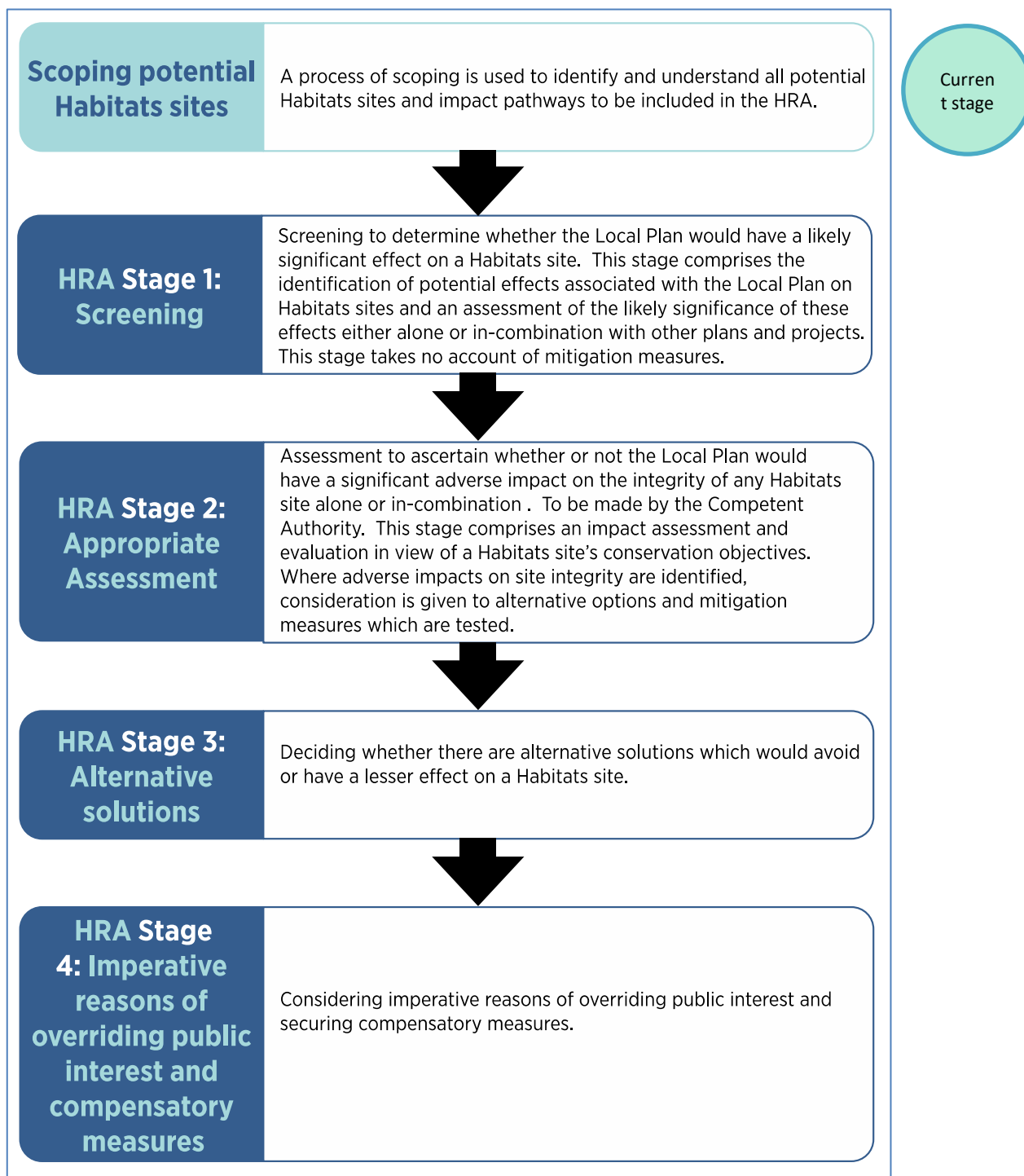


Figure 3.1: Stages in the Habitats Regulations Assessment process¹²

¹² Based on the process outlined in Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (October) (2018) edition UK: DTA Publications Limited. Available at: www.dtapublications.co.uk [Date accessed: 24/01/23]

3.2 Previous HRA work

- 3.2.1 This HRA Report represents the first HRA output as part of the SLP process.
- 3.2.2 As part of the plan making process for the ceased BCP, which was being prepared by SMBC alongside the other Black Country Authorities, an HRA process was carried out. An Interim HRA to support the plan making process was prepared and consulted on alongside the draft BCP in 2021¹³.
- 3.2.3 The draft BCP contained a suite of proposed policies and site allocations which were screened in the Interim HRA to identify potential Likely Significant Effects (LSEs) of the BCP on Habitats sites. The HRA concluded that the BCP should be screened in for an Appropriate Assessment. Preparation of the BCP ceased in autumn 2022. No further HRA work was therefore undertaken in support of the BCP.

¹³ Lepus Consulting (2021) Habitats Regulations Assessment of the Black Country Plan: Interim HRA to support the plan making process. Regulation 18 Draft Plan Consultation 2020 – 2039, July 2021. Available at: https://blackcountryplan.dudley.gov.uk/media/18641/lc-600_black_coutry_interim_hra_report_11_060721sc-compressed.pdf [Date accessed: 26/01/23]

4 Methodology

4.1 Introduction

4.1.1 As noted in **section 1.2**, the application of HRA to land-use plans is a requirement of the Habitats Regulations. HRA applies to plans and projects, including all Local Development Documents in England and Wales.

4.1.2 This report has been informed by the following guidance:

- Planning Practice Guidance: Appropriate Assessment¹⁴; and
- The Habitat Regulations Assessment Handbook – DTA, 2013 (in particular Part F: '*Practical Guidance for the Assessment of Plans under the Regulations*').

4.2 HRA methodology

4.2.1 HRA is a rigorous precautionary process centred around the conservation objectives of a Habitats site's qualifying interests. It is intended to ensure that designated Habitats sites are protected from impacts that could adversely affect their integrity, as required by the Birds and Habitats Directives. A step-by-step guide to this methodology is outlined in the DTA Handbook and has been reproduced in **Figure 4.1**.

4.2.2 This chapter outlines the methodology that will be followed in the HRA of the SLP as the plan develops.

4.3 Stage 1: Screening for likely significant effects

4.3.1 The first stage in the HRA process comprises the screening stage. The purpose of the screening process is to firstly determine whether a plan is either (1) exempt (because it is directly connected with or necessary to the management of a Habitats site), (2) whether it can be excluded (because it is not a plan), or (3) eliminated (because there would be no conceivable effects), from the HRA process. If none of these conditions apply, it is next necessary to identify whether there are any aspects of the plan which may lead to likely significant effects at a Habitats site, either alone or in combination with other plans or projects.

4.3.2 Screening considers the potential 'significance' of adverse effects. Where elements of the Local Plan will not result in an LSE on a Habitats site (alone or in-combination) these are screened out and not considered in further detail in the process. The screening stage follows a number of steps which are outlined in **Figure 4.1**.

¹⁴ Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment

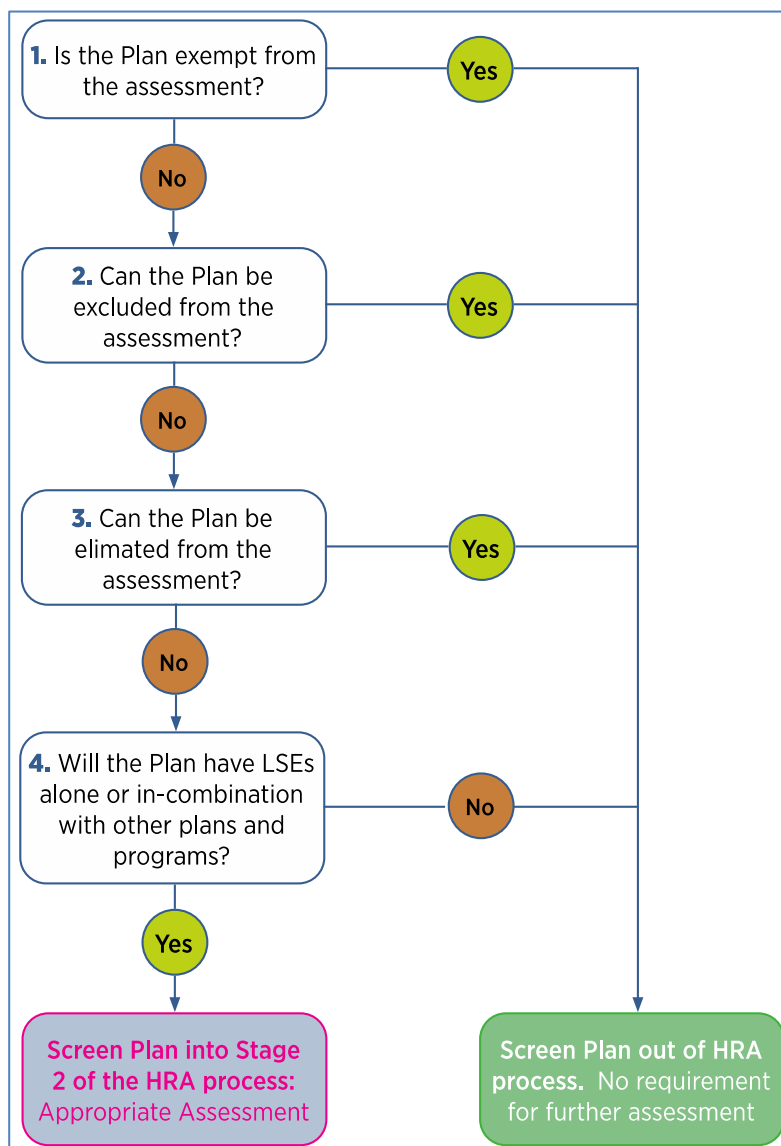


Figure 4.1: Outline of steps in stage 1: the HRA screening process

4.3.3 Pre-screening the components of a plan at an early stage of the plan-making process helps to minimise or avoid LSEs upon any Habitats site and as such improve the plan. The pre-screening process uses a number of evaluation codes to summarise whether or not a plan component is likely to have LSEs alone or in-combination (see **Table 4.1**) and inform the formal screening decision.

Table 4.1: Assessment and reasoning categories from Part F of the DTA Handbook

Assessment and reasoning categories from Chapter F of The Habitats Regulations Assessment Handbook (DTA Publications, 2013)¹⁵:

- A. General statements of policy / general aspirations.
- B. Policies listing general criteria for testing the acceptability / sustainability of proposals.
- C. Proposal referred to but not proposed by the plan.
- D. General plan-wide environmental protection / site safeguarding / threshold policies
- E. Policies or proposals that steer change in such a way as to protect European sites from adverse effects.
- F. Policies or proposals that cannot lead to development or other change.
- G. Policies or proposals that could not have any conceivable or adverse effect on a site.
- H. Policies or proposals the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in combination with other aspects of this or other plans or projects).
- I. Policies or proposals with a likely significant effect on a site alone.
- J. Policies or proposals unlikely to have a significant effect alone.
- K. Policies or proposals unlikely to have a significant effect either alone or in combination.
- L. Policies or proposals which might be likely to have a significant effect in combination.
- M. Bespoke area, site or case-specific policies or proposals intended to avoid or reduce harmful effects on a Habitats site.

4.4 What is a Likely Significant Effect?

4.4.1 HRA screening provides an analysis of LSEs identified during the HRA screening process. It considers the nature, magnitude and permanence of potential effects in order to inform the plan making process.

4.4.2 The DTA Handbook guidance provides the following interpretation of LSEs:

4.4.3 *"In this context, 'likely' means risk or possibility of effects occurring that cannot be ruled out on the basis of objective information. 'Significant' effects are those that would undermine the conservation objectives for the qualifying features potentially affected, either alone or in combination with other plans or projects ... even a possibility of a significant effect occurring is sufficient to trigger an 'appropriate assessment'".¹⁶*

4.4.4 With reference to the conservation status of a given species in the Habitats or Birds Directives, the following examples would be considered to constitute a significant effect:

- Any event which contributes to the long-term decline of the population of the species on the site;
- Any event contributing to the reduction, or to the risk of reduction, of the range of the species within the site; and

¹⁵ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook. December 2019 edition UK: DTA Publications Ltd, SLP.dtapublications.co.uk

¹⁶ Ibid

- Any event which contributes to the reduction of the size of the habitat of the species within the site.

4.4.5 Rulings from the 2012 'Sweetman'¹⁷ case provide further clarification:

4.4.6 *"The requirement that the effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill".*

4.4.7 Therefore, it is not necessary for the Council to show that the SLP will result in no effects whatsoever on any Habitats site. Instead, the Council are required to show that the Local Plan, either alone or in-combination with other plans and projects, will not result in an effect which undermines the conservation objectives of one or more qualifying features.

4.4.8 Determining whether an effect is significant requires careful consideration of the environmental conditions and characteristics of the Habitats site in question, as per the 2004 'Waddenzee'¹⁸ case:

4.4.9 *"In assessing the potential effects of a plan or project, their significance must be established in the light, inter alia, of the characteristics and specific environmental conditions of the site concerned by that plan or project".*

4.5 In-combination effects

4.5.1 Where screening concludes there are no LSEs from the SLP alone, it is next necessary to consider whether the effects of the policies in-combination with other plans and projects would combine to result in an LSE on any Habitats site. It may be that the SLP alone will not have a significant effect but could have a residual effect that may contribute to in-combination effects on a Habitats site.

4.5.2 The DTA Handbook¹⁹ notes that *"where an aspect of a plan could have some effect on the qualifying feature(s) of a European site, but that aspect of the plan alone are unlikely to be significant, the effects of that aspect of the plan will need to be checked in combination firstly, with other effects of the same plan, and then with the effects of other plans and projects".*

4.5.3 As such an in-combination assessment will be undertaken as part of the HRA process at both the screening stage (where no LSE are considered possible alone, but in-combination effects are likely) and at the Appropriate Assessment stage (where, following Appropriate Assessment and mitigation, an insignificant adverse effect is still likely which has the potential to act in-combination with other plans and projects).

¹⁷ Source: EC Case C-258-11 Reference for a Preliminary Ruling, Opinion of Advocate General Sharpston 'Sweetman' delivered on 22nd November 2012 (para 48)

¹⁸ Source: EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th Sept 2004 (para 48)

¹⁹ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook. December 2019 edition UK: DTA Publications Ltd, SLP.dtapublications.co.uk

- 4.5.4 Plans and projects which are considered to be of most relevance to the in-combination assessment of the Local Plan include those that have similar impact pathways. These include those plans and projects that have the potential to increase development in the HRA study area. In addition, other plans and projects with the potential to increase traffic across the study area which may act in-combination with the SLP, such as transport, waste and mineral plans and projects, have also been taken into consideration. Plans which allocate water resources or are likely to influence water quality in the study area have been considered. Finally, neighbouring authority local plans which may increase development related pressures at Habitats sites have also been considered.
- 4.5.5 The assessment of potential in-combination effects at screening has not resulted in additional impact pathways being screened in, however, several links between other plans and projects and the Local Plan have been identified for assessment in the HRA process.
- 4.5.6 It is recognised that the status of other plans and projects will change over the timescale of the SLP plan-making process. As such, and for the purposes of this stage of the HRA process, the following Local Planning Authority (LPA) local development plans will be considered in the HRA in-combination assessment. Alongside these local development plans, consideration will also be given to topic specific plans and projects including the local minerals and waste plans, transport plan and relevant river basin and Water Resource Management plans.
- Birmingham City Council;
 - Bromsgrove District Council;
 - City of Wolverhampton;
 - Dudley Metropolitan Borough Council;
 - Lichfield District Council;
 - North Warwickshire Borough Council;
 - Redditch Borough Council;
 - Solihull Metropolitan Borough Council;
 - South Staffordshire District Council;
 - Stratford-on-Avon District Council;
 - Tamworth Borough Council; and
 - Walsall Council.
- 4.5.7 The approach taken to the consideration of in-combination effects is compliant with the Wealden Judgement²⁰ which requires an in-combination approach that considers the development of neighbouring and nearby authorities when assessing likely significant effects.

²⁰ Wealden District Council & Lewes District Council before Mr Justice Jay. Available at: <http://SLP.bailii.org/ew/cases/EWHC/Admin/2017/351.html> [Date accessed: 24/01/23]

4.6 Consideration of mitigation measures

4.6.1 The European Court Judgement on the interpretation of the Habitats Directive in the case of People Over Wind and Sweetman vs Coillte Teoranta (Case C-323/17²¹) determined that mitigation measures are only permitted to be considered as part of an appropriate assessment.

4.6.2 It is therefore necessary to further define mitigation measures. The DTA Handbook notes that there are two types of measures as follows²²:

- *“Measures intended to avoid or reduce harmful effects on a European site; or*
- *Features or characteristics of a plan which are essential in defining the nature, scale, location, timing, frequency or duration of the plan’s proposals, or they may be inseparable aspects of the plan, without which an assessment of the plan could not properly be made, in the screening decision, even though these features or characteristics may incidentally have the effect of avoiding or reducing some or all of the potentially adverse effects of a plan”.*

4.6.3 The HRA screening process undertaken for the SLP will not take account of incorporated mitigation or avoidance measures that are intended to avoid or reduce harmful effects on a Habitats site when assessing the LSE of the SLP on Habitats sites. These are measures, which if removed (i.e. should they no longer be required for the benefit of a Habitats site), would still allow the lawful and practical implementation of a plan.

4.7 Stage 2: Appropriate Assessment and Integrity Test

4.7.1 Stage 2 of the HRA process comprises the Appropriate Assessment and Integrity Test. The purpose of the appropriate assessment (as defined by the DTA Handbook) is to *“undertake an objective, scientific assessment of the implications for the European site qualifying features potentially affected by the plan in light of their consideration objectives and other information for assessment”*²³.

4.7.2 As part of this process decision makers should take account of the potential consequences of no action, the uncertainties inherent in scientific evaluation and should consult interested parties on the possible ways of managing the risk, for instance, through the adoption of mitigation measures. Mitigation measures should aim to avoid, minimise or reduce significant effects on Habitats sites. Mitigation measures may take the form of policies within the Local Plan or mitigation proposed through other plans or regulatory mechanisms. All mitigation measures must be deliverable and be able to mitigate adverse effects for which they are targeted.

²¹ InfoCuria (2018) Case C-323/17. Available at:

<http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN> [Date accessed: 24/01/23]

²² Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook. November 2018 edition UK: DTA Publications Ltd, SLP.dtapublications.co.uk [Date accessed: 24/01/23]

²³ Tyldesley, D. (2013) The Habitats Regulations Assessment Handbook. DTA Publications.

- 4.7.3 The Appropriate Assessment will present information in respect of all aspects of the SLP and ways in which it could, either alone or in-combination with other plans and projects, affect a Habitats site.
- 4.7.4 The plan-making body (as the Competent Authority) must then ascertain, based on the findings of the Appropriate Assessment, whether the Local Plan will adversely affect the integrity of a Habitats site either alone or in-combination with other plans and projects. This is referred to as the Integrity Test.

4.8 Dealing with uncertainty

- 4.8.1 Uncertainty is an inherent characteristic of HRA, and decisions can be made only on currently available and relevant information. This concept is reinforced through the 7th of September 2004 'Waddenzee' ruling²⁴:
- 4.8.2 *"However, the necessary certainty cannot be construed as meaning absolute certainty since that is almost impossible to attain. Instead, it is clear from the second sentence of Article 6(3) of the habitats directive that the competent authorities must take a decision having assessed all the relevant information which is set out in particular in the appropriate assessment. The conclusion of this assessment is, of necessity, subjective in nature. Therefore, the competent authorities can, from their point of view, be certain that there will be no adverse effects even though, from an objective point of view, there is no absolute certainty".*

4.9 The Precautionary Principle

- 4.9.1 The HRA process is characterised by the precautionary principle. This is described by the European Commission as being:
- 4.9.2 *"If a preliminary scientific evaluation shows that there are reasonable grounds for concern that a particular activity might lead to damaging effects on the environment, or on human, animal or plant health, which would be inconsistent with protection normally afforded to these within the European Community, the Precautionary Principle is triggered".*

²⁴EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th September 2004 Advocate General's Opinion (para 107)

5 Habitats sites

5.1 Zone of influence

- 5.1.1 There is no guidance that defines the search area or zone of influence for the HRA process. Planning Practice Guidance for Appropriate Assessment indicates that²⁵:
- 5.1.2 *“The scope and content of an appropriate assessment will depend on the nature, location, duration and scale of the proposed plan or project and the interest features of the relevant site. ‘Appropriate’ is not a technical term. It indicates that an assessment needs to be proportionate and sufficient to support the task of the competent authority in determining whether the plan or project will adversely affect the integrity of the site”.*
- 5.1.3 Therefore, in order to determine a study area for the HRA, consideration has been given to the nature and extent of potential impact pathways from the SLP (see **Chapter 6**) and its relationship to Habitats sites. A 20km buffer from the SLP area has been applied. This is considered to provide a reasonable area of search within which the SLP could be considered to generate LSEs. In addition, pathways of impact, such as hydrological links, have been considered outside this 20km radius of search where applicable. Where impact pathways to Habitats sites have been identified these are considered further in the HRA.
- 5.1.4 The geographic extent of the SLP is shown in **Figure 1.1**. However, impacts at Habitats sites often take place outside administrative boundaries, for instance where residents travel to tourist destinations beyond an administrative area, or where Habitats sites are hydrologically connected to a plan area.

5.2 Identification of Habitats sites

- 5.2.1 Habitats sites to be assessed in this HRA report are identified in **Table 5.1**. The inclusion of sites has taken into consideration a review of pathways of impact as discussed in paragraph 5.1.3.

Table 5.1: Habitats sites for consideration in the HRA

Habitats site	Location in relation to the SLP administrative area
Cannock Chase SAC	Located outside the administrative area, approximately 17.2km to the north
Cannock Extension Canal SAC	Located outside the administrative area, approximately 8km to the north
Fens Pools SAC	Located outside the administrative area, approximately 3km to the west
Humber Estuary SAC	Located outside administrative area, approximately 139.7km to the north east
Humber Estuary SPA	Located outside administrative area, approximately 149.5km to the north east
Humber Estuary Ramsar	Located outside administrative area, approximately 139.7km to the north east
Severn Estuary SAC	Located outside administrative area, approximately 79km to the south west

²⁵ Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment. <https://slp.gov.uk/guidance/appropriate-assessment> [Date accessed: 25/01/23]

Habitats site	Location in relation to the SLP administrative area
Severn Estuary SPA	Located outside administrative area, approximately 79km to the south west
Severn Estuary Ramsar	Located outside administrative area, approximately 79km to the south west

5.2.2 **Figures 5.1** shows the location of the Severn Estuary and Humber Estuary Habitats sites in relation to the SLP boundary. **Figure 5.3** shows the location of Habitats sites within 20km of the SLP boundary.

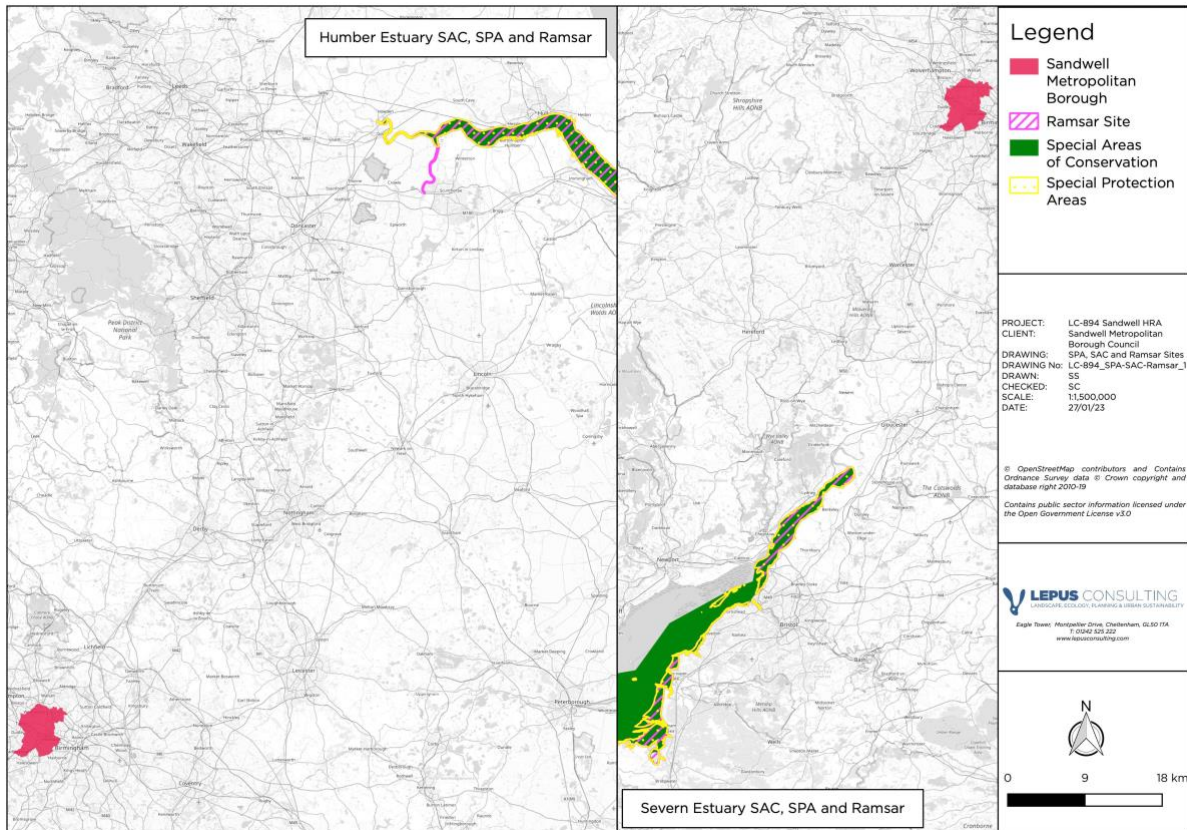


Figure 5.1: Location of the Humber Estuary and Severn Estuary designations in relation to the SLP area

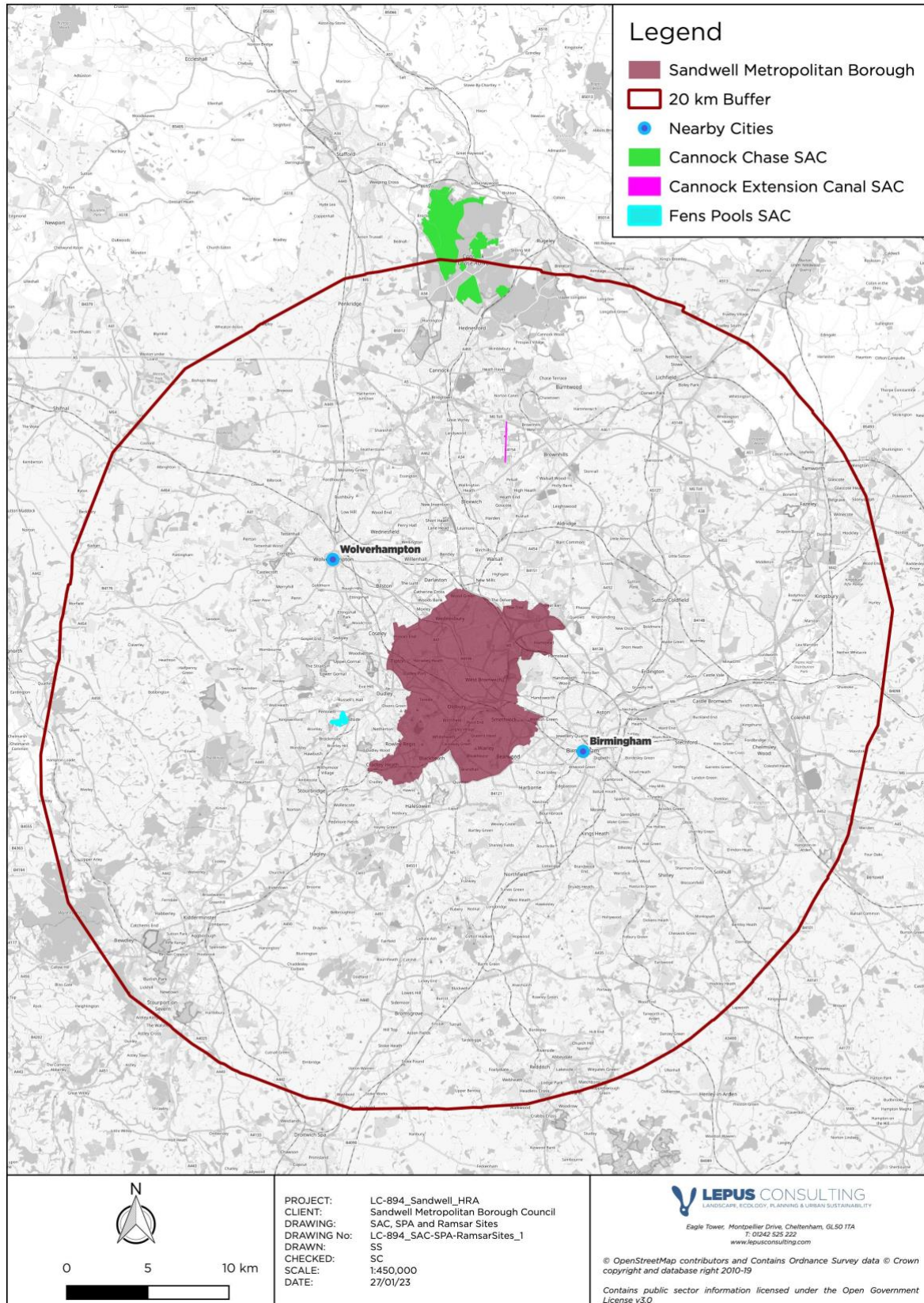


Figure 5.2: Habitats sites within 20km of the SLP area

- 5.2.3 Each Habitats site has its own intrinsic qualities, besides the habitats or species for which it has been designated, that enables the site to support the ecosystems that it does. An important aspect of this is that the ecological integrity of each site can be vulnerable to change from natural and human induced activities in the surrounding environment (known as pressures and threats (see **Chapter 6**)).
- 5.2.4 An intrinsic quality of any Habitats site is its functionality at the landscape ecology scale. This refers to how the site interacts with the zone of influence of its immediate surroundings, as well as the wider area. Adverse effects may also occur via impacts to mobile species occurring outside a designated site, but which are qualifying features of the site. For example, there may be effects on protected birds that use land outside the designated site for foraging, feeding, roosting or other activities.

5.3 Ecological information

- 5.3.1 The CJEU ruling in the Holohan case (C-461/17²⁶) confirmed that Appropriate Assessment should: (i) catalogue (i.e. list) all habitats and species for which the site is protected and (ii) include in its assessment other (i.e. non-protected) habitat types or species which are on the site and habitats and species located outside of the site if they are necessary to the conservation of the habitat types and species listed for the protected area.
- 5.3.2 The HRA process will fully consider the potential for effects on species and habitats. This includes those not listed as a qualifying feature for the Habitats site, but which may be important to achieving its conservation objectives. This ensures that the functional relationships underlying Habitats sites and the achievement of their conservation objectives are adequately understood.
- 5.3.3 **Appendix B** identifies the qualifying features of each of these sites and presents details of their conservation objectives. This information is drawn from the Joint Nature Conservancy Council (JNCC)²⁷ and Natural England²⁸.
- 5.3.4 The overall objective of the Habitats Regulations is to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of importance. Meeting site conservation objectives will ensure that the integrity of the National Site Network is maintained or restored as appropriate and ensures that each site contributes to achieving the 'favourable conservation status' of its qualifying features.
- 5.3.5 Natural England provides advice on what meeting conservation objectives means in terms of the environmental conditions (targets) and ecological requirements expected for designated habitats and species at sites which form the National Site Network. The targets are set to measure the condition of designated features, and progress towards meeting the objectives, is based on UK Common Standards for Monitoring Guidance (CSMG), published by the Joint Nature Conservation Committee.

²⁶ EUR-Lex (2018) Case C-461/17. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62017CJ0461&from=EN> [Date accessed: 25/01/23]

²⁷ JNCC (2023) Available at: <http://jncc.defra.gov.uk/page-1458> [Date accessed: 25/01/23]

²⁸ Natural England (2023) Available at: <http://publications.naturalengland.org.uk/> [Date accessed: 25/01/23]

- 5.3.6 Sites of Special Scientific Interest (SSSIs) are protected areas in the United Kingdom designated for conservation. SSSIs are the building blocks of site-based nature conservation in the UK. A SSSI will be designated based on the characteristics of its fauna, flora, geology and/or geomorphology. Whilst typically analogous in ecological function, the reasons for its designation can be entirely different to those for which the same area is designated as a SAC, SPA or Ramsar.
- 5.3.7 Natural England periodically assesses the conservation conditions of each SSSI unit against the CSMG standards. The conservation status of each SSSI highlights any SAC/SPA that is currently particularly vulnerable to threats/pressures. Conservation status is defined as follows:
- Favourable;
 - Unfavourable – recovering;
 - Unfavourable – no change; or
 - Unfavourable – declining.
- 5.3.8 SSSI units in either an 'Unfavourable – no change' or 'Unfavourable – declining' condition indicate that the Habitats site may be particularly vulnerable to certain threats or pressures. It is important to remember that the SSSI may be in an unfavourable state due to the condition of features unrelated to its Habitats designation. However, it is considered that the conservation status of SSSI units that overlap with Habitats designated sites offer a useful indicator of habitat health at that location.
- 5.3.9 Natural England defines zones around each SSSI which may be at risk from specific types of development, these are known as Impact Risk Zones (IRZ). These IRZs are *"a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on Natura 2000/Ramsar sites"*²⁹. The location of IRZs has been taken into consideration in this assessment as they provide a useful guide as to the location of functionally linked land and likely vulnerabilities.

²⁹ Natural England (2021) Natural England's Impact Risk Zones for Sites of Special Scientific Interest User Guidance. Available at: https://magic.defra.gov.uk/Metadata_for_magic/SSSI%20IRZ%20User%20Guidance%20MAGIC.pdf [Date accessed: 25/01/23]

6 Scoping Impact Pathways

6.1 Gathering information about impact pathways

6.1.1 It is important to understand how the SLP may affect a Habitats site to determine LSEs. Consideration must first be given to potential links or causal connections between the effects of the SLP and Habitats sites. This section therefore scopes potential impact pathways at Habitats sites in **Table 5.1**.

6.2 Threats and pressures

6.2.1 Threats and pressures to which Habitats sites are vulnerable have been identified through reference to data held by the JNCC and Natural England on Natura 2000 Data Forms, Ramsar Information Sheets and Site Improvement Plans (SIPs). This information provides current and predicted issues at each Habitats site and is summarised in **Appendix B**.

6.2.2 Supplementary advice notices prepared by Natural England provide more recent information on threats and pressures upon Habitats sites than SIPs and have therefore also been reviewed. A number of threats and pressures are unlikely to be exacerbated by the SLP. Threats and pressures which could be affected by the SLP at each Habitats site are provided at **Appendix B**.

6.2.3 Following a review of HRA assessment work undertaken to date for the adopted BCCS and the withdrawn draft BCP and an identification of causal connections and links, the remaining threats and pressures that are considered to be within the scope of influence of the SLP include:

- **Atmospheric pollution** – consideration of potential traffic commuting zones;
- **Hydrological changes** – consideration of hydrological connectivity and impacts on water quality and quantity;
- **Public access and disturbance** – consideration of recreational disturbance and urbanisation threats, drawing on recreational survey data, where available (including wildfire and arson) and
- **Functionally linked land** – consideration of direct and indirect loss of designated habitat, including functionally linked habitat.

6.3 Air quality

6.3.1 Air pollution can affect a Habitats site if it has an adverse effect on its features of qualifying interest. The main mechanisms through which air pollution can have an adverse effect is through eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides). Deposition of air pollutants can alter the soil and plant composition and species which depend upon these.

6.3.2 As highlighted through the review of threats and pressures at Habitats sites, (Appendix A) air pollution, and in particular atmospheric nitrogen deposition, has been identified as a threat or pressure for qualifying features of a number of Habitats sites within the relevant Natural England SIPs and Supplementary Conservation Advice Notes.

- 6.3.3 Excess atmospheric nitrogen deposition within an ecosystem or habitat can disrupt the delicate balance of ecological processes interacting with one another. As the availability of nitrogen increases in the local environment, some plants that are characteristic of that ecosystem may become competitively excluded in favour of more nitrophilic plants. It also upsets the ammonium and nitrate balance of the ecosystem, which disrupts the growth, structure and resilience of some plant species.
- 6.3.4 Excess nitrogen deposition often leads to the acidification of soils and a reduction in the soils' buffering capacity (the ability of soil to resist pH changes). It can also render the ecosystem more susceptible to adverse effects of secondary stresses, such as frost or drought, and disturbance events, such as foraging by herbivores.
- 6.3.5 As an attempt to manage the negative consequences of atmospheric nitrogen deposition, 'critical loads' and 'critical levels' have been established for ecosystems in Europe. Each Habitats site is host to a variety of habitats and species, the features of which are often designated a critical load for nitrogen deposition.
- 6.3.6 The critical loads of pollutants are defined as a "...quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge"³⁰. Critical levels are defined as "concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge"³¹.
- 6.3.7 Natural England has prepared a standard methodology for the assessment of traffic related air quality impacts under the Habitats Regulations which is relevant to the HRA of plans which may result in a change in traffic flows³². In addition, the Institute of Air Quality Management (IAQM)³³ and the Chartered Institute of Ecology and Environmental Management (CIEEM)³⁴ have also prepared advice on the assessment of air quality impacts at designated sites. This guidance sets thresholds for screening of likely significant (air quality) effects at the HRA screening stage (Stage 1 of the HRA process) and methodologies for further Appropriate Assessment (Stage 2 of the HRA process) of air quality impacts where relevant.

³⁰ UNECE (date unavailable) ICP Modeling and Mapping Critical loads and levels approach. Available at: https://www.umweltbundesamt.de/en/Coordination_Centre_for_Effects [Date accessed: 27/01/23]

³¹ UNECE (date unavailable) ICP Modeling and Mapping Critical loads and levels approach. Available at: https://www.umweltbundesamt.de/en/Coordination_Centre_for_Effects [Date accessed: 27/01/23]

³² Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001). Available at: <http://publications.naturalengland.org.uk/publication/4720542048845824> [Date accessed: 27/01/23]

³³ Holman et al (2020). A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.1, Institute of Air Quality Management, London.

³⁴ CIEEM (2021) Advice on Ecological Assessment of Air Quality Impacts. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

- 6.3.8 The advice from Natural England notes that for screening LSEs, an assessment of the risks from road traffic emissions can be expressed in terms of the average annual daily traffic flow (AADT) as a proxy for emissions. The use of the AADT screening threshold is advocated by Highways England in their Design Manual for Roads and Bridges (DMRB). This screening threshold is intended to be used as a guide to determine whether a more detailed assessment of the impact of emissions from road traffic is required. This non-statutory, or guideline threshold, is based on a predicted change of daily traffic flows of 1,000 AADT or more (or a change in heavy-duty vehicle (HDV) flows on motorways of 200 AADT or more).
- 6.3.9 The guidance also notes it is widely accepted that air quality impacts are greatest within 200m of a road source, decreasing with distance^{35,36,37}.
- 6.3.10 At this preliminary stage in the plan-making process, Natural England's guidance (in the form of a series of questions) has been applied to determine potential air quality pathways of impact to Habitats sites:
- Does the SLP give rise to emission which are likely to reach a Habitats site?
 - Are the qualifying features of sites within 200m of a road sensitive to air pollution?
 - Could the sensitive qualifying features of the site be exposed to emissions?
- 6.3.11 The SLP will trigger development in the form of housing, employment and retail development. The exact scale, location and nature of this development is however not known at this stage in the plan making process.
- 6.3.12 Baseline mapping data has been used to determine the proximity of Habitats sites, and their qualifying features, to roads which may result in an exceedance of Natural England's screening thresholds (A and B roads) within an approximate 20km buffer from the SLP administrative area³⁸. The UK Air Pollution Information System (APIS) provides information on all Habitats sites and the sensitivity of their qualifying features (habitats and / or species) to air pollution. This data has been interrogated, alongside a desk-based review of site-based data (Appendix A), to determine whether there may be pathways of impact from the SLP to any Habitats site through a change in atmospheric emissions (Table 6.1).

³⁵ The Highways Agency, Transport Scotland, Welsh Assembly Government, The Department for Regional Development Northern Ireland (2007) Design Manual for Roads and Bridges, Volume 11, Section 3, Part 1: Air Quality.

³⁶ Natural England (2016) The ecological effects of air pollution from road transport: an updated review. Natural England Commissioned Report NECR 199.

³⁷ Bignal, K., Ashmore, M. & Power, S. (2004) The ecological effects of diffuse air pollution from road transport. English Nature Research Report No. 580, Peterborough.

³⁸ 20km covers a sufficiently precautionary area over which traffic flows may reasonably increase due to development in the SLP administrative area.

Table 6.1: Atmospheric pollution pathways of impact to Habitats sites within 20km of the SLP administrative area

Habitats site name	Is the Habitats site sensitive to air quality impacts (as indicated in SIP / NE Supplementary Conservation Advice)?	Is there a strategic road link (A and B roads) located within 200m of the Habitats site?	Will the Habitats site be scoped in for further assessment in the HRA process
Cannock Extension Canal SAC	Yes	Yes - A5, M6 toll (junction for services), B4154	Yes
Cannock Chase SAC	Yes	Yes - A513, A460	Yes
Fens Pools SAC	Yes	Yes - A4101, B4180	Yes

6.3.13 Habitats sites which have been scoped into the HRA process (see Table 6.1) will be assessed further through HRA screening (Stage 1 of the HRA process) at as the SLP develops. This will look at traffic data, where available, to allow a comparison of flows from the SLP alone, and in-combination with other plans and projects, at the Habitats sites listed in Table 6.1 against Natural England’s AADT thresholds. It will also draw on APIS air pollution data for individual Habitats sites where relevant.

6.4 Hydrology (water resources (quantity) and water quality)

6.4.1 The Water Framework Directive (WFD) provides an indication of the health of the water environment and whether a water body is at good status or potential. This is determined through an assessment of a range of elements relating to the biology and chemical quality of surface waters and quantitative and chemical quality of groundwater. To achieve good ecological status or potential, good chemical status or good groundwater status every element assessed must be at good status or better. If one element is below its threshold for good status, then the status for the whole water body is classed below good. Surface water bodies can be classed as high, good, moderate, poor or bad status.

6.4.2 The WFD sets out areas which require special protection. These include areas designated for “*the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection including relevant Natura 2000 sites designated under Directive 92/43/EEC (the Habitats Directive) and Directive 79/409/EEC (the Birds Directive)*”³⁹.

6.4.3 The SLP administrative area falls predominantly within the Humber River Basin, with a smaller section of the SLP area in the south west within the Severn River Basin.

³⁹ Official Journal of the European Communities (2000) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:5c835afb-2ec6-4577-bdf8-756d3d694eeb.0004.02/DOC_1&format=PDF [Date accessed: 26/01/23]

- 6.4.4 Within the Humber Basin, the River Tame is a significant tributary of the River Trent and flows through Sandwell in an easterly direction, converging with the River Trent in Alrewas, Staffordshire, to the north east of Walsall. The River Trent then flows in a northerly direction, joining the Humber to the west of Hull. Within the Severn Basin, the River Stour flows along the south western plan boundary between Sandwell and Dudley in a westward direction. The River Stour flows westward from Halesowen and leaves the Black Country at Stourbridge, before joining the River Severn at Stourport on Severn.
- 6.4.5 An extensive canal network is also located within and around the SLP area, with the Walsall Canal, Tame Valley Canal, Birmingham to Wolverhampton Canal and the Titford Canal all passing through Sandwell.
- 6.4.6 River Basin Management Plans (RBMPs) provide a framework for protecting and enhancing the benefits provided by the water environment. To achieve this, and because water and land resources are closely linked, they also inform decisions on land-use planning.
- 6.4.7 The main water service provider for Sandwell is Severn Trent Water, with water resources also provided by South Staffs Water. Severn Trent Water provides water to over 8 million people. It is a statutory requirement that every five years water companies produce and publish a Water Resources Management Plan (WRMP). The WRMP demonstrates long term plans to accommodate the impacts of population growth, drought, environmental obligations and climate change uncertainty in order to balance supply and demand.
- 6.4.8 The Severn Trent WRMP⁴⁰ and South Staffs WRMP⁴¹ estimate future water demands and plans how these levels will be achieved. Both WRMPs forecast a deficit that is likely to develop between supply and demand for water over time unless action is taken. The WRMPs outline a number of demand management measures that need to be taken to ensure continued sustainable sources of supply including:
- Reducing abstraction from those water sources that have a detrimental impact on the environment
 - Making sure our future water abstractions do not pose a risk environmental deterioration, as required by the Water Framework Directive
 - Increasing the flexibility and resilience of our supply system
 - Increasing or optimising deployable output from existing, sustainable sources where possible
 - Using catchment restoration techniques to improve habitats and ecological resilience to low flows
 - Using catchment management measures to protect our sources of drinking water supply from pollution risks

⁴⁰ Severn Trent Water (2019) Waste Resources Management Plan 2019. Available at: <https://slp.stwater.co.uk/content/dam/stw-plc/our-plans/severn-trent-water-resource-management-plan.pdf> [Date accessed: 26/01/23]

⁴¹ South Staffs Water. Water Resources Management Plan 2019. Available at: <https://www.south-staffs-water.co.uk/media/2676/final-wrmp-2019-south-staffs-water.pdf> [Date accessed: 26/01/23]

- 6.4.9 Catchment Abstraction Management Plans (CAMS) are six-year strategies developed by the EA for managing water resources at the local level, produced for every river catchment area in England and Wales. All new licences within a CAMS area have a common end date so they can be reviewed simultaneously.
- 6.4.10 The SLP area is affected by the Worcestershire Middle Severn and the Tame, Anker and Mease⁴² abstraction licensing strategies^{43,44}. The strategies set out how water resources are used in the area, indicating areas where water is available for further abstraction. Surface water flow is assessed at ten Assessment Points (APs) in the Worcestershire Middle Severn catchment and ten APs in the Tame, Anker and Mease catchment.
- 6.4.11 Urban development set out within the emerging SLP has the potential to reduce catchment permeability and the presence of drainage networks may be expected to remove runoff from urbanised catchments. This may result in changes in run off rates from urbanised areas to Habitats sites or watercourses which run through them. Water mains leakage and sewer infiltration may also affect the water balance. In addition, new growth will increase water demand, changing the supply and demand for water resources in the region which may affect water levels. Features for which Habitats sites are designated are often sensitive to changes in water balance and levels. Therefore, any change to water flows through and water levels at a water sensitive Habitats sites has the potential to adversely affect the features for which they are designated.
- 6.4.12 Urbanisation run-off has the potential to reduce the quality of water entering a catchment. Water quality may also be reduced through effluent discharges from Wastewater Treatment Works (WwTWs) and other controlled point source discharges. Any change to water quality at a water sensitive Habitats site has the potential to adversely affect the features for which they are designated.
- 6.4.13 Baseline data for Habitats sites and information in relation to hydrological connectivity has been reviewed to determine whether there may be pathways of impact from the SLP to any Habitats site through a change in water quality or water levels (**Table 6.2**).

⁴² Environment Agency (2023) Catchment Data Explorer. Available at: <http://environment.data.gov.uk/catchment-planning/> [Date accessed: 26/01/23]

⁴³ Environment Agency (2022) Worcestershire Middle Severn Abstraction Licensing Strategy. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1088874/Worcestershire-Middle-Severn-abstraction-licensing-strategy.pdf [Date accessed: 26/01/23]

⁴⁴ Environment Agency (2022) Tame, Anker and Mease Abstraction Licensing Strategy. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1085020/Tame-Anker-and-Mease-abstraction-licensing-strategy.pdf [Date accessed: 26/01/23]

Table 6.2: Water resource levels and water quality impact pathways to Habitats sites

Habitats site name	Is the Habitats site sensitive to a change in water quality and /or water level impacts and is it hydrologically connected to the plan area?	Will the Habitats site be scoped in for further assessment in the HRA process
Cannock Chase SAC	Cannock Chase SAC is located to the north of the SLP area. Natural England’s supplementary information indicates Cannock Chase SAC is hydrologically connected to the Humber River Basin. It is however located in the Staffordshire Trent Valley Operational Management Catchment which is upstream of the SLP area and therefore not hydrologically linked to the Plan area. Wet heath habitat within the SAC is known to be sensitive to water abstraction and a change in water levels. Since the SAC and the SLP areas are within the same WRMP areas for both Severn Trent Water and South Staffs Water, water resource LSEs have been scoped in.	Yes
Cannock Extension Canal SAC	Cannock Extension Canal SAC is located to the north-east of the SLP area. The SAC is fed by the Chasewater reservoir which is part of the Chasewater Southern Staffordshire Coalfield Heaths SSSI which is located upstream of the SLP area and as such is not hydrologically linked to the Plan area.	No
Fens Pools SAC	Fens Pools SAC is located within the Severn Middle Worcestershire management catchment, to the west of the SLP area. As set out in Natural England’s Supplementary Advice, water is supplied to Fens Pools SAC from rainfall and run off from neighbouring residential areas. Given the location of the SAC outside of the Plan area and upstream of River Stour it is not considered to be hydrologically linked.	No
Severn Estuary SAC, SPA and Ramsar	The SLP area partially coincides with the Severn River Basin. The River Stour and its tributary the Mousesweet Brook form the south eastern boundary of Sandwell Borough. The River Stour is a major tributary of the River Severn. Consequently, the SLP has the potential to impact the Severn Estuary SAC, SPA and Ramsar sites through introduction of pollutants and changes in water levels through abstraction.	Yes
Humber Estuary SAC, SPA and Ramsar	The majority of the SLP area is located within the River Humber basin and is therefore hydrologically linked to the Humber Estuary SAC, SPA and Ramsar.	Yes

6.4.14 At the next stage of the Plan making process, all components of the SLP will be screened for potential water quality and quantity LSEs on the above Habitats sites, drawing on other elements of the evidence base.

6.5 Public access and disturbance

6.5.1 Public access/disturbance can take a number of forms. Physical disturbance as a result of urbanisation and increased recreational activity/pressure may include damage to habitats through erosion and compaction, troubling of grazing stock, causing changes in behaviour to animals such as birds at nesting and feeding sites, spreading invasive species, cat predation, dog fouling, litter and fly-tipping, tree climbing, wildfire and arson, noise and light pollution and vandalism. Typically, disturbance of habitat and species is the unintentional consequence of people’s presence which can impact breeding success and survival.

6.5.2 Increased development has the potential to increase recreational and navigational pressures upon Habitats sites which are accessible to the public.

- 6.5.3 Across the UK, public access and disturbance threats at Habitats sites have been considered in terms of buffer distances. These have been determined through analysis of visitor and recreational survey data, baseline site information and taking into consideration the proximity of new development. Existing strategies towards recreational mitigation at Habitats sites are in place for a number of sites which are being considered in the SLP HRA. These include Cannock Chase SAC and Severn Estuary SAC, SPA and Ramsar. These strategies are outlined below.
- 6.5.4 At the Severn Estuary SAC, SPA and Ramsar designations Stroud District Council has prepared a strategy in consultation with Natural England, Wildfowl and Wetlands Trust Severn Estuary Partnership, ASERA and Severn Estuary Stakeholders⁴⁵. It was developed on the basis of visitor survey data collated by EPR in 2015/16⁴⁶ and sets out a strategy to mitigate disturbance impacts associated with growth. The EPR visitor survey work established a catchment area of 7.7km from the Severn Estuary within which developments involving a net increase in housing may be required to contribute to the funding of impact avoidance and mitigation measures. At their closest point, the Severn Estuary Habitats designations are located over 54.6km from the SLP plan boundary. It is understood that the mitigation strategy is currently being re-assessed as part of Stroud's Local Plan review. However, given the distance of the designations from the plan area, it is considered that there will be no LSEs from the SLP at the Severn Estuary designations themselves from recreation impacts.

⁴⁵ Stroud District Council. 2017. Strategy for Avoidance of Likely Significant Adverse Effects on the Severn Estuary SAC, SPA and Ramsar Site. Available at: <https://www.stroud.gov.uk/media/557874/item-8-appendix-a.pdf>

⁴⁶ EPR. 2016. Severn Estuary (Stroud District) Visitor Survey Report. Available at: <http://www.epr.uk.com/assets/severnestuaryreport.pdf>

- 6.5.5 At Cannock Chase SAC recreational impacts are a known to be an issue for features for which the SAC is designated^{47,48}. To manage identified recreational pressures, the Cannock Chase SAC Partnership (composed of 6 Local Planning Authorities, Staffordshire County Council, Natural England, and a number of key stakeholders) was formalised under a Memorandum of Understanding (MOU) in 2016. The MOU sets out a suite of Strategic Access Management and Monitoring Measures (SAMMM) which are funded through financial contributions from new housing developments within 8km of the SAC (the zone within which most frequent visitors originated). In 2017 the Cannock Chase SAC stage 1 Planning Evidence Base Review (PEBR) was undertaken to act as a 'health check' upon the SAMMM, to review the current situation, check if the SAMMM was still fit for purpose, and act as a platform for further work going forward⁴⁹. Since the 2017 review, a further evidence base has been undertaken including updated visitor surveys⁵⁰. It identifies a 15km recreational zone of influence. The SLP sits outside this area and therefore it is considered that there will be no LSEs from the SLP at the SAC from recreation impacts.
- 6.5.6 Urbanisation effects are caused where development is located close to a Habitats site designated boundary. These effects often include cat predation of ground nesting birds, lighting (illumination), fly tipping, noise and vandalism. As with recreational impacts, urbanisation mitigation strategies have been implemented across the UK through the establishment of buffer zones. Commonly applied urbanisation zones of influence extend around 400 – 500m from the edge of a designation as this reflects likely impacts from pets (e.g. cat predation) and the distance from which people access a site on foot. The Thames Basin Heaths Special Protection Area Delivery Framework⁵¹ is one such strategy which makes recommendations for accommodating development while also protecting the SPA's qualifying features by establishing a 400m zone where development does not take place. Another example is the mitigation strategy developed for Burnham Beeches SAC which has a 500m area from the designation boundary within which there is a presumption against development⁵². There are no Habitats sites within the Plan area or within a 500m radius of the Plan boundary and therefore urbanisation effects can be scoped out.

⁴⁷ J. White, R. McGibbon & J. Underhill-Day (2012). Impacts of Recreation to Cannock Chase SAC. Unpublished report. Footprint Ecology.

⁴⁸ Liley, D., Underhill-Day, J., White, J. & Sharp, J. (2009) Evidence Base relating to Cannock Chase SAC and the Appropriate Assessment of Local Authority Core Strategies. Footprint Ecology.

⁴⁹ Hoskin, R. and Liley, D. 2017. Cannock Chase SAC Planning Evidence Base Review. Unpublished report for the Cannock Chase SAC Partnership.

⁵⁰ Panter, C & Liley, D., (2019). Cannock Chase Visitor Survey 2018. Unpublished report by Footprint Ecology for the Cannock Chase SAC Partnership.

⁵¹ Thames Basin Heaths Joint Strategic Partnership Board (2009). Thames Basin Heaths SPA Delivery Framework. <https://www.bracknell-forest.gov.uk/sites/default/files/2021-08/thames-basin-heaths-spa-delivery-framework.pdf> [Date Accessed: 27/01/23].

⁵² Burnham Beeches Special Area of Conservation. Strategic Access Management and Monitoring Strategy. Supplementary Planning Document. Available at: <https://www.chiltern.gov.uk/article/11300/Burnham-Beeches-Special-Area-of-Conservation-Strategic-Access-and-Mitigation-Strategy-Supplementary-Planning-Documents-SPD> [Date Accessed: 27/01/23]

6.5.7 Where available, buffer distances have been applied to determine potential pathways of recreational and urbanisation effects from the SLP. This review is summarised in Table 6.3 below.

Table 6.3: Review of recreational disturbance pathways of impact to Habitats sites

Habitats site name	Sensitive to public access and disturbance effects	Public access and disturbance impact pathways	Habitats site screened in for further consideration in HRA in terms recreational pressures
Cannock Chase SAC	Yes	The SLP area is not located within the recreational zone of influence (15km) of Cannock Chase SAC and therefore LSEs at this Habitats site can be scoped out.	No
Cannock Extension Canal SAC	Yes	The canal is part of the navigable canal network and contains a number of moorings. It is also fished. Given the location of the Cannock Extension Canal from the Plan area (8km) it is considered unlikely that there will be any public access and disturbance LSEs.	No
Fens Pools SAC	Yes	Natural England's SIP and Supplementary Advice does not suggest that Fens Pools SAC is sensitive to public access and disturbance effects. However, it is sensitive to urbanisation impacts within the immediate vicinity of the SAC. Given the distance of this SAC from the SLP area it is considered unlikely that there will be any public access and disturbance LSEs.	No
Humber Estuary SAC, SPA and Ramsar	Yes	A number of the qualifying features of the Humber Estuary SAC, Humber Estuary SPA and Humber Estuary Ramsar are known to be vulnerable to disturbance from human activities, including the intertidal mudflats and sandflats, and the species they support. At their closest point, these designations are located approximately 143.6km from the SLP. A such it is unlikely that there will be direct impacts upon these designations themselves.	No
Severn Estuary SAC, SPA and Ramsar	Yes	A number of the qualifying features of the Severn Estuary SAC, Severn Estuary SPA and Severn Estuary Ramsar are known to be vulnerable to disturbance from human activities, including the intertidal mudflats and sandflats, and the species they support. At their closest point, these designations are located approximately 54.6km from the SLP boundary which is significantly further than the EPR visitor survey work which established a catchment area of 7.7km. A such it is unlikely that there will be direct impacts upon these designations themselves.	No

6.5.8 As set out above public access and disturbance effects have been scoped out from the HRA process on the basis of established zone of recreational influence and the distance of Habitats sites from the Plan area.

6.6 Functionally linked land

- 6.6.1 Whilst functionally linked land is not a pathway of impact in its own right, it has the potential to be impacted upon by the SLP through a number of pathways and is therefore included in this section.
- 6.6.2 Land use planning has the potential to lead to direct loss and / or degradation at Habitats sites through the mechanisms described above, reduction in air quality, hydrology impacts and public access and disturbance (increased recreation and urbanisation impacts). It also has the potential to result in impacts upon qualifying features (for instance mobile bird species) when located outside a designation boundary, known as functionally linked habitat⁵³.
- 6.6.3 There are no Habitats sites within the plan area and therefore there will be no direct loss or degradation of habitat within a designated site boundary.
- 6.6.4 The term 'functional linkage' is defined by Natural England as "*the role or 'function' that land or sea beyond the boundary of a Habitats site might fulfil in terms of ecologically supporting the populations for which the site was designated or classified. Such land is therefore 'linked' to the Habitats site in question because it provides an important role in maintaining or restoring the population of qualifying species at favourable conservation status*"⁵⁴.
- 6.6.5 In addition to direct loss or degradation of habitat (designated or functionally linked), development has the potential to result in the fragmentation of habitats through the loss of connecting corridors which would hinder the movement of mobile qualifying species which are associated with some designations.
- 6.6.6 The tests set out under Article 6(3) and 6(4) of the Habitats Regulations need to be applied in respect of plans or projects which may significantly affect functionally linked habitat that plays an important role in contributing to the favourable conservation status of the relevant species for which a Habitats site is designated.
- 6.6.7 The CJEU ruling in the Holohan case confirmed that habitat and / or species which are located outside of a designated site, if they are necessary to the conservation of the habitat types and species listed for the protected area, must be considered in an Appropriate Assessment.

⁵³ "The term 'functional linkage' refers to the role or 'function' that land or sea beyond the boundary of a Habitats site might fulfil in terms of ecologically supporting the populations for which the site was designated or classified. Such land is therefore 'linked' to the Habitats site in question because it provides an important role in maintaining or restoring the population of qualifying species at favourable conservation status". Source: Natural England. 2016. Commissioned Report. NECR207. 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.

⁵⁴ Natural England. 2016. Commissioned Report. NECR207. 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.

- 6.6.8 A detailed desk study has been undertaken as part of the HRA screening process to identify pathways and connections to areas of functionally linked land and watercourses which may be affected by the SLP. This has drawn on Natural England designated site and SSSI IRZ data, International Union for Conservation of Nature (IUCN) data, magic, priority habitat inventory data and aerial photography.
- 6.6.9 As noted in section 6.4, the plan area predominantly falls within hydrological catchments associated with the Humber Estuary and to a lesser extent and the Severn Estuary. The Severn Estuary SAC and Severn Estuary Ramsar sites are hydrologically linked to the Plan. The River Stour (and its tributaries) run through the Plan area and connect with the River Severn at Stourport-on-Severn. The Humber Estuary designated sites (the Humber Estuary SPA, SAC and Ramsar) are linked to the Plan area via the River Tame.
- 6.6.10 The qualifying features of the Severn Estuary SAC include, among other features, a number of species of migratory fish including Twait shad (*Alosa fallax*), River lamprey (*Lampetra fluviatilis*) and Sea lamprey (*Petromyzon marinus*). Criterion 4 of the Severn Estuary Ramsar designation notes that the site is important for the run of migratory fish between sea and river via estuary, including the SAC species (listed earlier) and additionally species of salmon (*Salmo salar*), Sea trout (*S. trutta*) and Allis shad (*Alosa alosa*).
- 6.6.11 Consultation with the Environment Agency (EA) indicates that recent surveys have identified fish spawning sites along the whole length of the River Severn (where access is possible) and within the River Teme. With fish recorded from Maisemore Weir in Gloucester all the way up to Lincombe Wier near Stourport and in the River Teme from its mouth with the Severn to upstream of Knightwick and as far as Tenbury⁵⁵. Historically fish spawning sites had been associated with gravel locations, but EA recent research suggests that spawning is not confined to these areas.

⁵⁵ Unlocking the Severn. <https://slp.unlockingthesevern.co.uk/endangered-fish-return-to-habitat-unlocked-after-180-years/> [Date accessed: 26/01/23]

- 6.6.12 The 'Unlocking the Severn' project⁵⁶, which is run in partnership between the Canal and Rivers Trust, the Severn Rivers Trust, the Environment Agency (EA) and Natural England, aims to create fish passes at six barriers on the Severn and its River Teme tributary to allow Twaite Shad to migrate upstream. With the opening of the Diglis fish pass in March 2021 fish are now able to move upstream through Worcester to Stourport on Severn. Natural England note that in the last few decades eel numbers have declined internationally by as much as 95% and have been listed by the International Union for Conservation of Nature (IUCN) on their Red List as critically endangered species⁵⁷. Barriers to their journey upstream and degradation of habitat and pollution are some of the contributing factors for the decline. The River Severn RBMP sets out several catchment partnership measures for Severn catchment, which include creation of fish passes to reduce barriers to fish movement further up the River Severn catchment⁵⁸.
- 6.6.13 Migratory fish species associated with the Humber Estuary SAC and the Humber Estuary Ramsar are Sea Lamprey and River Lamprey. The River Lamprey has been recorded as far upstream as the River Dove (on the Staffordshire/Derbyshire border).
- 6.6.14 Any potential deterioration in water quality or habitat outside the Severn Estuary and Humber Estuary SAC and Ramsar designations as a result of the SLP may have implications for the migration of fish to upstream spawning habitat if it results in a barrier to movement. The impact of the SLP upon functionally linked watercourses and habitat through a deterioration in water quality, flows and loss and / or deterioration of riparian and in-stream habitat may therefore have adverse effects on the achievement of the conservation objectives which aim to maintain and restore the condition of these features for relevant qualifying species. Natural England consider that Good Ecological Status under the WFD is an appropriate standard for functionally linked watercourse⁵⁹.
- 6.6.15 The Severn and Humber SAC and Ramsar designations will therefore be scoped in for further consideration in the HRA process as the SLP develops.

6.7 Issues and Options Preliminary Screening

- 6.7.1 Following the identification of Habitats sites for inclusion in the HRA and potential pathways of impact from the SLP, the next stage in the HRA process is Screening (Figure 3.1).

⁵⁶ Rivers and Canals Trust. Unlocking the Seven Project Available at: https://canalrivertrust.org.uk/enjoy-the-waterways/canal-and-river-network/river-severn-navigation/unlocking-the-severn?gclid=EAlaIqobChMIsevp7MLd8QIVysLtCh3-VwefEAAYASAAEgLC4vD_BwE [Date accessed: 26/01/23]

⁵⁷ IUCN Red List of Threatened Species. Available at: <https://slp.iucnredlist.org/species/60344/152845178> [Date accessed: 26/01/23]

⁵⁸ Environment Agency (2015) Severn River Basin Management Plan. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718336/Severn_RBD_Part_1_river_basin_management_plan.pdf [Date accessed: 26/01/23]

⁵⁹ Defra (2014). Water Framework Directive implementation in England and Wales: new and updated standards to protect the water environment (publishing.service.gov.uk). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/307788/river-basin-planning-standards.pdf [Date accessed: 26/01/23]

- 6.7.2 The SLP is not directly connected with or necessary to the management of any Habitats site. Neither can it be excluded or eliminated from the HRA process. Therefore, it is necessary to identify whether there are any aspects of the SLP which may lead to LSEs at a Habitats site, either alone or in combination with other plans or projects – Screening.
- 6.7.3 LSEs are discussed in section 4.4 and comprise an effect which may undermine the conservation objectives for the qualifying features of a Habitats site, either alone or in combination. Identification of LSEs will trigger the requirement for an Appropriate Assessment – Stage 2 of the HRA process. Appropriate Assessment allows effects to be assessed in more detail and mitigation measures applied.
- 6.7.4 Screening for LSEs is normally undertaken at the preferred options stage when policies and allocations are known, and again at Regulation 19 to ensure any changes are captured. Screening at Preferred Options will comprise a detailed analysis of all components of the SLP against Screening criteria set out in Table 4.1.
- 6.7.5 The Issues and Options consultation (February 2023) does not contain any policies or details on allocations, instead it identifies specific issues upon which consultation is sought.
- 6.7.6 Appendix B provides an analysis of the vision, development strategy and themes addressed in the Issues and Options consultation, to highlight key issues for consideration in future stages of the HRA and plan making processes. A summary of recommendations is set out below in Box 1.

Box 1: Issues and Options HRA Screening Recommendations

1. Policies relating to the protection of biodiversity and geodiversity should consider the protection of functionally linked watercourses within the Plan area. It is recommended that the SLP incorporates strong policy wording around the protection of water quality to achieve Good Ecological Status.
2. It is recommended that any green / blue infrastructure requirements complement the emerging Local Nature Recovery Network to ensure maximum biodiversity benefits are achieved through design.
3. Incorporation of features such as SuDS should be encouraged to contribute to GI provision which can link to the wider biodiversity network and connectivity.
4. Strong policy wording around all forms of pollution should be incorporated into the SLP. This should focus on habitats and species as well as human receptors.
5. It is recommended that reference be made to the national green infrastructure standards⁶⁰ and the revised Accessible Natural Greenspace Standards (ANGSt) requirements⁶¹ within the SLP infrastructure provision.
6. Selection of options which encourage sustainable and active transport choices will have a positive impact upon air quality with associated benefits for Habitats sites and areas of functionally linked land and should be prioritised.
7. Biodiversity Net Gain requirements should actively contribute towards and work alongside the emerging Nature Recovery Network and wider connectivity with Habitats sites⁶².

⁶⁰ Natural England. GI Framework Web Portal.

<https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx> [Date accessed: 26/01/23]

⁶¹ The revised ANGSt are a component of the green infrastructure standards and include additional targets for greenspace provision.

⁶² CIEEM (2016) Biodiversity Net Gain. Good Practice Principles. Available at: <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf> [Date accessed: 27/01/23]

6.8 Summary

6.8.1 Table 6.4 provides a summary of impact pathways which will be considered at each Habitats site in the HRA.

Table 6.4: Summary of pathways of impact at each Habitat site from the SLP

Habitats sites	Air pollution	Hydrological changes	Habitat loss and fragmentation	Public access and disturbance
Cannock Chase SAC	Vulnerable	Vulnerable	No threat or pressure	No threat or pressure
Cannock Extension Canal SAC	Vulnerable	No threat or pressure	No threat or pressure	No threat or pressure
Fens Pools SAC	Vulnerable	No threat or pressure	No threat or pressure	No threat or pressure
Humber Estuary SAC	No threat or pressure	Vulnerable	Vulnerable	No threat or pressure
Humber Estuary SPA	No threat or pressure	Vulnerable	Vulnerable	No threat or pressure
Humber Estuary Ramsar	No threat or pressure	Vulnerable	Vulnerable	No threat or pressure
Severn Estuary SAC	No threat or pressure	Vulnerable	Vulnerable	No threat or pressure
Severn Estuary SPA	No threat or pressure	Vulnerable	Vulnerable	No threat or pressure
Severn Estuary Ramsar	No threat or pressure	Vulnerable	Vulnerable	No threat or pressure

7 Conclusions

7.1 Summary

7.1.1 The purpose of this Preliminary HRA Report is to ensure the HRA forms an integral element of the plan-making process, and that best practice is followed. Recommendations made following the preliminary screening of issues and options are set out in **Box 1** and at **Appendix B**. These should inform the selection of allocations and development of SLP policies as the plan evolves.

7.1.2 In conclusion the following Habitats sites and pathways of impact will form the focus of the HRA for the SLP going forward:

- Cannock Chase SAC – air quality and hydrology;
- Cannock Extension Canal SAC – air quality;
- Fens Pools SAC – air quality;
- Severn Estuary SAC, SPA and Ramsar – hydrology and functionally linked land; and
- Humber Estuary SAC, SPA and Ramsar – hydrology and functionally linked land.

7.2 Next steps

7.2.1 Following the Issues and Options consultation and consideration of responses received the next stage of the HRA process will comprise Phase 1 of the HRA process (see **Figure 3.1**) – screening - and will be undertaken at the Draft Plan (Regulation 18) stage. All components of the SLP Draft Plan consultation will be assessed against the HRA screening criteria (see **Table 4.1**). Screening will take into consideration case law and best practice and outcomes will ensure the HRA influences the plan-making process and site selections in an iterative manner.

7.2.2 The output of screening will identify LSEs of the SLP on Habitats sites scoped into the HRA at this stage, and identify whether Appropriate Assessment will be required. It will also set out additional recommendations intended to help ensure that the SLP does not affect the integrity of any Habitats site and detail methods for Appropriate Assessment.

7.2.3 The HRA will continue to inform the plan making process with both a re-screening and Appropriate Assessment being reported upon at the Submission Plan (Regulation 19) stage. As set out in the Habitats Regulations the Council must 'have regard' to Natural England's representations under the provisions of Regulations 63(3) and 105(2).

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Habitats Regulations Assessments

Sustainability Appraisals

Strategic Environmental Assessments

Landscape Character Assessments

Landscape and Visual Impact Assessments

Green Belt Reviews

Expert Witness

Ecological Impact Assessments

Habitat and Ecology Surveys



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CHELTENHAM

Appendix A: Habitats Site Conservation Objectives, Qualifying Features, Threats and Pressures

Cannock Chase SAC¹

Conservation objectives:

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

Qualifying Features:

H4010. Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath
H4030. European dry heaths

Threats and Pressures at Habitats site which may be affected by the SLP^{2,3}:

- Hydrological changes;
- Water quality;
- Air pollution – impact of nitrogen deposition;
- Wildfire / arson; and
- Conservation measures (recreational impact).

Cannock Extension Canal SAC⁴

Conservation objectives:

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
- The distribution of qualifying species within the site.

Qualifying Features:

S1831. *Luronium natans*; Floating water-plantain

Threats and Pressures at Habitats site which may be affected by the SLP^{5,6}:

¹ Natural England (2018) Cannock Chase SAC Conservation Objectives. Available at: <http://publications.naturalengland.org.uk/publication/6687924741472256> [Date accessed: 26/01/23]

² Natural England (2014) Cannock Chase SAC SIP. Available at: <http://publications.naturalengland.org.uk/publication/4957799888977920> [Date accessed: 26/01/23]

³ Natural England (2020) Cannock Chase SAC Conservation Objectives Supplementary Advice. Available at: <http://publications.naturalengland.org.uk/file/5345144318722048> [Date accessed: 26/01/23]

⁴ Natural England (2018) Cannock Extension Canal SAC Conservation Objectives. Available at: <http://publications.naturalengland.org.uk/publication/5063623810482176> [Date accessed: 26/01/23]

⁵ Natural England (2014) Cannock Extension Canal SAC SIP. Available at: <http://publications.naturalengland.org.uk/file/6749431462363136> [Date accessed: 26/01/23]

⁶ Natural England (2018) Cannock Extension Canal SAC Conservation Objectives Supplementary Advice. Available at: <http://publications.naturalengland.org.uk/file/4920757142683648> [Date accessed: 26/01/23]

Cannock Extension Canal SAC⁴

- Water pollution (water quality and water clarity);
- Water levels;
- Air pollution – impact of nitrogen deposition;
- Disturbance of habitat by human activity.

Fens Pools SAC⁷

Conservation objectives:

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 the qualifying species;
- The structure and function of the habitats of the qualifying species;
- The supporting processes on which the habitats of the qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

Qualifying features:

S1166. *Triturus cristatus*; Great crested newt.

Threats and Pressures at Habitats site which may be affected by the SLP^{8,9}:

- Water pollution;
- Habitat fragmentation; and
- Air quality.

Humber Estuary SAC¹⁰

Conservation objectives:

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.

Qualifying features:

⁷ Natural England (2018) Fens Pools SAC Conservation Objectives. Available at: <http://publications.naturalengland.org.uk/file/6642225895440384> [Date accessed: 26/01/23]

⁸ Natural England (2014) Fens Pools SAC SIP. Available at: <http://publications.naturalengland.org.uk/file/4872756676001792> [Date accessed: 26/01/23]

⁹ Natural England (2017) Fens Pools SAC Conservation Objectives Supplementary Advice. Available at: <http://publications.naturalengland.org.uk/file/5386159160557568> [Date accessed: 26/01/23]

¹⁰ Natural England (2018) Humber Estuary SAC Conservation Objectives. Available at: <http://publications.naturalengland.org.uk/publication/5009545743040512> [Date accessed: 26/01/23]

Humber Estuary SAC¹⁰

H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks

H1130. Estuaries

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

H1150. Coastal lagoons*

H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand

H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) H2110. Embryonic shifting dunes

H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland

H2160. Dunes with *Hippophae rhamnoides*; Dunes with sea-buckthorn

S1095. *Petromyzon marinus*; Sea lamprey

S1099. *Lampetra fluviatilis*; River lamprey

S1364. *Halichoerus grypus*; Grey seal

Threats and Pressures at Habitats site which may be affected by the SLP¹¹:

- Water pollution;
- Public access / disturbance;
- Direct land take for development;
- Coastal squeeze; and
- Air pollution.

Humber Estuary SPA¹²

Conservation objectives:

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.

Qualifying features:

A021 *Botaurus stellaris*; Great bittern (Non-breeding)

A021 *Botaurus stellaris*; Great bittern (Breeding)

A048 *Tadorna tadorna*; Common shelduck (Non-breeding)

A081 *Circus aeruginosus*; Eurasian marsh harrier (Breeding)

A082 *Circus cyaneus*; Hen harrier (Non-breeding)

A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding)

A132 *Recurvirostra avosetta*; Pied avocet (Breeding)

A140 *Pluvialis apricaria*; European golden plover (Non-breeding)

¹¹ Natural England (2015) Humber Estuary SIP. Available at: <http://publications.naturalengland.org.uk/file/5730884670980096> [Date accessed: 26/01/23]

¹² Natural England (2019) Humber Estuary SPA Conservation Objectives. Available at: <http://publications.naturalengland.org.uk/publication/5382184353398784> [Date accessed: 26/01/23]

Humber Estuary SPA¹²

- A143 *Calidris canutus*; Red knot (Non-breeding)
 - A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
 - A151 *Philomachus pugnax*; Ruff (Non-breeding)
 - A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
 - A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
 - A162 *Tringa totanus*; Common redshank (Non-breeding)
 - A195 *Sterna albifrons*; Little tern (Breeding)
- Waterbird assemblage

Threats and Pressures at Habitats site which may be affected by the SLP¹³:

- Water pollution;
- Public access / disturbance;
- Direct land take for development;
- Coastal squeeze; and
- Air pollution.

Humber Estuary Ramsar¹⁴

Ramsar sites do not have the Conservation Objectives in the same way as SPAs and SACs. Information regarding the designation of Ramsar sites is contained in JNCC Ramsar Information Sheets. Ramsar Criteria are the criteria for identifying Wetlands of International Importance. The relevant criteria and ways in which this site meets the criteria are presented in the table below.

Ramsar Criterion	Justification for the application of each 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 is dominated by common cordgrass <i>Spartina anglica</i> and annual glasswort <i>Salicornia</i> communities. Low to mid marsh communities are mostly represented by sea aster <i>Aster tripolium</i> , common saltmarsh grass <i>Puccinellia maritima</i> and sea purslane <i>Atriplex portulacoides</i> communities. The upper portion of the saltmarsh community is atypical, dominated by sea couch <i>Elytrigia atherica</i> (<i>Elymus pycnanthus</i>) saltmarsh

¹³ Natural England (2015) Humber Estuary SIP. Available at: <http://publications.naturalengland.org.uk/file/5730884670980096> [Date accessed: 26/01/23]

¹⁴ JNCC (2007) Ramsar Information Sheet: Humber Estuary. Available at: <https://rsis.ramsar.org/RISapp/files/RISrep/GB663RIS.pdf> [Date accessed: 26/01/23]

Ramsar Criterion	Justification for the application of each criterion
	community. In the upper reaches of the estuary, the tidal marsh community is dominated by the common reed <i>Phragmites australis</i> fen and sea club rush <i>Bolboschoenus maritimus</i> swamp with the couch grass <i>Elytrigia repens</i> (<i>Elymus repens</i>) saltmarsh community. Within the Humber Estuary Ramsar site there are good examples of four of the five physiographic types of saline lagoon.
3	The Humber Estuary Ramsar site supports a breeding colony of grey seals <i>Halichoerus grypus</i> 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 <i>Bufo calamita</i> .
5	Assemblages of international importance: 153,934 waterfowl, non-breeding season (5 year peak mean 1996/97-2000/2001)
6	<p>Species/populations occurring at levels of international importance. Qualifying species/populations (as identified at designation): Species with peak counts in winter:</p> <ul style="list-style-type: none"> • Common shelduck, <i>Tadorna tadorna</i>, NW Europe - 4464 individuals, representing an average of 1.5% of the population (5 year peak mean 1996/7-2000/1) • Eurasian golden plover, <i>Pluvialis apricaria</i>, <i>altifrons</i> subspecies, NW Europe, W Continental Europe, NW Africa population - 30,709 individuals, representing an average of 3.3% of the GB population (5 year peak mean 1996/7-2000/1) • Red Knot, <i>Calidris canutus islandica</i> subspecies - 28165 individuals, representing an average of 6.3% of the population (5 year peak mean 1996/7-2000/1) • Dunlin, <i>Calidris alpina alpina</i>, Europe - 22222 individuals, representing an average of 1.7% of the population (5 year peak mean 1996/7-2000/1) • Black-tailed godwit, <i>Limosa limosa</i>, <i>islandica</i> subspecies - 1,113 individuals, wintering, representing an average of 3.2% of the population (5 year peak mean 1996/7-2000/1) • Bar-tailed godwit, <i>Limosa lapponica</i>, <i>lapponica</i> subspecies - 2,752 individuals, wintering, representing an average of 2.3% of the population (5 year peak mean 1996/7-2000/1) • Common redshank, <i>Tringa totanus totanus</i> - 4632 individuals, representing an average of 3.6% of the population (5 year peak mean 1996/7- 2000/1)
8	The Humber Estuary acts as an important migration route for both river lamprey <i>Lampetra fluviatilis</i> and sea lamprey <i>Petromyzon marinus</i> between coastal waters and their spawning areas.

Threats and Pressures at Habitats site which may be affected by the SLP:

- Water pollution (domestic sewage);
- Recreational / tourism disturbance;
- Coastal squeeze.

Severn Estuary SAC¹⁵

Conservation objectives:

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.

Qualifying features:

H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks;

H1130. Estuaries;

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats;

H1170. Reefs;

H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); Atlantic salt meadows;

S1095. *Petromyzon marinus*; Sea lamprey;

S1099. *Lampetra fluviatilis*; River lamprey; and

S1103. *Alosa fallax*; Twaite shad.

Threats and Pressures at Habitats site which may be affected by the SLP¹⁶:

- Public access / disturbance;
- Impacts from development;
- Coastal squeeze;
- Water pollution; and
- Air pollution.

Severn Estuary SPA¹⁷

Conservation objectives:

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.

¹⁵ Natural England (2019) Severn Estuary SAC Conservation Objectives. Available at: <http://publications.naturalengland.org.uk/file/6377265718099968> [Date accessed: 26/01/23]

¹⁶ Natural England (2015) Severn Estuary SIP. Available at: <http://publications.naturalengland.org.uk/file/4856107648417792> [Date accessed: 26/01/23]

¹⁷ Natural England (2019) Severn Estuary SPA Conservation Objectives. Available at: <http://publications.naturalengland.org.uk/file/6288530213175296> [Date accessed: 26/01/23]

Severn Estuary SPA¹⁷

Qualifying features:

A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding);
 A048 *Tadorna tadorna*; Common shelduck (Non-breeding);
 A051 *Anas strepera*; Gadwall (Non-breeding);
 A149 *Calidris alpina alpina*; Dunlin (Non-breeding);
 A162 *Tringa totanus*; Common redshank (Non-breeding); and
 A394 *Anser albifrons albifrons*; Greater white-fronted goose (Non-breeding) Waterbird assemblage.

Threats and Pressures at Habitats site which may be affected by the SLP¹⁸:

- Public access / disturbance;
- Impacts from development;
- Coastal squeeze;
- Water pollution; and
- Air pollution.

Severn Estuary Ramsar¹⁹

Ramsar sites do not have the Conservation Objectives in the same way as SPAs and SACs. Information regarding the designation of Ramsar sites is contained in JNCC Ramsar Information Sheets. Ramsar Criteria are the criteria for identifying Wetlands of International Importance. The relevant criteria and ways in which this site meets the criteria are presented in the table below.

Ramsar Criterion	Justification for the application of each criterion
1	Due to immense tidal range (second-largest in world), this affects both the physical environment and biological communities.
3	Due to unusual estuarine communities, reduced diversity and high productivity.
4	This site is important for the run of migratory fish between sea and river via estuary. Species include: Salmon <i>Salmo salar</i> ; Sea trout <i>S. trutta</i> ; Sea lamprey <i>Petromyzon marinus</i> ; River lamprey <i>Lampetra fluviatilis</i> ; Allis shad <i>Alosa alosa</i> ; Twaite shad <i>A. fallax</i> , and Eel <i>Anguilla anguilla</i> . It is also of particular importance for migratory birds during spring and autumn.
5	Assemblages of international importance: Species with peak counts in winter: <ul style="list-style-type: none"> • 70919 waterfowl (5 year peak mean 1998/99-2002/2003)
6	Species/populations occurring at levels of international importance. Qualifying species/populations (as identified at designation): Species with peak counts in winter:

¹⁸ Natural England (2015) Severn Estuary SIP. Available at: <http://publications.naturalengland.org.uk/file/4856107648417792> [Date accessed: 26/01/23]

¹⁹ JNCC (2008) Ramsar Information Sheet: UK11081 Severn Estuary. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11081.pdf> [Date accessed: 26/01/23]

Ramsar Criterion	Justification for the application of each criterion
	<ul style="list-style-type: none"> • Tundra swan, <i>Cygnus columbianus bewickii</i>, NW Europe - 229 individuals, representing an average of 2.8% of the GB population (5 year peak mean 1998/9-2002/3) • Greater white-fronted goose, <i>Anser albifrons albifrons</i>, NW Europe - 2076 individuals, representing an average of 35.8% of the GB population (5 year peak mean for 1996/7-2000/01) • Common shelduck, <i>Tadorna tadorna</i>, NW Europe - 3223 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3) • Gadwall, <i>Anas strepera strepera</i>, NW Europe - 241 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9-2002/3) • Dunlin, <i>Calidris alpina alpina</i>, W Siberia/W Europe - 25082 individuals, representing an average of 1.8% of the population (5 year peak mean 1998/9-2002/3) • Common redshank, <i>Tringa totanus totanus</i> - 2616 individuals, representing an average of 1% of the population (5 year peak mean 1998/9- 2002/3) <p>Species/populations identified subsequent to designation for possible future consideration under criterion 6. Species regularly supported during the breeding season:</p> <ul style="list-style-type: none"> • Lesser black-backed gull, <i>Larus fuscus graellsii</i>, W Europe/Mediterranean/W Africa - 4167 apparently occupied nests, representing an average of 2.8% of the breeding population (Seabird 2000 Census) <p>Species with peak counts in spring/autumn:</p> <ul style="list-style-type: none"> • Ringed plover, <i>Charadrius hiaticula</i>, Europe/Northwest Africa - 740 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3) <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> • Eurasian teal, <i>Anas crecca</i>, NW Europe - 4456 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3) • Northern pintail, <i>Anas acuta</i>, NW Europe - 756 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9- 2002/3)
8	<p>The fish of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded.</p> <p>Salmon <i>Salmo salar</i>, sea trout <i>S. trutta</i>, sea lamprey <i>Petromyzon marinus</i>, river lamprey <i>Lampetra fluviatilis</i>, allis shad <i>Alosa alosa</i>, twaite shad <i>A. fallax</i>, and eel <i>Anguilla anguilla</i> use the Severn Estuary as a key migration route to their spawning grounds in the many tributaries that flow into the estuary.</p> <p>The site is important as a feeding and nursery ground for many fish species particularly allis shad <i>Alosa alosa</i> and twaite shad <i>A. fallax</i> which feed on mysid shrimps in the salt wedge.</p>

Threats and Pressures at Habitats site which may be affected by the SLP:

- Recreational / tourism disturbance.

Appendix B: Preliminary Screening of SLP Issues and Options

Vision and Objectives

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Vision for the SLP	Two options are presented for the vision for the emerging SLP; one based on the Sandwell Vision 2030 ¹ and one based on newly drafted text for the SLP. Both options aim to meet the identified needs of the local population, promote safe, healthy and resilient communities, and seek to protect and enhance the natural and built environment alongside growth.	The vision should provide a positive framework for nature conservation and will be drawn upon to inform the HRA process.
SLP Objectives	Eleven draft objectives are set out, which together are intended to help the achievement of the proposed vision for Sandwell, forming a framework for the delivery of sustainable growth.	The objectives provide a positive framework for nature conservation and will be drawn upon to inform the HRA process.
Strategic Policies	These questions focus on the approach that SMBC should take with respect to the incorporation of former BCP strategic policies into the emerging SLP, and seeks views on which policies should be included.	The former BCP policies were screened as part of the BCP HRA process ² . It concluded that LSEs, either from the BCP alone or in combination with other plans or projects, could be screened out for most policies. However, a number of policies were considered likely to have an LSE on the basis of the assessment. All proposed SLP policies, including those to be carried forward from the draft BCP, will be screened in the HRA process at the Draft SLP plan making stage.

Tackling Climate Change

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Climate Change	This section seeks to gather views on what the priorities of the SLP should be in reducing GHG emissions, and the potential for including policies in the SLP relating to carbon reduction and adaptive techniques in buildings and extensions, and renewable energy sources.	<p>Incorporating measures to address the climate crisis such as protecting and enhancing open spaces and planting trees would be likely to lead to multi-functional benefits, including for climate change and wildlife. Protection of biodiversity assets can contribute towards more resilient and connected habitats, with positive effects for Habitats sites.</p> <p>The allocation of any sites for renewable energy generation promoted through the SLP would need to be assessed through the HRA process to identify potential for LSEs on Habitats sites. Wind and solar farms</p>

¹ Sandwell Metropolitan Borough Council 2021 – 2025. Big Plans for a Great Place: The Sandwell Plan. Available at: https://www.sandwell.gov.uk/download/downloads/id/29963/corporate_plan_-_big_plans_for_a_great_place_for_the_people_of_sandwell.pdf [Date accessed: 16/01/23]

² Lepus Consulting (2021) Habitats Regulations Assessment of the Black Country Plan: Interim HRA to support the plan making process. Regulation 18 Draft Plan Consultation 2020 – 2039, July 2021. Available at: https://blackcountryplan.dudley.gov.uk/media/18641/lc-600_black_coutry_interim_hra_report_11_060721sc-compressed.pdf [Date accessed: 26/01/23]

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
		have the potential to have LSEs on the qualifying features of Habitats sites, for instance upon bird populations which may use functionally linked land within the plan area. This could be through creation of a collision risk, fragmentation of the landscape, creation of barriers to movement, loss of habitat and direct disturbance.
Heat Networks	These questions focus on the potential for the SLP to support, and in some cases require, the development and delivery of heat networks.	Heat networks are unlikely to affect Habitats sites, although may lead to indirect benefits for air quality.
Resilient Landscapes	These questions seek to identify priorities for design and landscaping of new development with respect to climate change resilience and protection of locally important landscape features.	Measures to protect Sandwell's open spaces, parks and countryside and incorporate new landscaping schemes and GI into new development could potentially have a positive effect for Habitats sites which are sensitive to recreational pressures by providing an alternative for the local community. More resilient and well connected landscapes would also be likely to benefit the wider ecological network.
Sustainable Drainage	These questions seek views on how to manage flood risk alongside growth, and the level of detail that should be included in SLP policies regarding SuDS schemes.	Water quality and water supply will be a key aspect of the HRA, in particular regarding water dependent Habitats sites and functionally linked watercourses. Use of SuDS will help to improve the quality of water discharged from development sites. Incorporation of features such as SuDS can contribute to GI if designed sensitively which can link to the wider biodiversity network and connectivity.

Development Strategy and Housing Provision

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Future Development in Sandwell	A range of questions are presented which seek to gather views on the type, location and density of homes needed, and the perceived challenges and issues that should be addressed through the SLP.	<p>Policies regarding types and tenures of homes are unlikely to affect Habitats sites.</p> <p>Higher density developments in centres and closer to public transport infrastructure can lead to environmental benefits such as use of brownfield land, tackling climate change, reducing the need to travel and promoting active travel. These will lead to knock-on impacts which will benefit Habitats sites and areas of linking habitat, such as improvements in air quality.</p> <p>Development of new homes has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail through an AA and, where necessary, look at potential options for mitigation.</p>

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Housing Windfall Sites	These questions relate to a potential local windfall housing policy being included in the SLP.	Development of new homes has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail through an AA and, where necessary, look at potential options for mitigation.
Sustainable Locations	These questions seek views on the preferred location for development to be concentrated, and how the SLP can encourage more sustainable travel.	Locating growth close to sustainable modes of transport, local services and places of work will reduce the need to travel and encourage active travel / public transport use rather than private car reliance, leading to improvements in local air quality. This may have a beneficial effect upon Habitats sites (and areas of functionally linked land) which may be sensitive to air pollution.
Masterplanning	These questions relate to the potential for masterplans to be required for certain types of development.	Masterplanning may provide opportunities to integrate requirements such as tighter water efficiency standards will benefit water sensitive Habitats sites by reducing water demand and also reducing the volume of water requiring treatment at WwTWs. Use of SuDS will help to improve the quality of water discharged from development sites. Incorporation of features such as SuDS can contribute to GI if designed sensitively which can link to the wider biodiversity network and connectivity.
Good Design	These questions seek views on appropriate guidance for design and explore the potential for a local design policy / guidance to be prepared for Sandwell.	If design codes require well-designed neighbourhoods that promote sustainable accessibility and integration of GI and SuDS this could lead to air quality and water quality benefits as discussed above.
Shopfront Design	This question relates to including policies to regulate the external appearance or design of shopfronts.	Shopfront design is unlikely to affect Habitats sites.

Other Housing Issues

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Self- and Custom-Build Housing	These questions seek views on including a policy on self- and custom-build housing and the approach this should take.	Development of new homes, including self- and custom-build housing, has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail through an AA and, where necessary, look at potential options for mitigation.
Specific Housing Requirements	These questions relate to the potential to include a policy on specialist housing needs and appropriate space standards to incorporate in the SLP.	Development of new homes, including those for the elderly and people with specific housing requirements, has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail through an AA

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
		and, where necessary, look at potential options for mitigation.
Gypsies, Travellers and Travelling Showpeople	This question asks whether to retain the draft BCP policy to provide sufficient, appropriately designed sites for travelling communities.	Development of new homes, including those for Gypsies, Travellers and Travelling Showpeople has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail through an AA and, where necessary, look at potential options for mitigation.
Houses in Multiple Occupation	These questions relate to the potential to include a policy on appropriate areas for HMOs or introducing thresholds.	The distribution of HMOs is unlikely to affect Habitats sites.

Healthy People and Communities

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Development for Health	These questions seek views on the perceived key public health issues in Sandwell and ways in which the SLP could encourage healthier lifestyles.	Encouraging active travel could lead to benefits for Habitats sites and areas of linking habitat, through improvements in air quality.
Active Recreation	These questions seek views on whether the SLP should incorporate Sport England Active Design Principles.	Conserving and enhancing a network of multi-functional open spaces and encouraging active travel would lead to benefits for Habitats sites which are sensitive to recreational pressures or air pollution by providing an alternative for the local community and improving air quality.
Community Facilities and Services	These questions relate to the type, quantity and location of community facilities needed in Sandwell.	The type and distribution of community facilities is unlikely to affect Habitats sites.
Green and Blue Infrastructure	These questions relate to the potential for green and blue infrastructure requirements within new developments.	Provision of green and blue infrastructure could lead to multi-functional benefits such as improved air quality, improved water quality and connectivity between biodiversity assets. These improvements would be likely to have a positive impact for Habitats sites and areas of functionally linked land. It recommended that any green / blue infrastructure requirements complement the emerging Local Nature Recovery Network to ensure maximum biodiversity benefits are achieved through design.
Open Space	A range of questions are presented which seek views on potential requirements / thresholds for the type and amount of on-site open space provision in new developments.	Providing on-site open spaces could lead to a positive effect for Habitats sites which are sensitive to recreational pressures by providing an alternative for the local community. It may be helpful to reference the national green infrastructure standards ³ and the revised Accessible Natural Greenspace

³ Natural England. GI Framework Web Portal.

<https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx> [Date accessed: 26/01/23]

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
		Standards (ANGSt) requirements ⁴ within the SLP.
Hot Food Takeaways and Gambling Establishments	These questions seek views on appropriate locations and potential regulations for takeaways, betting shops and other establishments.	The regulation of such uses is unlikely to affect Habitats sites.

Thriving Towns

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Retailing in Town Centres	These questions seek views on key issues relating to town centres and high streets and how the SLP should approach uses in these areas.	The balance of retail and other uses in town centres is unlikely to affect Habitats sites.
Gateway Sites	This question asks whether the SLP should include a policy on gateway sites.	The design and layout of gateway sites is unlikely to affect Habitats sites; although, opportunities to increase biodiversity value of such sites could lead to wider benefits to the ecological network and connectivity.
Town Centres	This series of questions relate to town centre boundaries, the hierarchy of centres and potential to increase density in centres.	Higher density developments in centres and closer to public transport infrastructure can lead to environmental benefits such as use of brownfield land, tackling climate change, reducing the need to travel and promoting active travel. These will lead to knock-on impacts which will benefit Habitats sites and areas of linking habitat, such as through improvements in air quality.

West Bromwich

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
West Bromwich	These questions seek views on perceived issues for West Bromwich Town Centre.	Unlikely to affect Habitats sites.
West Bromwich Future Uses	These questions explore potential uses for vacant shops in West Bromwich.	Development of new homes and businesses, including conversion of vacant employment land into residential use, has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail through an AA and, where necessary, look at potential options for mitigation.

⁴ The revised ANGSt are a component of the green infrastructure standards and include additional targets for greenspace provision.

Supporting a Sustainable Economy

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Employment Land Need	This question seeks views on how the employment land shortfall should be addressed in the SLP.	Development of new employment land has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail through an AA and, where necessary, look at potential options for mitigation.
Sandwell's Economy	These questions explore the potential for a local Economic Development Strategy policy to encourage specific industries.	The delivery of new businesses has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail through an AA and, where necessary, look at potential options for mitigation. Encouraging more manufacturing and distribution uses in particular may lead to increases in traffic flows, including HGVs, with implications for air pollution with potential LSEs for Habitats sites that are sensitive to changes in air quality.
Regeneration	These questions relate to a potential policy for regeneration and explores options for the best methods to attract investment.	All growth in the Local Plan has the potential to have an LSE upon Habitats sites (sites and pathways of impact are set out in the main HRA report) and areas of functionally linked land. Although, regeneration could have positive effects on biodiversity and ecological networks in terms of making best use of available land and incorporating GI, reducing pressure on previously undeveloped land for development.
Demand for Employment Sites	These questions seek views on the size of employment sites to be promoted through the SLP and sets out options for addressing the lack of larger sites.	All growth in the Local Plan has the potential to have an LSE upon Habitats sites (sites and pathways of impact are set out in the main HRA report) and areas of functionally linked land. As discussed above, encouraging certain types of employment which may generate higher traffic volumes can lead to LSEs on Habitats sites which are sensitive to air quality.
Non-Conforming Employment Uses	These questions relate to the potential to permit some employment / ancillary uses in industrial or warehousing areas.	The balance of uses in existing employment areas is unlikely to affect Habitats sites.
Alternative Uses in Industrial Areas	This series of questions seeks views on the types of employment uses that should be permitted in employment locations, and circumstances in which non-employment uses should be encouraged.	The balance of uses in existing employment areas is unlikely to affect Habitats sites. Although, development of new homes and businesses, including potential conversion of vacant employment land into residential use, has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The HRA process will explore these impacts in more detail

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
		through an AA and, where necessary, look at potential options for mitigation.
Training and Recruitment	This question asks whether the existing SAD policy on training and recruitment should be retained for the SLP.	Training and recruitment policy is unlikely to affect Habitats sites.

Industrial Legacy

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Industrial Legacy	These questions seek views on how existing SAD policies should be updated to address pollution, safety and ground conditions for land affected by industrial development.	A policy to address local issues with contaminated land and pollutants associated with Sandwell's industrial legacy would be likely to reduce pollution and improve water quality. These improvements would be likely to have a positive impact for Habitats sites and areas of functionally linked land.

Waste Management

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Strategic Waste Management	This question asks whether to retain the draft BCP policy on waste management to help identify new locations for waste sites.	The development of new waste sites has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The Council may wish to consider the requirement for project level HRA to accompany applications for new waste facilities.
Protection and Location of Waste Facilities	These questions relate to a potential policy to protect areas of land saved for potential waste use from non-conforming development.	The development of new waste sites has the potential to have LSEs on Habitats sites (and areas of functionally linked land) through pathways of impact (see main HRA report). The Council may wish to consider the requirement for project level HRA to accompany applications for new waste facilities.

Greener Infrastructure

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
General Infrastructure	This question invites suggestions for the types of infrastructure that should be provided by the SLP.	Infrastructure provision includes aspects such as GI, SuDS and open space, which would help to connect biodiversity networks, contribute towards improved water quality, and improves the biodiversity resource in the SLP area. It also promotes sustainable forms of transport, with air quality benefits. Such infrastructure will have a positive impact for Habitats and functionally linked land.

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Transport Infrastructure	This question seeks views on where new and improved transport infrastructure is required.	Encouraging active travel and public transport use rather than private car reliance would help to improve local air quality. This may have a beneficial effect upon Habitats sites (and areas of functionally linked land) which may be sensitive to air pollution.
Greener Travel Networks	This question presents options to address the need to promote road sharing.	Encouraging active travel and public transport use rather than private car reliance would help to improve local air quality. This may have a beneficial effect upon Habitats sites (and areas of functionally linked land) which may be sensitive to air pollution.
Safe Access and Addressing Transport Impacts	This question relates to the potential to embed 15-minute neighbourhood principles in the SLP.	15-minute neighbourhoods encourage active and sustainable transport choices. This would have a knock-on positive impact on air quality and a benefit for Habitats sites.
Communications and Digital Infrastructure	This question relates to updating the current policy position for new antennae / masts to ensure applications meet public exposure guidelines.	It is recommended that strong policy wording around all forms of pollution and disturbance be incorporated into the SLP, recognising the potential effects on habitats and species as well as human receptors.
Telephone Kiosks	This question seeks views on the approach to changing uses for telephone kiosks.	Telephone kiosks are unlikely to affect Habitats sites.
Broadband	This question relates to a potential new policy focused on the provision of fast and reliable broadband.	Broadband improvements are unlikely to affect Habitats sites.
Taxis and Private Hire Vehicles	This question relates to the provision of taxi ranks for new developments which generate visitors.	Encouraging more road-based travel including taxis may lead to increases in traffic flows, with implications for air pollution with potential LSEs for Habitats sites that are sensitive to changes in air quality.

Enhancing the Natural and Built Environment

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
Biodiversity Net Gain	These questions set out the potential for a new policy to regulate off-site BNG and explores the potential to adopt a credit scheme for developers.	BNG requirements should actively contribute towards and work alongside the emerging Nature Recovery Network. CIEEM provides useful guidance in relation to Biodiversity Net Gain ⁵ .
Green Spaces	This question relates to the hierarchy of green spaces in Sandwell and the potential to review the existing SAD policy in this regard.	Conserving and enhancing a range of green spaces could lead to a positive effect for Habitats sites which are sensitive to recreational pressures by providing an alternative for the local community. It may be helpful to reference the national green infrastructure standards ⁶ and the

⁵ CIEEM (2016) Biodiversity Net Gain. Good Practice Principles. Available at: <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf> [Date accessed: 27/01/23]

⁶ Natural England. GI Framework Web Portal. <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx> [Date accessed: 26/01/23]

Issues and Options section	Summary of plan element	Key HRA related issues for consideration in HRA and plan-making process
		revised Accessible Natural Greenspace Standards (ANGSt) requirements ⁷ within the SLP.
The Rowley Hills	These questions focus on policy protection for the visual, historic and ecological value of the Rowley Hills and explores the potential for a new designation as Green Belt or Local Green Space.	Conserving and enhancing a range of green spaces and encouraging use of green spaces for recreation and leisure could lead to a positive effect for Habitats sites which are sensitive to recreational pressures by providing an alternative for the local community. Provision of green space should be linked to existing and future GI (and emerging Local Nature Recovery Network) to ensure maximum biodiversity benefits are achieved through design.
Heritage Assets	These questions explore the potential for a new policy to address locally listed heritage assets and ways in which to safeguard heritage assets in light of climate change.	Locally listed heritage assets are unlikely to affect Habitats sites.
Conservation Areas	These questions relate to the approach to conservation area appraisals and explores the potential for new conservation areas to be designated.	Conservation areas are unlikely to affect Habitats sites.
Archaeology	This question asks whether the existing SAD policy providing guidance on the requirements for sites with potential archaeologically important features should be retained for the SLP.	Archaeology is unlikely to affect Habitats sites.
Black Country Geopark	This question asks whether to retain the draft BCP policy regarding the Black Country Geopark.	The conservation of geological features is unlikely to affect Habitats sites.

⁷ The revised ANGSt are a component of the green infrastructure standards and include additional targets for greenspace provision.



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