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Habitats Regulations Assessment of the Cannock Chase Local Plan

Scoping Report

HRA Scoping Report Prepared by LUC March 2019

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1 Introduction

- 1.1 Cannock Chase Council is reviewing its Local Plan, which is the statutory development plan for the District and forms the basis for promoting and controlling development. The Local Plan (Part 1) was adopted in June 2014.
- 1.2 The purpose of this HRA Scoping Report is to draw together and update as necessary the information that was gathered during the HRA of the adopted Local Plan (Part 1) and to describe the approach that will be taken to the HRA of the updated Local Plan.

Background to the Cannock Chase Local Plan

- 1.3 Cannock Chase Council adopted its Local Plan (Part 1) in June 2014, which contains the Core Strategy for the District and the Rugeley Town Centre Area Action Plan. The Local Plan (Part 1) sets out the overall planning strategy for Cannock Chase up to 2028.
- 1.4 The Council began work on a Local Plan (Part 2) and issued the Issues and Options version for consultation in January 2017, with the intention of following this with a published version of the Local Plan (Part 2) that would have set out detailed policies and allocate sites for development within the District.
- 1.5 However, changes to the planning system mean that local authorities must review their plans every five years and the Local Plan is due for review in 2019. Cannock Chase Council has therefore decided to cease work on the Local Plan (Part 2) and commence a review of the Local Plan. The Council issued its Local Plan (Issues and Scope) Consultation Document in July 2018 and the next stage (Issues and Options) will be issued for consultation in early 2019. This HRA scoping report relates to the Local Plan: Issues and Options document and subsequent versions of the Local Plan, produced during the review process.

The requirement to undertake Habitats Regulations Assessment of Development Plans

- 1.6 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010 and again in 2012. These updates were consolidated into the Conservation of Habitats and Species Regulations 2017¹.
- 1.7 The HRA refers to the assessment of the potential effects of a development plan on one or more European sites, including Special Protection Areas (SPAs) and Special Areas of Conservation SACs):
 - SPAs are classified under the European Council Directive "on the conservation of wild birds" (79/409/EEC; 'Birds Directive') for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species);
 - SACs are designated under the Habitats Directive and target particular habitats (Annex 1) and/or species (Annex II) identified as being of European importance.

¹ The Conservation of Habitats and Species Regulations 2017 (Statutory Instrument 2017 No. 1012) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments.

- 1.8 Currently, the Government also expects potential SPAs (pSPAs), possible SACs (pSACs) and Ramsar sites to be included within the assessment².
 - Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).
- 1.9 Candidate SACs (cSACs) and Sites of Community Importance (SCIs), which are sites that have been adopted by the European Commission but not yet formally designated by the Government, must also be considered.
- 1.10 For ease of reference during HRA, these three designations are collectively referred to as European sites, despite Ramsar designations being at the wider international level.
- 1.11 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or whole development plan, would adversely affect the integrity of the site in question. This is judged in terms of the implications of the plan for a site's 'qualifying features' (i.e. those Annex I habitats, Annex II species, and Annex I bird populations for which it has been designated). Significantly, HRA is based on the precautionary principle. Where uncertainty or doubt remains, an adverse effect should be assumed.

Post Brexit Scenario

1.12 The exit of the UK from the European Union may have implications for undertaking HRA for Local Plans. The requirement for assessment of effects on European sites (i.e. HRA) is derived from EC Directives which are currently transposed into domestic legislation via the Conservation of Habitats and Species Regulations 2017³. The UK government has published the draft Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019⁴. The amended (and currently draft) Regulations confirm that the provisions for HRA will be retained. As such the Cannock Chase Local Plan should continue to be required to undergo HRA in spite of any updates to the UK position within or outside of the European Union.

Case Law

1.13 The HRA will be prepared in line with the latest case law applying to interpretation of the Habitats Regulations, and the implications of the most recent relevant case law are discussed further in **Chapter 2**.

Previous HRA work

- 1.14 The Local Plan (Part 1) has been subject to HRA, prior to its adoption. The final HRA reports for the Local Plan (Part 1) were:
 - HRA Report for the Draft Local Plan (Part 1) January 2013, prepared by Halcrow on behalf of Cannock Chase Council.
 - HRA Addendum Report for the Proposed Submission Local Plan (Part 1) November 2013, prepared by CH2MHill on behalf of Cannock Chase Council.
- 1.15 LUC was appointed by Cannock Chase Council in March 2016 to undertake Habitats Regulations Assessment (HRA) of the emerging Local Plan (Part 2) on its behalf, before it was withdrawn.
- 1.16 Therefore, there is already a significant body of HRA work available relating to Cannock Chase District, which can be drawn on to inform the HRA for the review of the Local Plan. The purpose of this Scoping Report is to draw together that information and to update it as appropriate, in order to set the context for the HRA for the review of the Local Plan.

² Department of Communities and Local Government (February 2019) *National Planning Policy Framework* (para 176).

³ SI No. 2017/2012

⁴ ISBN 978-0-11-117951-2

Structure of this report

- 1.17 This chapter (**Chapter 1**) has described the background to the Cannock Chase Local Plan review work and the requirement to undertake HRA. The remainder of the report is structured into the following sections:
 - **Chapter 2** details the approach that will be taken to the HRA for the Local Plan, including the specific tasks that will be undertaken.
 - **Chapter 3** describes the European sites in and around Cannock Chase.
 - **Chapter 4** sets out assumptions that will underpin the HRA assessment.
 - **Chapter 5** describes the next steps that will be carried out in the HRA for the Local Plan.

2 Approach to the HRA

2.1 This chapter describes the approach that will be taken to the HRA for the Cannock Chase Local Plan.

Stages of the Habitats Regulations Assessment

2.2 **Table 2.1** below summarises the stages involved in carrying out a full HRA, based on various guidance documents^{5,6}.

Table 2.1 Stages in HRA

Stage	Task	Outcome	
Stage 1: Screening (the 'Significance Test')	Description of the plan. Identification of potential effects on European sites. Assessing the effects on European sites (taking into account potential mitigation provided by other policies in the plan).	Where effects are unlikely, prepare a 'finding of no significant effect report'. Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.	
Stage 2: Appropriate Assessment (the 'Integrity Test')	Gather information (plan and European sites). Impact prediction. Evaluation of impacts in view of conservation objectives. Where impacts considered to affect qualifying features, identify alternative options. Assess alternative options. If no alternatives exist, define and evaluate mitigation measures where necessary.	Appropriate Assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will be avoided through, firstly, avoidance, and secondly, mitigation including the mechanisms and timescale for these mitigation measures. If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.	
Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation	Identify and demonstrate 'imperative reasons of overriding public interest' (IROPI). Demonstrate no alternatives exist. Identify potential compensatory measures.	This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous.	

- 2.3 In assessing the effects of the Local Plan in accordance with Regulation 105 of the Conservation of Habitats and Species Regulations 2017⁷, there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which will inform the 'Integrity Test'. The relevant sequence of questions is as follows:
 - Step 1: Under Reg. 105(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not –

⁵ The HRA Handbook. David Tyldesley & Associates, a subscription based online guidance document: https://www.dtapublications.co.uk/handbook/*European*

⁶ Planning for the Protection of European sites. Guidance for Regional Spatial Strategies and Local Development Documents.

Department for Communities and Local Government (DCLG), August 2006.

⁷ SI No. 2017/2012

- Step 2: Under Reg. 105(1)(a) consider whether the plan is likely to have a significant effect on the site, either alone or in combination with other plans or projects (the 'Significance Test'). [These two steps are undertaken as part of Stage 1: Screening shown in Table 2.1. above.] If Yes –
- Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public. [This step is undertaken during Stage 2: Appropriate Assessment shown in **Table 2.1** above.]
- Step 4: In accordance with Reg.105(4), but subject to Reg.107, give effect to the land use plan only after having ascertained that the plan will not adversely affect the integrity of the European site.
- 2.4 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the avoidance of likely significant effects at Stage 1, and through Appropriate Assessment at Stage 2 by the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified only very occasionally and would involve engagement with both the Government and European Commission.
- 2.5 The HRA should be undertaken by the 'competent authority', in this case Cannock Chase Council, and LUC has been commissioned to do this on its behalf. The HRA also requires close working with Natural England as the statutory nature conservation body⁸ in order to obtain the necessary information and agree the process, outcomes and any mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

Recent case law changes

- 2.6 The HRA needs to be prepared in accordance with recent case law findings, including most notably the recent 'People over Wind' and 'Holohan' rulings from the Court of Justice for the European Union (CJEU).
- 2.7 The recent *People over Wind, Peter Sweetman v Coillte Teoranta* (April 2018) judgment ruled that Article 6(3) of the Habitats Directive should be interpreted as meaning that mitigation measures should be assessed as part of an Appropriate Assessment, and should not be taken into account at the screening stage. The precise wording of the ruling is as follows:

"Article 6(3)must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site.

- 2.8 In light of the above, the HRA screening stage must not rely upon avoidance or mitigation measures to draw conclusions as to whether the Local Plan could result in likely significant effects on European sites, with any such measures being considered at the Appropriate Assessment stage as relevant.
- 2.9 HRA must also fully considers the recent *Holohan v An Bord Pleanala* (November 2018) judgement which stated that:

Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project

⁸ Regulation 5 of *The Conservation of Habitats and Species Regulations 2017* (Statutory Instrument 2017 No. 1012).

for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that the competent authority is permitted to grant to a plan or project consent which leaves the developer free to determine subsequently certain parameters relating to the construction phase, such as the location of the construction compound and haul routes, only if that authority is certain that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that, where the competent authority rejects the findings in a scientific expert opinion recommending that additional information be obtained, the 'appropriate assessment' must include an explicit and detailed statement of reasons capable of dispelling all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned.

2.10 In undertaking HRA, LUC fully considers the potential for effects on species and habitats, including those not listed as qualifying features, to result in secondary effects upon the qualifying features of European sites, including the potential for complex interactions and dependencies. In addition, the potential for offsite impacts, such as through impacts to functionally linked land, and or species and habitats located beyond the boundaries of European site, but which may be important in supporting the ecological processes of the qualifying features, will also be fully considered in the HRA of the Cannock Chase Local Plan.

Screening methodology

2.11 HRA Screening of the Local Plan will be undertaken in line with current available guidance and seek to meet the requirements of the Habitats Regulations. The Habitats Regulations require screening to involve the stages outlined in **Table 2.2**.

Table 2.2 Stages of HRA screening

Regulation	Stage required by Regulation
Reg. 63(1)	1) Determine whether the plan or project is within the scope of the Habitats Regulations
	2) Determine whether the plan or project is of a type that could possibly have any (positive or negative) effect on a European site
	3) Determine whether the plan or project is directly connect with or necessary to the management of the European sites potentially affected
	4) Identify the European sites potentially adversely affected and their conservation objectives
	5) Determine whether the plan or project is likely to have a significant adverse effect on any European site alone
	6) Determine whether the plan or project is likely to have a significant adverse effect on any European site in combination with other plans or projects
Reg. 63(2)	7) Requires the information necessary to decide whether the plan or project would be likely to have a significant adverse effect on a European site either alone or in combination with other plans or projects
Reg. 67	8) Coordination where more than one competent authority is involved in screening the plans or projects

2.12 Local Plans fall within the scope of the Habitats Regulations (screening stage 1) and Cannock Chase Council is the competent authority with regards to screening the Local Plan (screening stage 8). The information required to determine whether the Local Plan is likely to have a significant effect (screening stage 7) is set out below, along with the methodology for determining the remainder of the stages.

Identifying types of potential impact from the Local Plan

2.13 **Table 2.3** below sets out the range of potential impacts that development of the type likely to be included in the Local Plan and related activities may have on European sites. This table has been prepared by LUC for use in informing HRA judgements, drawing on our experience of HRA and comments previously provided by Natural England relating to the potential impacts and activities that could affect European sites.

Table 2.3 Potential impacts and activities arising from implementation of the Local Planthat could adversely affect European sites

Broad categories and examples of potential impacts on European sites	Examples of activities responsible for impacts
 Physical loss Removal (including offsite effects, e.g. foraging habitat) Smothering Habitat degradation 	Development (e.g. housing, employment, infrastructure, tourism) Structural alterations to buildings (bat roosts) Afforestation Tipping Cessation of or inappropriate management for nature conservation
 Physical damage Direct mortality Sedimentation / silting Prevention of natural processes Habitat degradation Erosion Trampling Fragmentation Severance / barrier effect Edge effects Fire 	Flood defences Dredging Recreation (e.g. motor cycling, cycling, walking, horse riding, water sports, caving) Development (e.g. infrastructure, tourism, adjacent housing etc.) Vandalism Arson Cessation of or inappropriate management for nature conservation
 Non-physical disturbance Noise Vibration Visual presence Human presence Light pollution 	Development (e.g. housing, industrial) Recreation (e.g. dog walking, water sports) Industrial activity Vehicular traffic Artificial lighting (e.g. street lighting)
 Water table/availability Drying Flooding / stormwater increase Water level and stability Water flow (e.g. reduction in velocity of surface water Barrier effect (on migratory species) 	Water abstraction Drainage interception (e.g. reservoir, dam, infrastructure and other development) Increased discharge (e.g. drainage, runoff)
 Toxic contamination Water pollution Soil contamination Air pollution 	Oil / chemical spills Tipping Vehicular traffic Industrial waste / emissions
 Non-toxic contamination Nutrient enrichment (e.g. of soils and water) Algal blooms Changes in salinity Changes in thermal regime Changes in turbidity Air pollution (dust) 	Sewage discharge Water abstraction Industrial activity Flood defences Construction

Broad categories and examples of potential impacts on European sites	Examples of activities responsible for impacts
 Biological disturbance Direct mortality Out-competition by non-native species Selective extraction of species Introduction of disease Rapid population fluctuations Natural succession 	Development (e.g. housing areas with domestic and public gardens) Predation by domestic pets Introduction of non-native species (e.g. from gardens) Fishing Hunting Changes in management practices (e.g. grazing regimes, access controls, cutting / clearing)

Identifying European sites that may be affected

- 2.14 Geographical Information Systems (GIS) data has been used to map the locations and boundaries of European sites using publicly available data from Natural England. Usually, all European sites lying partially or wholly within 15 km of the Local Plan boundary are included, to reflect the fact that policies in the Local Plan may affect European sites that are located outside of the administrative boundary of the Plan. The 15 km distance has been agreed with Natural England for HRAs elsewhere and is considered a precautionary method of identifying European sites that could potentially be affected by development. A check is also carried out to identify any further-distant European sites that could be significantly affected by development within Cannock Chase District due to links (e.g. hydrological or ecological) with the Plan area.
- 2.15 **Chapter 3** identifies the European sites that will need to be considered within the HRA of the Cannock Chase Local Plan.

Assessment of 'likely significant effects' of the Local Plan

- 2.16 Regulation 105 of the Conservation of Habitats and Species Regulations 2017⁹ (the 'Habitats Regulations'), requires an assessment of the 'likely significant effects' of a land use plan. Relevant case law helps to interpret when effects should be considered as a likely significant effect, when carrying out HRA of a land use plan.
- 2.17 In the Waddenzee case¹⁰, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:
 - An effect should be considered 'likely', "*if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site"* (para 44).
 - An effect should be considered 'significant', "*if it undermines the conservation objectives*" (para 48).
 - Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).
- 2.18 A relevant opinion delivered to the Court of Justice of the European Union¹¹ commented that:

"The requirement that an 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."

2.19 This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or *de minimis*; referring to such cases as those "*that have no appreciable effect on the site"*. In practice such effects could be screened out as having no likely significant effect – they would be 'insignificant'.

⁹ SI No. 2017/2012

¹⁰ ECJ Case C-127/02 "Waddenzee" Jan 2004.

¹¹ Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

2.20 The HRA screening assessment therefore considers whether the Local Plan policies could have likely significant effects either alone or in combination.

In-combination effects

- 2.21 Regulation 105 of the Habitats Regulations 2017 requires an Appropriate Assessment where "a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site". Therefore, where likely significant effects are identified for the Local Plan it is necessary to consider whether there may also be significant effects in combination with other plans or projects.
- 2.22 The first stage in identifying 'in-combination' effects involves identifying which other plans and projects in addition to the Cannock Chase Local Plan may affect the European sites that will be the focus of this assessment. This exercise seeks to identify those components of nearby plans that could have an impact on the European sites within the Cannock Chase District boundary, e.g. areas or towns where additional housing or employment development is proposed near to the European sites (as there could be effects from the transport, water use, infrastructure and recreation pressures associated with the new developments). Plans for other local authorities of the Cannock Chase SAC Partnership have also been considered, as these are within 15km of Cannock Chase SAC and therefore have potential to lead to additional visitor pressure on this site. This includes all local authorities within which the European sites of concern lie.
- 2.23 There are a large number of potentially relevant plans; therefore the review has focussed on planned spatial growth within authorities adjacent to Cannock Chase as well as other authorities that are adjacent to the European sites included in this HRA. The findings of any associated HRA work for those plans have been reviewed where available.
- 2.24 **Appendix 2** presents the review of other plans, outlining the components of each plan that could have an impact on nearby European sites. The plans which are currently adopted are subject to review by the relevant planning authorities and as such updates to these documents will need to be taken into account at subsequent stages of the HRA. This information will be updated as appropriate as the HRA for the Local Plan progresses. The following authorities' plans will be considered:

County that Cannock Chase is in:

• Staffordshire County

Shared boundary with Cannock Chase District:

- Stafford Borough
- Lichfield District
- Walsall Borough
- South Staffordshire District

Other local authorities within Cannock Chase SAC Partnership:

- East Staffordshire Borough
- Wolverhampton City

Other local authorities for which there is potential for in combination effects on other European sites:

• North Warwickshire – The HRA for the North Warwickshire Draft Submission Local Plan concluded that impacts on the Cannock Extension Canal SAC in relation to air pollution could not be screened out from further assessment.

Appropriate Assessment methodology

2.25 Following the screening stage, if likely significant effects on European sites are unable to be ruled out, the plan-making authority is required under Regulation 105 of the Habitats Regulations 2017

to make an 'Appropriate Assessment' of the implications of the plan for European sites, in view of their conservation objectives. EC Guidance¹² states that the Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of European sites with respect to their conservation objectives and to their structure and function.

Assessment scope

- 2.26 The scope of the Appropriate Assessment can be narrowed down by identifying the specific aspects of the Local Plan that contribute to its potential for significant effects. Each Local Plan policy (and option or site allocation, where relevant) is considered, alone and in-combination with other policies, site allocations and/or plans from neighbouring authorities.
- 2.27 A risk-based approach involving the application of the precautionary principle will be adopted, such that a conclusion of 'no significant effect' will only been reached where it is considered unlikely, based on current knowledge and the information available, that a Local Plan policy would have a significant effect on the integrity of a European site.
- 2.28 For some types of impacts, the potential for likely significant effects can been determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, where assumptions have been made, these are set out in **Chapter 4** Assessment assumptions; these will be reviewed as the HRA progresses.
- 2.29 A scoping matrix will be prepared in order to assess which draft policies (and options or site allocations) are likely to have a significant effect on European sites. The scoping matrix will be appended to the HRA report and will be summarised in the main body of the report. The proposed structure of the scoping matrix is shown in **Table 2.4** below.

Policy/option /site allocation	Likely activities (operations) to result as a consequence	Potential effects if implemented	Does the policy / option / site allocation need to be scoped into the Appropriate Assessment?

Table 2.4 Proposed structure of the HRA screening matrix

2.30 A 'traffic light' approach will be used in the scoping matrix to record the likely impacts of each policy (and option or site allocation) on European sites and their qualifying habitats and species, using the colour categories shown below.

Red	There are likely to be significant effects (scoped in to Appropriate Assessment).
Amber	There may be significant effects, but this is currently uncertain (scoped in to Appropriate Assessment).
Green	There are unlikely to be significant effects (scoped out of Appropriate Assessment).

2.31 The Appropriate Assessment then focuses on those policies / options / site allocations that have been scoped in.

¹² Assessment of plans and projects significantly affecting European sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.

Assessing the effects on site integrity

- 2.32 A site's integrity depends on it being able to sustain its 'qualifying features' (i.e. those Annex 1 habitats, Annex II species, and Annex 1 bird populations for which it has been designated) and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a site's conservation objectives is realised and where the site is capable of self-repair and renewal with a minimum of external management support.
- 2.33 A conclusion needs to be reached as to whether or not the Local Plan would adversely affect the integrity of a European site. As stated in the EC Guidance, assessing the effects on the site(s) integrity involves considering whether the predicted impacts of the Local Plan policies (either alone or in combination) have the potential to:
 - Cause delays to the achievement of conservation objectives for the site;
 - Interrupt progress towards the achievement of conservation objectives for the site;
 - Disrupt those factors that help to maintain the favourable conditions of the site;
 - Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site;
 - Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem;
 - Change the dynamics of relationships that define the structure or function of the site (e.g. relationships between soil and water, or animals and plants);
 - Interfere with anticipated natural changes to the site;
 - Reduce the extent of key habitats or the population of key species;
 - Reduce the diversity of the site;
 - Result in disturbance that could affect the population, density or balance between key species;
 - Result in fragmentation; or
 - Result in the loss of key features.
- 2.34 The conservation objectives for each European site (**Appendix 1**) are generally to maintain the qualifying features in favourable condition. The Site Improvement Plans for each European site provide a high level overview of the issues (both current and predicted) affecting the condition of the European features on the site(s) and outline the priority measures required to improve the condition of the features. These have been drawn on to help to understand what is needed to maintain the integrity of the European sites.
- 2.35 For each European site where an uncertain or likely significant effect is identified in relation to the Local Plan, the potential impacts will be set out and judgements made (based on the information available) regarding whether the impact will have an adverse effect on the integrity of the site. Consideration will be given to the potential for mitigation measures to be implemented that could reduce the likelihood or severity of the potential impacts such that there would not be an adverse effect on the integrity of the site.

3 European sites in and around Cannock Chase

- 3.1 Geographical Information Systems (GIS) data have been used to map the locations and boundaries of European sites within 15km of the Cannock Chase District boundary (**Figure 3.1**), using publicly available data from Natural England. All European sites lying partially or wholly within 15km have been included, along with any further-distant European sites that could be significantly affected by development within the District.
- 3.2 The 2013 HRA of the adopted Local Plan (Part 1) used a more precautionary 20km screening distance for its initial screening of the European sites, but then screened out the majority of the sites within 20km, on the basis of their distance from the District and the sensitivity of their qualifying features. Only three sites were therefore screened into the 2013 HRA: Cannock Chase SAC, Cannock Extension Canal SAC, and West Midland Mosses SAC.
- 3.3 Given the time that has elapsed since that HRA work, the changes to case law that have occurred since, and the fact that the Local Plan is under review, it is considered that the HRA for the Local Plan should revisit which European sites need to be screened into the assessment. 15km is considered an appropriate screening distance, with checks to confirm that no other sites could be functionally connected to the Local Plan area (see paragraph 2.15).
- 3.4 The following European sites are within 15km of Cannock Chase District:
 - Cannock Chase SAC (within and adjacent to the District);
 - Cannock Extension Canal SAC (within and adjacent to the District);
 - Pasturefields Salt Marsh SAC (c.6km away);
 - Midland Meres and Mosses (Phase 1) Ramsar site / West Midland Mosses SAC (c.8km away);
 - Mottey Meadows SAC (c.13km away); and
 - River Mease SAC (c.13km away).
- 3.5 Humber Estuary SAC, SPA and Ramsar site is c.155km away but hydrologically connected to the rivers of Cannock Chase. If the updated Local Plan contains significant new sources of pollution, this European site may need to be scoped in, but otherwise it is considered too far away to be affected by the Local Plan.
- 3.6 The attributes of these sites which contribute to and define their integrity have been described (see **Appendix 1**). In doing so, reference was made to the Natura 2000 standard data forms published on the JNCC website¹³, Natural England's Site Improvement Plans¹⁴ and Conservation Objectives Supplementary Advice¹⁵. This analysis enables European site interest features to be identified, along with the features of each site which determine site integrity and the specific sensitivities of the site. This information will allow an analysis of how the potential impacts of the Local Plan may affect the integrity of each site.
- 3.7 **Table 3.1** summarises the key vulnerabilities of each site to the types of effect that may arise from the development plan.

¹³ www.jncc.defra.gov.uk

¹⁴ http://publications.naturalengland.org.uk/category/4879822899642368

¹⁵ http://publications.naturalengland.org.uk/category/5134123047845888

Table 3.1Key vulnerabilities of European sites

	Air pollution	Water levels / abstraction	Water quality	Recreation / urban effects
Cannock Chase SAC	✓	✓		~
Cannock Extension Canal SAC	✓		✓	
West Midland Mosses SAC	✓	✓	4	
Midland Meres and Mosses (Phase 1) Ramsar site			V	
Pasturefields Salt Marsh SAC				
Mottey Meadows SAC		✓	✓	
River Mease SAC		*	4	

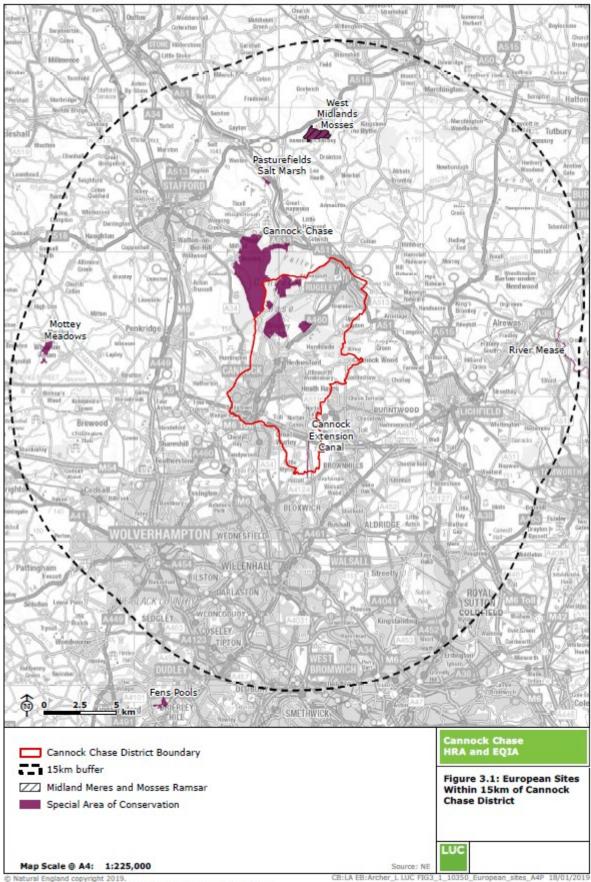


Figure 3.1 European sites within 15km of Cannock Chase District

 \odot Natural England copyright 2019. Contains Ordnance Survey data \odot Crown copyright and database right 2019

4 Assessment assumptions

- 4.1 For many of the types of impacts, the potential for significant effects will be determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, a number of assumptions will be applied in relation to assessing the potential effects on European sites that may result from the Local Plan, as described below.
- 4.2 Other types of potential effect may be identified during the HRA process. If so, any assumptions that the assessment of those effects is based on will be set out in the HRA.

Physical loss of habitat

- 4.3 Any development resulting from the Local Plan will be located within Cannock Chase District; therefore loss of habitat from within the boundaries of a European site will be able to be ruled out in relation to most of the European sites as they lie entirely outside of Cannock Chase. However, the potential for loss of habitat from within the boundaries of the European sites that lie partially within the District (Cannock Chase SAC and Cannock Extension Canal SAC) will need to be considered if Local Plan proposals could result in development coming forward in those areas.
- 4.4 None of the qualifying features for the European sites considered in this HRA (**Appendix 1**) are mobile species, so there is no scope for loss of functionally linked land.

Noise, vibration and light pollution

4.5 Noise and vibration effects, e.g. during the construction of new housing or other development, are most likely to disturb bird species and are thus a key consideration with respect to European sites where birds are the qualifying features, although such effects may also impact upon some mammals and fish species. Artificial lighting at night (e.g. from street lamps, flood lighting and security lights) is most likely to affect bat populations and some nocturnal bird species, and therefore have an adverse effect on the integrity of European sites where bats or nocturnal birds are a qualifying feature. As none of the sites in this HRA are designated for bird or bat species, noise, vibration and light pollution need not be considered in this assessment.

Air pollution

- 4.6 Air pollution is most likely to affect European sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species may also be affected, either directly or indirectly, by any deterioration in habitat as a result of air pollution. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen (N) availability that can then affect plant health, productivity and species composition. All of the sites have plant and/or water habitats or species as their qualifying feature.
- 4.7 In terms of vehicle traffic, nitrogen oxides (NOx, i.e. NO and NO₂) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NOx can cause eutrophication of soils and water. The HRA will refer to the UK Air Pollution Information System¹⁶ to determine whether concentrations of NOx at the European sites are currently exceeding critical loads or not.
- 4.8 Based on the Highways Agency Design for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 1¹⁷ (which was produced to provide advice regarding the design, assessment and operation of trunk roads (including motorways)), it is assumed that air pollution from roads is unlikely to be significant beyond 200 m from the road itself. Where increases in traffic volumes are forecast, this 200 m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.

¹⁶ http://www.apis.ac.uk/

¹⁷ http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3.htm

- 4.1 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:
 - Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
 - Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
 - Daily average speed will change by 10 km/hr or more; or
 - Peak hour speed will change by 20 km/hr or more; or
 - Road alignment will change by 5 m or more.
- 4.2 Recent case law, known as the Wealden judgment¹⁸, has revised the method by which Natural England expects to see in-combination air pollution effects assessed. The implication of the judgment is that, where the road traffic effects of other plans or projects are known or can be reasonably estimated (including those of adopted plans or consented projects), then these should be included in road traffic modelling by the local authority whose local plan or project is being assessed. The screening criteria of 1,000 AADT should then be applied to the traffic flows of the plans in combination.
- 4.3 It has been assumed that only those roads forming part of the primary road network (motorways and 'A' roads) might be likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000 AADT etc.).
- 4.4 Traffic forecast data (based on the planned level of growth) will therefore be needed to determine if increases in vehicle traffic in and around Cannock Chase are likely to be significant as a result of the Local Plan, either alone or in combination with other plans or projects. An assessment will also be undertaken to identify which European sites lie within 200m of the strategic road network.
- 4.5 Potential effects will also be considered if there is any significant development identified in the plan that would cause aerial emissions (e.g. airports, power stations).

Recreation and urban impacts

- 4.6 Recreation activities and general human presence can have an adverse impact on the integrity of a European site as a result of physical disturbance, e.g. through erosion, arson and trampling. Where policies or site allocations in the Local Plan are likely to result in an increase in the local population (i.e. residential development), or where an increase in tourism is considered likely, the potential for an increase in visitor numbers and the associated impacts at sensitive European sites will be identified.
- 4.7 Consideration will be given to factors such as the characteristics and current use of the European sites and their accessibility from potential development areas. The only European site that has been identified as sensitive to recreation and urban impacts is Cannock Chase SAC. This site is not designated for bird or bat species that would be sensitive to disturbance from the presence of people or dogs, but its habitats are sensitive to other forms of disturbance, for example fires.
- 4.8 Visitor survey work undertaken by Footprint Ecology¹⁹ in partnership with local authorities of the Cannock Chase SAC Partnership (Stafford Borough, South Staffordshire, Lichfield, East Staffordshire, Walsall Metropolitan Borough Council, Wolverhampton City Council) (the 'Footprint Ecology' report) shows that the 'in combination' impact of proposals involving a net increase of one or more dwellings within a 15 kilometre radius of the SAC could have an adverse effect on its integrity; with a significantly higher proportion of visitors coming from within 8km. Therefore, proposed residential or tourism development within 15km of the Cannock Chase SAC will be highlighted as likely to have significant effects. Members of the Cannock Chase SAC Partnership formally acknowledge a 15km zone of influence, with financial contributions being sought in the 0-

¹⁸ Wealden District Council v. (1) Secretary of State for Communities and Local Government; (2) Lewes District Council; (3) South Downs National Park Authority and Natural England

¹⁹ Liley, D. (2012). Cannock Chase SAC Visitor Survey. Unpublished report, Footprint Ecology

8km zone. Further information on this is given in the Cannock Chase SAC Guidance to Mitigate the Impact of New Residential Development²⁰.

4.9 It should be noted that the Cannock Chase SAC Partnership is currently reviewing and updating its evidence base. As such while the situation described for the District reflects the most up to date scenario, there is potential for this to change. New evidence will inform the assessment as and when it becomes available where relevant.

Water quantity and quality

- 4.10 The following sites have qualifying features that are sensitive to changes in water levels or quality:
 - Cannock Chase SAC;
 - Cannock Extension Canal SAC;
 - Midland Meres and Mosses (Phase 1) Ramsar site / West Midland Mosses SAC;
 - Mottey Meadows SAC; and
 - River Mease SAC.
- 4.11 Water supply in Cannock Chase is managed by South Staffs Water (SSW) and wastewater treatment by Severn Trent Water. SSW's Water Resources Management Plan (WRMP)²¹ is in the process of being updated. It will set out the water company's plans to maintain a balance between supply and demand over 25 years from 2020 to 2045, and will itself be subject to HRA. As the Local Plan progresses and the WRMP is updated, the HRA will need to ensure that its evidence base remains up to date.
- 4.12 The latest Water Cycle Study²² is from 2010 but a new Water Cycle Study is currently being prepared, which will need to be taken into account to ensure that any revisions arising from the Local Plan will not result in issues with wastewater treatment. South Staffs Water may also need to be consulted with regards to potential water supply issues, if the 2019 WRMP is not completed by the time the HRA is prepared.

²⁰ Cannock Chase District Council (date not available) Cannock Chase Special Area of Conservation (SAC) Guidance to Mitigate the Impact of New Residential Development (2015/16)

²¹ South Staffs Water Resources Management Plan https://www.south-staffs-water.co.uk/about-us/our-strategies-and-plans/ourwater-resources-plan

²² Southern Staffordshire Outline Water Cycle Study

https://www.cannockchasedc.gov.uk/sites/default/files/113_water_cycle_study_2010_0.pdf

5 Next steps

- 5.1 This Scoping Report has introduced the HRA process that will be undertaken in relation to the Cannock Chase Local Plan.
- 5.2 The next iteration of the Local Plan will be subject to HRA in line with the methodology presented in **Chapter 2** of this report.
- 5.3 The HRA report will be updated as required throughout the Local Plan process, with the HRA report relating to each iteration of the Local Plan being published during consultation periods. Specific consultation on this Scoping Report and subsequent HRA Reports will be undertaken with Natural England as the statutory consultation body for HRA as the Local Plan progresses.

LUC March 2019

Appendix 1

Attributes of European sites with the potential to be affected by the Local Plan

	ualifying habitats and species upon which the qualifying ts and/or species depend
Chase SAC (1,244.2ha)heaths Northern Atlantic wet heaths with <i>Erica tetralix</i> • The site requires grazing to diversify the 	rd data form: ts at the site: 3% Heath, scrub, maquis and garrigue, phygrana % Coniferous woodland 5% Non-forest areas cultivated with woody plants (including hards, groves, vineyards) % Inland water bodies (standing water, running water) vation objectives supplementary advice ²⁵ lowing targets within the supplementary advice indicate the t habitats and species within the heathland that are important to egrity of the site: ntain valley bogs / fen containing a mosaic of M6 <i>Carex</i> <i>inata-Sphagnum fallax</i> mire, M15 <i>Scirpus cespitosa – Erica</i> <i>ralix</i> mire, M16 – <i>Erica tetralix & Sphagnum compactum</i> wet ath, M21 <i>Narthecium ossifragum-Sphagnum papillosum</i> mire and 5 <i>Molinia caerulea-Potentilla erecta</i> mire, along with with M23 <i>cus effusus/acutiflorus-Galium palustre</i> rush pasture and S3 <i>ex paniculata</i> swamp. ntain areas of transition between wet heath and other heathland sociated habitats

 ²³ Natural England (2014) Site Improvement Plan: Cannock Chase SAC <u>http://publications.naturalengland.org.uk/publication/4957799888977920?category=4879822899642368</u>
 ²⁴ JNCC (2016) Standard Data Form: Cannock Chase SAC <u>http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0030107.pdf</u>

²⁵ Natural England (2017) Cannock Chase SAC Conservation Objectives supplementary advice <u>http://publications.naturalengland.org.uk/publication/6687924741472256</u>

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
			 bracken <i>Pteridium aquilinum</i> Restore the abundance of the species listed below to enable each of them to be a viable component of the H4010 wet heath feature: Constant and preferential wet heath plant species of M6, M15, M16 and M25 along with M10, M21, M22, M23, M25 & S3 vegetation types in the intimate valley bog/mire mosaic including <i>Erica tetralix, Vaccinium oxycoccus, Eriophorum angustifolium, Sphagnum</i> species, <i>Thelypteris thelypteroides, Drosera rotundifolia, Eleocharis quinqueflora, Narthecium ossifragum, Carex dioica, Carex lepidocarpa, Carex paniculata, Pinguicula vulgaris and Parnassia palustris.</i> Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, to within typical values for the H4010 wet heath feature. Restore the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values
Cannock Extension Canal SAC (5ha)	Floating water- plantain <i>Luronium natans</i>	 Site improvement plan²⁶ There is a sediment load, albeit low, in the inflow water. Overgrazing of water plants by Canada geese could affect the plan community and contribute additional nutrients to the water via excreta. Invasive species Water fern <i>Azolla filiculoides</i> and Water pennywort <i>Hydrocotyle ranunculoides</i> have been present in the recent past but controlled by the Canal and Rivers Trust. 	 Standard data form Habitats at the site: 75% Inland water bodies (Standing water, running water) 10% Humid grassland, mesophile grassland 10.1% Other land (including towns, villages, roads, waste places, mines, industrial sites) 4.9% Broad-leaved deciduous woodland Conservation objectives supplementary advice²⁸ The following targets within the supplementary advice indicate the

 ²⁶ Natural England (2014) Site Improvement Plan: Cannock Extension Canal SAC <u>http://publications.naturalengland.org.uk/publication/6103368296562688?category=4879822899642368</u>
 ²⁸ Natural England (2018) Cannock Extension Canal SAC Conservation Objectives supplementary advice <u>http://publications.naturalengland.org.uk/publication/5063623810482176</u>

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
(Area, ha)	features	 Air pollution is a pressure, as nitrogen deposition currently exceeds the relevant critical load. This could be exacerbated by major roads, industrial estates and farming. Standard data form²⁷ The following are identified as threats: groundwater pollution, invasive species, air pollution and grazing. Site improvement plan²⁹ 	 habitats and/or species depend specific habitats and species within the canal that are important to the integrity of the site: Ensure the supporting open water habitat is sufficiently free of other competing vegetation and shade Restore a high degree of water clarity, water quality and substrate Ensure invasive non-native species are absent Maintain sufficient areas of shallow and still water for floating water plantain
Midland Mosses SAC (184.62ha)	dystrophic lakes and ponds Transition mires and quaking bogs	 Site Improvement plant This SAC is vulnerable to changes in water quality and nutrient enrichment, particularly from agriculture, forest nursery and residential uses in the catchments. Pools at Abbots Moss fail to meet their water quality objectives and those at Clarepool Moss require testing. The SAC is vulnerable to hydrological changes, including groundwater abstractions, artificial flooding and catchment drainage. Both surface water and groundwater are important supply mechanisms. Air pollution is a pressure as nitrogen deposition at the site exceeds the relevant critical loads. Inappropriate scrub control is identified as a pressure, as transition mire habitat experiences continual recolonization by scrub, which can increase the rate of drying out and the addition 	 Habitats at the site: 35.5% Bogs, marshes, water fringed vegetation, fens 22.5% Broad-leaved deciduous woodland 20.5% Improved grassland 5.5% Heath, scrub, maquis and garrigue, phygrana 4.9% Coniferous woodland 3.3% Mixed woodland 3.3% Mixed woodland 3.3% Inland water bodies (standing water, running water) 2.2% Inland rocks, screes, sands <i>Conservation objectives supplementary advice</i> ³¹ The following targets within the supplementary advice indicate the

 ²⁷ JNCC (2015) Standard Data Form: Cannock Extension Canal SAC <u>http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0012672.pdf</u>
 ²⁹ Natural England (2015) Site Improvement Plan: West Midland Mosses SAC <u>http://publications.naturalengland.org.uk/publication/5422476326600704</u>

³¹ Natural England (2016) West Midland Mosses SAC Conservation Objectives supplementary advice <u>http://publications.naturalengland.org.uk/publication/6449667604742144</u>

Site name Qualifying K (Area, ha) features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
T ir a g T n a	 of nutrients. Game management is an issue as nutrient enrichment and disturbance to ground flora have been identified in the areas of pheasant pens at Clarepool and Chartley Mosses. Erosion may be caused by shoot activities and access restrictions due to shooting can restrict rewetting and conservation management. Inappropriate woodland management could cause shade, nutrient enrichment, enhanced evapotranspiration and increase the seed stock for scrub encroachment. Improved forest/plantation management could have a positive effect on this SAC. As the constituent sites of the SAC are small and geographically isolated, localised species extinction is a threat. Standard data form³⁰ The following are identified as threats: human induced changes in hydraulic conditions, hunting and collection of wild animals, air pollution, groundwater pollution, and succession. The mowing/cutting of grassland, grazing, modification of cultivation practices and improved access as potentially having positive effects on the site. 	 specific habitats and species within the heathland that are important to the integrity of the site: Ensure 'high impact' non-native species (such as signal crayfish) are either rare or absent. Maintain a characteristic zonation of fringing vegetation, to maintain the macrophyte community structure eg. at Lily Pool. A well defined hydrosere associated with the water body is also required. Maintain the natural shoreline of the lake, to avoid impacts on sediment deposition. Maintain the natural substrate for the lake as predominantly peaty. Restore the abundance of the following species: Characteristic species - <i>Utricularia</i> spp (bladderworts), Sphagnum spp, <i>Comarum palustre</i> (marsh cinquefoil), <i>Juncus bulbosus</i> (bulbous rush), Nymphaea alba, <i>Menyanthes trifoliata</i> and <i>Potamogeton polygonifolius</i> (bog pondweed) with associates of <i>Sparganium angustifolium</i> (floating bur-reed), <i>Eleogiton fluitans</i> (floationg clubrush)and <i>Drepanocladus</i> spp; Assemblage of dragonflies and damselflies (including white-faced darter <i>Leucorrhinia dubia</i>, downy emerald <i>Cordulia aenea</i> and black darter <i>Sympetrum danae</i>). Maintain a total projected biomass of total fish production at appropriate levels (fishing stocking is inappropriate). Restore stable nutrient levels appropriate for lake type. Restore nitrogen concentrations to appropriate levels. Restore water quality at 'good' chemical status.

³⁰ JNCC (2015) Standard Data Form: West Midland Mosses SAC <u>http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0013595.pdf</u>

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
			 Restore dissolved oxygen levels. Restore the clarity of water to an appropriate level, to support macrophytes. Restore chlorophyll concentrations to comply with 'high' ecological status. Restore natural hydrological processes, through blocking/infilling of drainage ditches and reduction of woodland cover. Maintain the natural sediment load. Restore the land habitat surrounding the site. Maintain concentrations of air pollutants within critical load or level values. Maintain management measures necessary to maintain and restore the feature.
Midland Meres and Mosses (Phase 1) Ramsar site (1,588ha)	Natural dystrophic lakes and ponds Transition mires and quaking bogs	 Information sheet³² The following factors were identified as adversely affecting the site's ecological character: Eutrophication (to be addressed through agri-environment schemes) Introduction/invasion of exotic plant species Urban land uses There is no major tourism or recreational use of the site, other than some angling/boating/motor sports (water skiing). 	Information sheet Habitats at the site: • 35% freshwater lakes (permanent) • 7.7% freshwater marshes/pools (permanent) • 2% freshwater marshes/pools (seasonal/intermittent) • 36.2% peatlands • 6.1% shrub-dominated wetlands • 13% other.

³² RIS (1994) Information Sheet on Ramsar Wetlands (Midland Meres and Mosses) http://jncc.defra.gov.uk/pdf/RISold/7UK075.pdf

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
Pasturefields Salt Marsh SAC (7.8ha)	Inland salt meadows	Site improvement plan ³³ No issues affecting the feature were identified at this site. Standard data form ³⁴ The modification of cultivation practices is identified as having potentially positive effects on the site.	 Standard data form Habitats at the site: 90.5% Humid grassland, Mesophile grassland 6.5% Salt marshes, Salt pastures, Salt steppes 3.0% Inland water bodies (Standing water, Running water) Conservation objectives supplementary advice³⁵ The following targets within the supplementary advice indicate the specific habitats and species within the salt marsh that are important to the integrity of the site: Ensure the component vegetation is characterised by : SM16 <i>Festuca rubra</i> salt-marsh community Restore the abundance of the following features: <i>Puccinellia maritima</i>, <i>Festuca rubra</i>, <i>Juncus gerardii</i>, <i>Armeria maritima</i>, <i>Agrostis stolonifera</i>, <i>Glaux maritima</i>, <i>Triglochin maritima</i>, <i>Leontodon auturnalis</i>. Maintain the level of the following undesirable species at acceptable levels and do not encourage their spread: <i>Deschampsia cespitosa</i>, large Carex spp. (leaves more than 5mm wide) e.g. <i>Carex acutiformis</i>, large grasses (leaves more than 10mm wide, stout stems) i.e. <i>Glyceria maxima</i>, <i>Phalaris arundinacea</i>, <i>Phragmites australis</i>, <i>Cirsium arvense</i>, <i>Cirsium</i>

 ³³ Natural England (2014) Site Improvement Plan: Pasturefields Salt Marsh SAC: http://publications.naturalengland.org.uk/publication/5513486415167488?category=4879822899642368
 ³⁴ JNCC (2015) Standard Data Form: Pasturefields Salt Marsh SAC http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0012789.pdf
 ³⁵ Natural England (2014) Pasturefields Salt Marsh SAC Conservation Objectives supplementary advice
 http://publications.naturalengland.org.uk/publication/6292877810335744?category=5134123047845888

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
			<i>vulgare, Rumex crispus, Rumex obtusifolius, Urtica dioica</i> and Senecio spp
			 Maintain the properties of the underlying soil types to within typical values for the habitat.
			 Ensure the salinity of spring water is at an appropriate level for supporting salt marsh vegetation.
			• Ensure water quality and quantity is maintained or restored.
			• Restore water table levels and the spring flow regime during the year at appropriate levels.
			 Restore the full range of hydrological/ hydrogeological aspects of a site's catchment.
			 Ensure that connectivity is maintained with the local landscape, including surrounding inland saltmarshes.
			 Maintain resilience to environmental changes (the feature has been identified as having high overall vulnerability to climate change).
			 Maintain concentrations of air pollutants within critical load or level values.
			 Maintain management measures necessary to maintain and restore the feature, including land use patterns such as pastoral livestock farming.
Mottey	Lowland hay	Site improvement plan ³⁶	Standard data form
Meadows SAC	meadows	• This SAC is under pressure from water	Habitats at the site:
(43.69ha)		pollution, given that excess nutrients from surrounding land uses can enable more vigorous plant species to take over,	• 97% Humid grassland, Mesophile grassland

³⁶ Natural England (2014) Site Improvement Plan: Mottey Meadows SAC http://publications.naturalengland.org.uk/publication/6519033218203648?category=4879822899642368

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
(Area, ha)	features	 reducing biodiversity value. This might be managed by establishing low/no nutrient input buffer zones on sloping land surrounding the feature. Hydrological changes have been identified as a threat, given that the grassland has precise hydrological requirements, as well as threats of climate change-induced flooding and drought. The eco-hydrology of the site requires improved understanding. Water abstraction has been identified as a 	 habitats and/or species depend 3% Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas) Conservation objectives supplementary advice³⁸ The following targets within the supplementary advice indicate the specific habitats and species within the meadows that are important to the integrity of the site: Ensure the component vegetation communities are characterised by: MG4 Alopecurus pratensis - Sanguisorba officinalis grassland.
		 Water abstraction has been identified as a threat at this SAC, with the Whiston Brook catchment affected by over abstraction, particularly the trickle irrigation used for growing soft fruit. The cumulative impact of abstractions requires further investigation. Changes in land management has been identified as a threat to this SAC, particularly if graziers are to withdraw from the site, as they are essential management requirements. Standard data form³⁷ 	 Maintain the level of the following undesirable species at an acceptable level and prevent changes that encourage their spread: Anthriscus sylvestris, Cirsium arvense, Cirsium vulgare, Epilobium hirsutum, Galium aparine, Plantago major, Rumex crispus, Rumex obtusifolius, Senecio jacobaea, Urtica dioica, Equisetum arvense) Lolium perenne, Phleum pratense, Bromus hordeaceus, Holcus lanatus, Trifolium repens); Arrhenatherum and Dactylis glomerata; Large Carex species; large grasses such as Glyceria maxima, Phalaris arundinacea and Phragmites australis; and coarse Juncus species, particularly J. effusus, J. conglomeratus); Woody species and bracken
		The threats are as identified in the site improvement plan.	 Restore the natural pattern of vegetation zonations and transitions.
		Grazing and livestock farming/animal breeding are identified as potentially having positive effects on the site.	 Maintain the properties of the underlying soil types to within typical values for the habitat. Restore water quality and quantity to a standard necessary to support the feature, particularly given diffuse pollution from

 ³⁷ JNCC (2015) Standard Data Form: Mottey Meadows SAC http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0030051.pdf
 ³⁸ Natural England (2014) European Site Conservation Objectives for Mottey Meadows SAC http://publications.naturalengland.org.uk/publication/5720449535180800?category=5134123047845888

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
			 agriculture. Restore a consistently near-surface water table at appropriate depths. Restore the appropriate duration of surface flooding, with no inundations during March-August, in order to restore natural hydrological processes. Restore functional connections with the local landscape, given
			 current isolation within landscape of intensive dairy and arable farmland. Restore resilience to wider environmental changes. Restore the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values (this habitat is considered sensitive to changes in air quality).
			 Maintain necessary management measures, including grazing, scrub management, weed control, and recreation/visitor management. Sheep-grazing may need monitoring.
			• Maintain the abundance of the following species: MG4 vegetation type, including great burnet <i>Sanguisorba officinalis</i> and meadow foxtail <i>Alopecurus pratens</i> is; and populations of Snake's-head fritillary <i>Fritillaria mealegaris</i> , saw-wort <i>Serratula tinctoria</i> and meadow thistle <i>Cirsium dissectum</i> .
River Mease SAC (23.03ha)	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho- Batrachion	 Site improvement plan³⁹ The SAC is under pressure from water pollution, which can lead to increased algal growth and a subsequent decline in habitat quality. Some phosphate stripping has been carried out, however further reductions are desirable. Discharges from septic tanks are 	 Standard data form Habitats at the site: 100% inland water bodies. Conservation objectives supplementary advice⁴¹ The following targets within the supplementary advice indicate the

 ³⁹ Natural England (2014) Site Improvement Plan: River Mease SAC <u>http://publications.naturalengland.org.uk/publication/5422476326600704</u>
 ⁴¹ Natural England (2014) European Site Conservation Objectives for River Mease SAC http://publications.naturalengland.org.uk/publication/6217720043405312

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
		 thought to be one source of pollution, and requires fuller understanding, as well as sources of high levels of ammonia that impact species. The SAC is under pressure from drainage, which affects the naturalised flow pattern, leading to a more 'flashy' river. Roads act as conduits for drainage flows. As such, SuDS should be required at all new development schemes. The SAC is under pressure from inappropriate weirs, dams and other structures, which restrict species population size and distribution, and prevent fish movement. To be dealt with through the River Restoration Plan. The SAC is under pressure from invasive species, including Himalayan balsam, Japanese knotweed and American signal crayfish (which carry a crayfish plague). The SAC is under pressure from siltation, which impacts the spawning habitat of the bullhead and spined loach. The SAC is under pressure from water 	 habitats and/or species depend specific habitats and species within the river catchment that are important to the integrity of the site: Restore/maintain the following habitat structures: Riparian zone: a patchy mosaic of natural woody and herbaceous, and riparian vegetation. Woody moaterials: restore coarse woody material within the river channel. Water course flow: restore the natural flow regime. Sediment regime: restore natural supply for coarse and fine sediment. Thermal regime: ensure temperatures not artificially elevated. Biological connectivity: ensure movement of wildlife is not artificially constrained. Ensure that 'high impact' non-native species are either rare or absent. Restore the abundance of the following typical species: River water crowfoot <i>Ranunculus fluitans</i>, stream water crowfoot <i>R.penicillatus</i> spp. pseudofluitans, water-starworts Callitriche spp. flowering rush <i>Botumus umbellatus</i>; Pondweeds <i>Potamogeton</i> spp, bur-reeds <i>Sparganium</i> spp; Water plantain
		abstraction, which changes the naturalised flow pattern. Sources include regulated agriculture-related abstraction, transfer to the Ashby canal and 11 sewage treatment works within the catchment area.	 Alisma plantago-aquatica, spiked milfoil Myriophyllum spicatum, yellow water-lily Nuphar lutea, arrowhead Sagittaria sagittifolia. Maintain fish densities at/below carrying capacity of river.
		Standard data form ⁴⁰	• Restore grazing activity in relevant zones to suitably low levels.

⁴⁰ JNCC (2015) Standard Data Form: River Mease SAC http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0030258.pdf

Site name (Area, ha)	Qualifying features	Key vulnerabilities	Non-qualifying habitats and species upon which the qualifying habitats and/or species depend
		Threats are as identified in the site improvement plan.	 Maintain sufficient proportion of aquatic macrophytes to allow them to reproduce.
		There are no potential positive effects identified in the data form.	Restore supporting riverine habitats outside site boundaries.
			 Restore a natural nutrient regime to rhe river, and limit anthropogenic enrichment to prevent dominance of more competitive plants.
			Restore organic pollution to appropriate level, to control enrichment effect.
			• Maintain resilience to wider environmental change (this feature has been identified as high vulnerability to climate change).
			 Achieve at least 'Good' chemical status (to address elevated levels of copper, zinc and lead concentrations, and historic pollution legacy of mining activities).
			Maintain management measures that support the feature.

Appendix 2

Review of Potential for In-Combination Effects with other Local Authority Plans

Staffordshire Local Transport Plan 2011 to 2026

Cannock Chase District Integrated Transport Strategy 2013-2028 (November 2013)

Cannock Chase District lies within the Staffordshire County area.

The Local Transport Plan sets out the transport strategy and policies for the county, including Policy 7.8 which seeks to protect internationally significant nature conservation sites by supporting measures to maintain the integrity of the sites, requiring any new scheme to demonstrate that it will avoid adverse effects on their integrity, supporting a limit on the levels of boat traffic on the Cannock Extension Canal, and promoting monitoring of air pollution and recreational pressure.

Integrated transport strategies for each of the eight districts and boroughs within Staffordshire sit alongside the Local Transport Plan. These identify local transport issues, opportunities, and proposed transport improvements.

Minerals Local Plan for Staffordshire 2015-2030 (adopted February 2017)

The Minerals Local Plan identifies suitable land for minerals extraction and provides the policies against which planning applications for mineral extraction or processing will be determined.

Cannock Chase District contains sand and gravel quarries and the southern part of the District falls within a Mineral Safeguarding Area.

Staffordshire and Stoke-on-Trent Joint Waste Local Plan 2010-2026 (adopted March 2013)

The Joint Waste Local Plan sets out the strategy for waste management in the County and Stoke on Trent, and provides the policies against which planning applications for waste management will be determined.

Waste management could result in changes to vehicle flows (e.g. HGVs) and changes to air quality (e.g. from vehicle emissions or incineration).

The Plan for Stafford Borough (adopted June 2014)

Plan for Stafford Borough: Part 2 (adopted January 2017)

Stafford lies to the North West of Cannock Chase.

The Plan for Stafford Borough contains a vision, spatial principles and specific policies to guide development across the Borough. Part 2 of the Plan for Stafford Borough sets out boundaries for a number of main settlements and for Recognised Industrial Estates, along with accompanying policies. Part 2 was submitted to the Secretary of State in April 2016 for Examination and, following modifications, was adopted in January 2017.

Housing Development

Policy SP2 makes provision for the development of 500 homes per year over the Plan period, which totals 10,000 between 2011 and 2031. Policy SP4 specifies that this growth will be distributed as follows:

- Stafford 70%
- Stone 10%
- Key Service Villages 12%
- Rest of Borough area 8%

Employment Development

Policy SP2 makes provision for the development of 8ha of employment land per year over the Plan period, which totals 16,000ha between 2011 and 2031. Policy SP5 specifies that this growth will be distributed as follows:

- Stafford 56%
- Stone 12%

• Rest of Borough area – 32%

Lichfield District Local Plan Strategy 2008-2029 (adopted February 2015)

Lichfield District Local Plan Allocations 2008-2029 (currently undergoing consultation following required modifications)

Lichfield lies to the east of Cannock Chase.

Housing Development

Core Policy 1 specifies that a minimum of 10,030 new homes will be delivered between 2008 and 2029 with growth being focussed at the most accessible and sustainable locations as set out in the Settlement Hierarchy which distributes housing development as follows:

- Lichfield 38%
- Burntwood 13%
- Rugeley 11%
- Tamworth 10%
- Fradley 12%
- Fazeley, Shenstone and Armitage with Handsacre 16%

Employment Development

Core Policy 7 specifies that 79.1ha of employment land will be allocated including approximately 12ha within the Cricket Lane strategic development allocation. Around 10 additional hectares of land will be defined by the Local Plan Allocations document to ensure flexibility of provision.

Black Country Core Strategy (adopted February 2011)

The four Black Country Local Authorities of Dudley, Sandwell, Walsall and Wolverhampton have prepared a Core Strategy for the Black Country which was adopted in February 2011. This forms the basis of Walsall's and Wolverhampton's Local Development Framework.

Black Country Core Strategy – Issues & Options Report (June 2017)

The Issues & Options report is the first stage of the formal review of the Black Country Core Strategy to ensure the spatial objectives and strategy are being effectively delivered and to keep the plan up-to-date in line with national planning guidance.

Walsall lies to the southeast of Cannock Chase and is one of the four Black Country Local Authorities.

The Black Country Core Strategy also applies to Wolverhampton, which is not adjacent to Cannock Chase but a significant part of it lies within 15km of Cannock Chase SAC. Wolverhampton lies southwest of Cannock Chase.

Housing Development

Policy HOU1 specifies that at least 63,000 homes will be developed across the whole Plan area between 2006 and 2026. At least 95% of these homes will be developed on previously developed land. Of this total figure, 11,973 new homes will be located within Walsall Borough and 13,411 new homes will be located within Wolverhampton.

The Issues & Options report finds that the Black Country is currently 3,000 homes behind Core Strategy targets, and the SHMA carried out in 2017 concluded that the local housing need (OAN) for the Black Country over the period 2014-36 is 78,190 homes. Further land, beyond the existing spatial strategy, will be required to provide 22-25,000 new homes. The two proposed options are: 1) 'rounding off' the Green Belt and identifying small-medium sized sites; or 2) a more focussed approach that identifies a limited number of SUEs

Employment Development

Policy EMP1 specifies that 2,900ha of employment land will be provided across the whole Plan area between 2006 and 2026. Walsall is to provide a total of at least 611 ha employment land stock by 2026

and Wolverhampton is to provide at least 645 ha employment land stock by 2026. Policy EMP4 states that Walsall should have 46ha and Wolverhampton should have 41ha employment land readily available at any one time.

The Issues & Options report notes that an Economic Development Needs Assessment (EDNA) carried out for the Black Country during 2016-17 recommends that the review should plan for up to 800 ha of additional land to meet the needs of the region for the period 2015-36. Further land, beyond the existing spatial strategy, will be required to provide up to 300 ha of new employment land. The plan suggests a number of spatial options for accommodating this growth.

Walsall Site Allocation Document(adopted January 2019)

Walsall lies to the southeast of Cannock Chase. The site allocations document adds further detail to the Black Country Core Strategy by allocating specific sites in Walsall.

Housing Development

The Site Allocation Document specifies that 11,973 new homes will be located within Walsall Borough. Policy HC1 affirms that each site allocation will achieve a density of at least 35 dwellings per hectare.

Employment Development

The Site Allocation Document specifies that a minimum of 46ha of employment land will be available at any one time within Walsall Borough, in line with the Black Country Core Strategy.

South Staffordshire Core Strategy (adopted December 2012)

South Staffordshire lies to the west of Cannock Chase.

Housing Development

Core Policy 6 specifies that a minimum of 3,850 homes will be delivered between 2006 and 2028. The Council will also ensure that a sufficient supply of deliverable/developable land is available to deliver 175 new homes each year informed by the District housing trajectory.

The balance of new housing development (1,606 homes rounded to 1,610) will be distributed as follows:

- Northern Area 370 dwellings (23%)
- North Western Area 129 dwellings (8%)
- North Eastern Area 226 dwellings (14%)
- Central Area 515 dwellings (32%)
- Southern Area 370 dwellings (23%)

Employment Development

Core Policy 7 affirms that the Council will support measures to sustain and develop the local economy of South Staffordshire. This will focus on four freestanding strategic employment sites: i54, Hilton Cross, ROF Featherstone/Brinsford and Four Ashes.

South Staffordshire Site Allocations Document (adopted September 2018)

South Staffordshire lies to the west of Cannock Chase.

Housing Development

The Site Allocations Document (SAD) reviewed existing permissions and housing development since the Core Strategy and concluded that the SAD needs to allocate a residual 993 dwellings. Policy SAD2 presents minimum housing allocations that would provide a minimum of 1,070 dwellings, distributed between the following settlements:

- Bilbrook (102)
- Brewood (74)

- Cheslyn Hay 63)
- Codsall (210)
- Coven (40)
- Featherstone (60)
- Great Wyrley (95)
- Kinver (60)
- Swindon (10)
- Wheaton Aston (15)
- Wombourne 179)

Employment Development

Employment development must conform to the Core Strategy.

Policy SAD5 presents the employment land allocations, which proposed a 40ha extension to i54 and an up to 12ha of additional employment land plus an additional 10ha employment land within the existing development boundary, totalling an additional 62ha employment land.

East Staffordshire Local Plan (adopted October 2015)

East Staffordshire lies to the northeast of Cannock Chase. It does not adjoin Cannock Chase but a significant part of it lies within 15km of Cannock Chase SAC.

Housing Development

Strategic Policy 3 makes provision for the development of 11,648 dwellings over the plan period of 2012-2031. The housing requirement will be delivered in accordance with the following indicative average annual rate:

- 466 dwellings per annum for 6 years (2012/2013-2017/2018)
- 682 dwellings per annum for 13 years (2018/2019-2030/2031)

Employment Development

Strategic Policy 3 makes provision for the development of 40 hectares of employment land which consists of 30 hectares of new provision B1, B2 and B8 employment land and a continuation of 10 hectares of B1, B2 and B8 employment land.

North Warwickshire Local Plan (Draft Submission) (November 2017)

North Warwickshire lies approximately 22km to the east of Cannock Chase. As such it does not adjoin Cannock Chase. These districts are however linked by the A5. Furthermore the HRA for the Draft Submission North Warwickshire Local Plan could not rule out impacts on the Cannock Extension Canal SAC in relation to air pollution and as such there is potential for in-combination effects on this site.

Housing Development

Policy LP6 sets out that up to 2033 a minimum of 5808 dwellings (net) will be built in the District. There is an aspiration to deliver a further 3790 dwellings on top of this minimum amount of housing development over this period of time. Between 2011 and 2028, nine residential and five transit Gypsy and Traveller pitches will also be delivered.

Employment Development

Policy LP6 also states that around 100 hectares of employment land will be required over the plan period.