



Habitats Regulations Assessment of the South Staffordshire Local Plan Review 2018-2038 (Preferred Options)

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Summary

The Conservation of Habitats and Species Regulations 2017 (as amended) require local authorities to assess the impact of their local plan on the internationally important sites for biodiversity in and around their administrative areas. Together, these Special Protection Areas, Special Areas of Conservation and Ramsar sites are known as European sites. The task is achieved by means of a Habitats Regulations Assessment (HRA).

An HRA asks very specific questions of a plan. Firstly, it 'screens' the plan to identify if there is a risk that certain policies or allocations may have a 'likely significant effect' on a European site, alone or (if necessary) in-combination with other plans and projects. If the risk of likely significant effects can be ruled out, then the plan may be adopted but if they cannot, the plan must be subjected to the greater scrutiny of an 'appropriate assessment' to find out if the plan will have an 'adverse effect on the integrity' of the European sites.

Following an appropriate assessment, a Plan may only be adopted if an adverse effect on the integrity of the site can be ruled out. If necessary, a plan should be amended to avoid or mitigate any likely conflicts. This usually means that some policies or allocations will need to be modified or, more unusually, may have to be removed altogether.

This document is the HRA report for the South Staffordshire Local Plan Review (preferred options). The HRA will continue to be developed and updated as plan-making progresses and will be finalised once the Plan has been subject to examination. At this, preferred options stage, there is still further evidence gathering to take place and some of the policies are yet to be drafted. As such the appropriate assessment sections are incomplete and will be progressed further with later stages of plan making.

Following the screening, we identify likely significant effects from recreation (Cannock Chase SAC, Motte Meadows SAC), water issues (Motte Meadows SAC) and air quality (Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).

In terms of impacts on recreational pressure, there is a long-standing mitigation strategy in place for recreation impacts and Cannock Chase SAC. Further checks are necessary at the next iteration of the HRA to ensure adequate mitigation is secured. The relevant policy here will be Policy NB3 – Cannock Chase SAC. For Motte Meadows recreation impacts are a risk from development in and around Wheaton Aston (3 allocations). In the absence of mitigation, it is not likely to be possible to rule out adverse effects on integrity as a result of the Plan alone. There are three Wheaton Aston allocations that are relevant and further iterations of the Plan will need to ensure that these can only come forward following site-specific checks and if necessary, mitigation is secured. With suitable wording added to the site proformas to ensure that any necessary mitigation is secured and project-level HRA undertaken, it should be possible to rule out adverse effects on integrity and this will need to be checked in the HRA of the Regulation 19 version of the Plan.

In terms of water issues, likely significant effects have been identified for Motte Meadows SAC from housing in close proximity to the site (3 allocations in the vicinity of Wheaton Aston). The water cycle study (JBA Consulting, 2020) recommends a phase 2 study with checks on water quality for SSSIs, checks of flood risk from additional foul flow and further water quality modelling. This may provide the necessary evidence to complete the assessment or it may be that specific policy wording is required for the sites identified, such that development is dependent on specific requirements being met and checked at project-level HRA.

In terms of impacts on air pollution, the absence of key evidence means it cannot be ascertained at this point in time that the Plan will not adversely affect the integrity of the various European sites with roads within 200m, alone or in-combination. It is necessary to further understand likely changes in traffic (and potentially air quality), as a result of the South Staffordshire Plan (and other plans and projects). Further evidence gathering is being undertaken by the Council and will inform the next iteration of the HRA. We have screened in Policy EC8 Wolverhampton Halfpenny Green Airport for air quality impacts on a precautionary basis and further checks will be necessary as plan-making progresses. Risks could relate to increased traffic and possibly to increased flights, but these can only be identified (and ruled out) once further work on the policy has been undertaken.

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1. Introduction

Overview

- 1.1 This report is the Habitats Regulations Assessment (HRA) of the South Staffordshire Local Plan Review ('the Plan') and has been prepared by Footprint Ecology on behalf of South Staffordshire Council. A HRA assesses the implications of a plan for legally protected European sites.
- 1.2 The HRA will be updated at each stage of the Local Plan review, with an update to the report being prepared at each public consultation stage. This HRA report accompanies the Preferred Options version of the Plan and builds on the HRA reports produced by the Council at the earlier stages of Plan making.

The South Staffordshire Local Plan Review

- 1.3 South Staffordshire is a rural district to the north-west of the West Midlands conurbation. The District has no cities or towns and no single dominant settlement and is comprised of 27 parishes with a dispersed settlement pattern of small hamlets and villages. The District adjoins the Major Urban Area of the West Midlands Conurbation and is close to the Black Country towns of Dudley and Walsall and the City of Wolverhampton.
- 1.4 The currently adopted Local Plan for South Staffordshire consists of the Core Strategy (adopted in 2012) and the Site Allocations Document (adopted in 2018). The new Local Plan will set out how much development is required in South Staffordshire up until 2038. This will include residential (including Gypsy, Traveller and Travelling Showpeople accommodation) and employment uses. The Local Plan will allocate the sites required to deliver the identified level of development needed and set out the policies that will guide the determination of planning applications.
- 1.5 The Preferred Options have been selected following evidence gathering, a consultation on the Issues and Options (October 2018) and a further consultation on the Spatial Housing Strategy and Infrastructure Delivery (October 2019).

Habitats Regulations Assessment process

- 1.6 The designation, protection and restoration of European wildlife sites is embedded in the Conservation of Habitats and Species Regulations 2017, as amended, which are commonly referred to as the 'Habitats Regulations'. Importantly, the most recent amendments (the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019¹) take account of the UK's departure from the EU.
- 1.7 Regulation 105 *et seq* addresses the assessment of local plans and determines the scope of this HRA alongside recent Government Guidance on the interpretation and application of the Regulations².

European sites

- 1.8 'European sites' are the cornerstone of UK nature conservation policy. Each forms part of a 'national network' of sites that are afforded the highest degree of protection in domestic policy and law. They comprise Special Protection Areas (SPA) classified under the 1979 Birds Directive and Special Areas of Conservation (SAC) designated under the 1992 Habitats Directive. As a matter of policy, potential SPAs (pSPAs), possible SACs (pSACs) and those providing formal compensation for losses to European sites, are also given the same protection³.
- 1.9 Together, the network comprises over 275 sites extending over 3,750,000ha⁴, and safeguards the most valuable and threatened habitats and species across the country and Europe. Prior to Brexit, this formed part of the EU-

¹ The amending regulations generally seek to retain the requirements of the 2017 Regulations but with adjustments for the UK's exit from the European Union. See Regulation 4, which also confirms that the interpretation of these Regulations as they had effect, or any guidance as it applied, before exit day, shall continue to do so.

² Habitats regulations assessments: protecting a European site. Defra and Natural England. 24 February 2021. <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site> (accessed 4 March 2021)

³ For the avoidance of doubt, the list of statutory European sites also comprises: A site submitted by the UK to the European Commission (EC) before Exit Day (a candidate SAC or cSAC) as eligible for selection as a Site of Community Importance (SCI) but not yet entered on the EC's list of SCI, until such time as the Appropriate Authority has designated the site or it has notified the statutory nature conservation body that it does not intend to designate the site. After Exit Day, no further cSACs will be submitted to the EU. Statutory European sites also include SCI included on a list of such sites by the European Commission from cSACs submitted by the UK before the UK left the EU, until such time as the UK designates the site when it will become a fully designated SAC.

⁴ <https://jncc.gov.uk/our-work/special-protection-areas-overview/> (accessed 4 March 2021)

wide Natura 2000 network of SPAs and SACs to form the largest, coordinated network of protected areas in the world.

- 1.10 The designations made under the European Directives still apply and the term, 'European site' remains in use. According to long-established Government policy⁵, European sites also comprise 'Wetlands of International Importance' (or Ramsar sites) although these do not form part of the national network.
- 1.11 The overarching objectives of the national network is to maintain, or where appropriate, restore habitats and species listed in Annexes I and II of the Habitats Directive to a Favourable Conservation Status, and contribute to ensuring, in their area of distribution, the survival and reproduction of wild birds and securing compliance with the overarching aims of the Wild Birds Directive.
- 1.12 The appropriate authorities must have regard to the importance of protected sites, coherence of the national site network and threats of degradation or destruction (including deterioration and disturbance of protected features) on SPAs and SACs.

Role of the competent authority

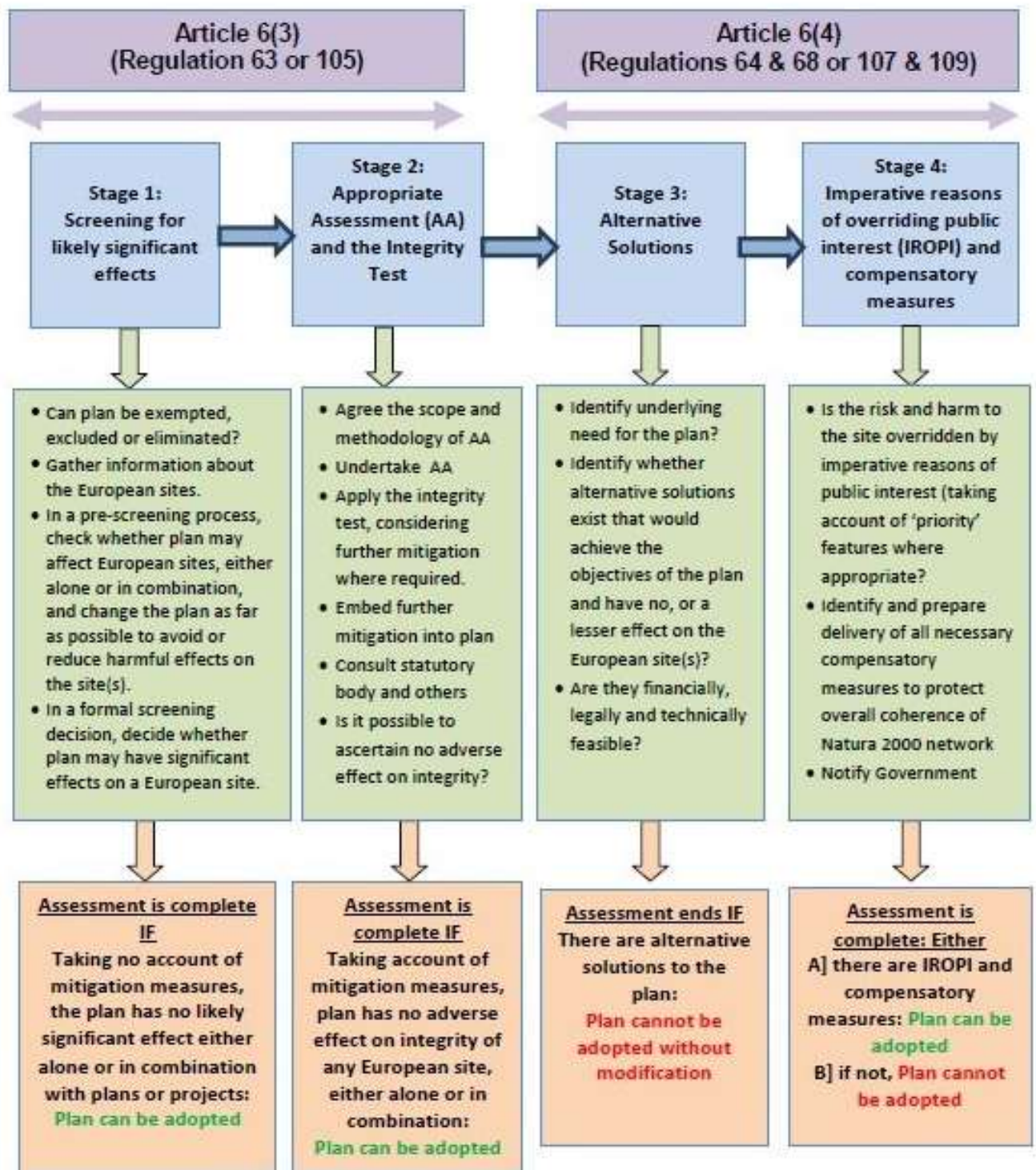
- 1.13 Although this HRA has been prepared to help the Council discharge its duties under the Habitats Regulations, the Council is the competent authority, and it must decide whether to accept this report or otherwise. Further, it should be noted that this HRA has been prepared for the purposes of preparing and examining the Plan. Individual allocations will need to be reviewed when they become the subject of an individual planning application, to ensure that if further assessment under the Habitats Regulations is necessary, it is undertaken in accordance with the requirements of appropriate assessment.

Process

- 1.14 The step-by-step process of HRA is summarised in Figure 1. Though dated prior to the latest amendments to the Regulations, the same tests still apply and it remains valid.

⁵ ODPM Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System (16 August 2005), to be read in conjunction with the current NPPF, other Government guidance and the current version of the Habitats Regulations.

Outline of the four-stage approach to the assessment of plans under the Habitats Regulations



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Figure 1: Outline of the assessment of plans under the Habitat Regulations

- 1.15 Throughout all stages, there is a continual consideration of the options available to avoid and mitigate any identified potential impacts. A competent authority may consider that there is a need to undertake further levels of evidence gathering and evaluation at the appropriate assessment stage in order to provide the necessary certainty. At this point the competent authority may identify the need to add to or modify the plan in order to adequately protect the European site, and these mitigation measures may be added through the imposition of particular restrictions and conditions.
- 1.16 For plans, the stages of HRA are often quite fluid, with the plan normally being prepared by the competent authority itself. This gives the competent authority the opportunity to repeatedly explore options to prevent impacts, refine the plan and rescreen it to demonstrate that all potential risks to European sites have been successfully dealt with.
- 1.17 When preparing a plan, a competent authority may therefore go through a continued assessment as the plan develops, enabling the assessment to inform the development of the plan. For example, a competent authority may choose to pursue an amended or different option where impacts can be avoided, rather than continue to assess an option that has the potential to significantly affect European site interest features.
- 1.18 After completing an assessment, a competent authority should only adopt a plan where it can be ascertained that there will not be an adverse effect on the integrity of the European site(s) in question. In order to reach this conclusion, the competent authority may have made changes to the plan, or modified the project with restrictions or conditions, in light of their Appropriate Assessment findings.
- 1.19 Where adverse effects cannot be ruled out, further exceptional tests are set out in Regulation 107. In exceptional cases, this allows a plan to be taken forward where there are no 'alternative solutions', where 'imperative reasons of overriding public interest' apply and where compensation can be delivered. It should be noted that meeting these tests is a rare last resort and ordinarily, competent authorities seek to ensure that a plan or project is fully mitigated for, or it does not proceed.
- 1.20 In such circumstances where a competent authority considers that a plan should proceed under Regulations 107, they must notify the relevant Secretary of State. Normally, planning decisions and competent authority duties are then transferred, becoming the responsibility of the Secretary of State, unless on considering the information, the planning authority is

directed by the Secretary of State to make their own decision on the plan or project at the local level. The decision maker, whether the Secretary of State or the planning authority, should give full consideration to any proposed 'overriding reasons' for which a plan or project should proceed despite being unable to rule out adverse effects on European site interest features, and ensure that those reasons are in the public interest and are such that they override the potential harm. The decision maker will also need to secure any necessary compensatory measures, to ensure the continued overall coherence of the European site network if such a plan or project is allowed to proceed.

Definitions, references to case law and guidance

- 1.21 This HRA follows principles of case law, both UK and EU. It also refers as appropriate to the Habitats Regulations Assessment Handbook (Tyldesley & Chapman, 2021), to which Footprint Ecology subscribes. We also follow relevant government guidance.
- 1.22 Drawing on the Handbook, other relevant guidance and case law, we clarify the following terms used in the flow chart (Figure 1):
- 1.23 In Stage 1, A '**likely significant effect**' following Waddenzee⁶, is a '*possible significant effect; one whose occurrence cannot be excluded on the basis of objective information*'. It is a low threshold and simply means that there is a risk or doubt regarding such an effect. The screening stage is a preliminary examination, sometimes described as a coarse filter, or following Sweetman, '*a trigger for the obligation to carry out an appropriate assessment*'. There should however be credible evidence to show that there is a real rather than a hypothetical risk of effects that could undermine a site's conservation objectives. This was amplified in the Bagmoor Wind⁷ case where '*if the absence of risk... can only be demonstrated after a detailed investigation, or expert opinion, [then] the authority must move from preliminary examination to appropriate assessment*'.

⁶ Waddenzee: European Courts C-127/02 Waddenzee 7th September 2004, reference for a preliminary ruling from the Raad van State.

⁷ Bagmoor Wind: UK courts Bagmoor Wind v The Scottish Ministers, Court of Session [2012] CSIH 93

- 1.24 Following the People Over Wind judgement⁸, when making screening decisions for the purposes of deciding whether an appropriate assessment is required, competent authorities cannot take into account any mitigation measures.
- 1.25 Stage 2 involves the **appropriate assessment and integrity test**. Here a plan can only be adopted if the competent authority can demonstrate that it will not adversely affect the integrity of the European site. This is precautionary approach and means it is necessary to show the absence of harm.
- 1.26 Following Champion⁹ **'appropriate'** is not a technical term but simply indicates that the assessment needs to be appropriate to the task in hand.
- 1.27 The **integrity** of a European site has been described as the *'coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified'*¹⁰. An alternative definition, after Sweetman¹¹, is 'the lasting preservation of the constitutive characteristics of the site'.
- 1.28 In terms of the burden of proof, the HRA of development plans was first made a requirement in the UK following a ruling by the European Court of Justice in EC v UK¹². However, the judgement¹³ recognised that any assessment had to reflect the actual stage in the strategic planning process and the level of evidence that might or might not be available. This was given expression in the High Court (Feeney)¹⁴ which stated: *"Each ... assessment ... cannot do more than the level of detail of the strategy at that stage permits"*.
- 1.29 The need to consider possible **in-combination** effects arises at stage 1 – the screening and also at stage 2 – the appropriate assessment and integrity test. The effects of the plan in-combination with other plans or projects are the cumulative effects which will or might arise from the addition of the

⁸ People Over Wind: European Court Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta 12 April 2018

⁹ Champion: UK Supreme Court [2015] UKSC 52 22nd July 2015

¹⁰ Para 20 of the ODPM Circ. 06/2005

¹¹ Sweetman: European Court C – 258/11 Sweetman 11th April 2013, reference for a preliminary ruling from the Supreme Court of Ireland

¹² Commission v UK (C-6/04) [2005] ECR I-9017

¹³ Commission of the European Communities v UK Opinion of Advocate General Kokott

¹⁴ Feeney: Feeney v Oxford City Council [2011] EWHC 2699 (Admin) . 24th October 2011

effects of other relevant plans or projects alongside the plan under consideration. If during the stage 1 screening it is found the subject plan would have no likely effect alone, but might have such an effect in-combination then the appropriate assessment at stage 2 will proceed to consider cumulative effects. Where a plan is screened as having a likely significant effect alone, the appropriate assessment should initially concentrate on its effects alone. Exceptionally, the Wealden decision¹⁵ requires the impacts of air pollution to be considered alone and in-combination.

¹⁵ Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and the South Downs National Park Authority (Defendants) and Natural England (Interested Party) [2017] EWHC 351 (Admin).

2. European sites in and around South Staffordshire

Overview of potentially relevant European sites

- 2.1 We have used 20km from the District boundary as an initial area of search (20km providing a reasonable area of search within which policies could reasonably be considered to generate measurable effects). This same area of search was used in the HRA that accompanied the Issues and Options and was also used in the Core Strategy HRA in 2012 and Site Allocations Document HRA in 2018.
- 2.2 European sites within 20km are shown in Map 1 (SACs) and Map 2 (Ramsar sites). There are no SPA sites within 20km. It can be seen that the only European site that is within the District Boundary is the Motte Meadows SAC, while Cannock Chase SAC abuts the boundary. There are a further 4 European sites within the 20km radius. There are 2 Ramsar sites within 20km. European sites within 20km are listed in Table 1.

Table 1: European Sites within a 20km radius

SAC	Ramsar
Cannock Chase	Midland Meres and Mosses Phase 1 ¹⁶
Cannock Extension Canal	Midland Meres and Mosses Phase 2 ¹⁷
Fens Pools	
Motte Meadows	
Pasturefields Salt Marsh	
West Midlands Mosses ¹⁸	

- 2.3 For the avoidance of doubt, it should be noted that although far distant, parts of the District do drain into the Severn Estuary and the Humber Estuary, both of which are European sites and were identified in the Issues and Options HRA as relevant. However, the closest part of the Severn Estuary SAC lies approximately 74km distant, as the crow flies while the

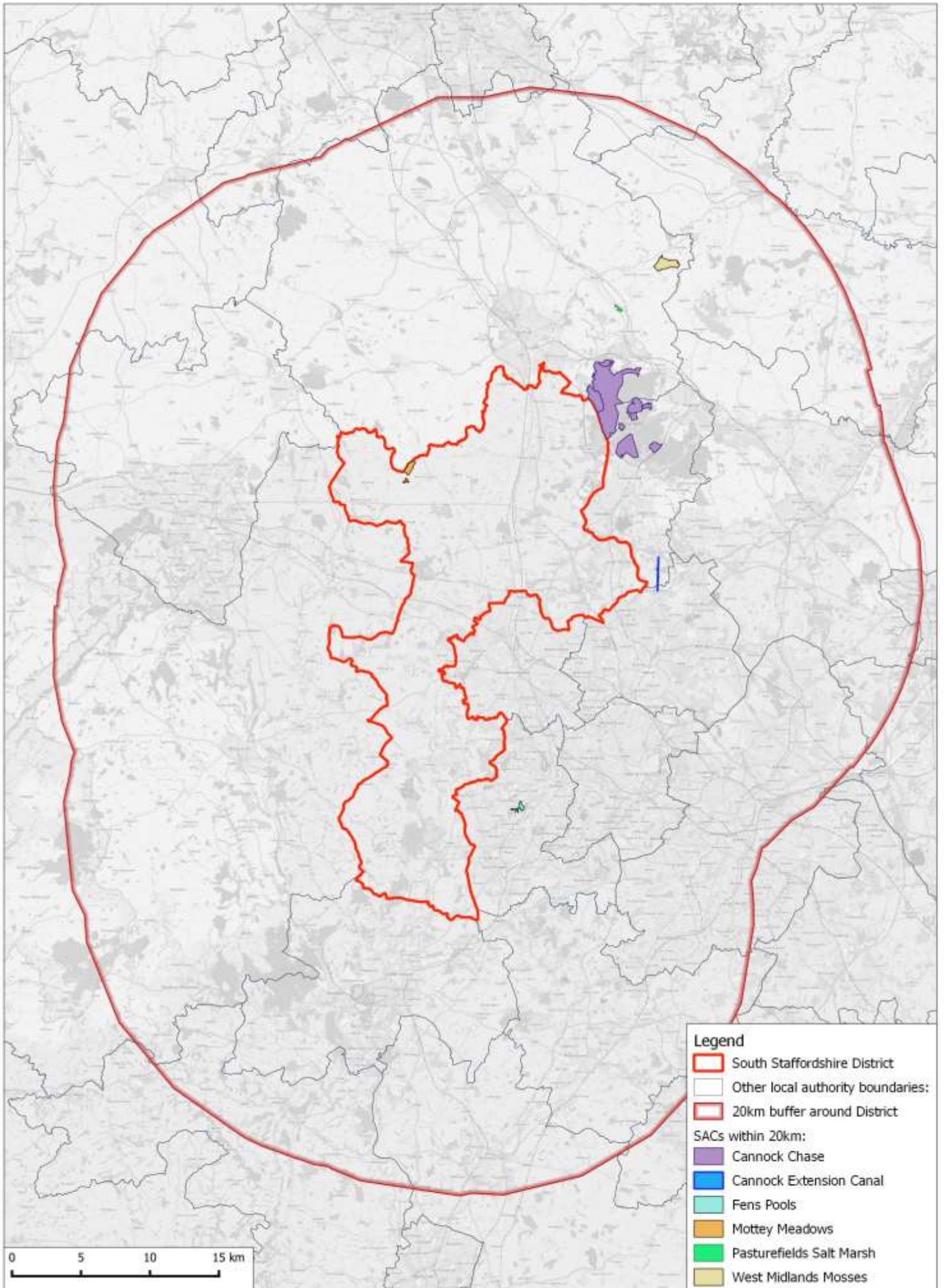
¹⁶ This Ramsar contains a range of component sites. It is Chartley Moss SSSI that is relevant to this assessment.

¹⁷ This Ramsar contains a range of component sites. It is Aqualate Mere SSSI and Cop Mere SSSI that are relevant to this assessment.

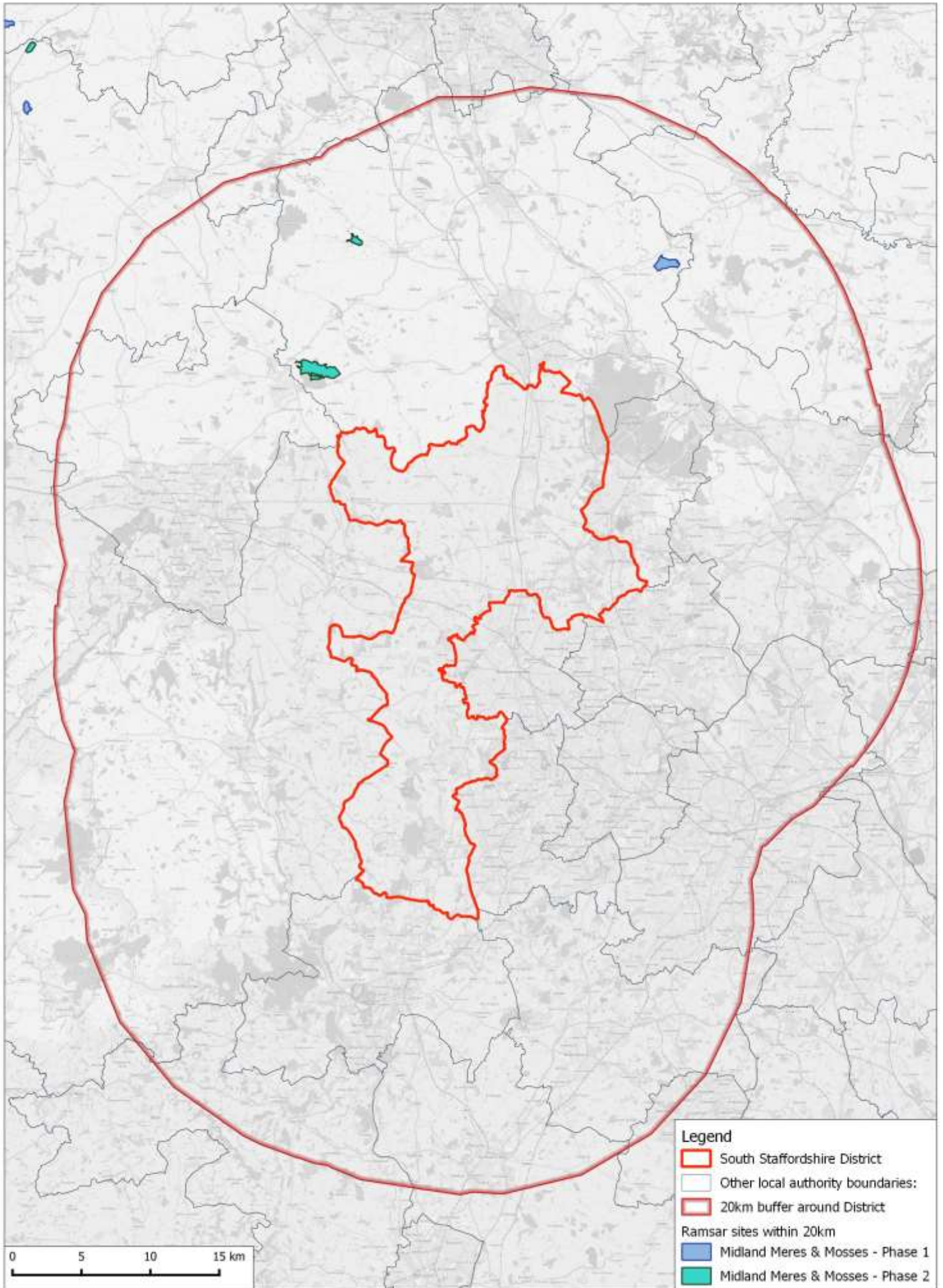
¹⁸ This SAC contains a range of component sites. It is Chartley Moss SSSI that is relevant to this assessment.

Humber Estuary SAC is nearly 130km away. At such a distance, the only possible impact is provided by wastewater discharges. However, given the dilution effect provided by the distance, river volume and that wastewater treatment plants have to meet strict water quality standards by law, it is considered inconceivable that any credible or appreciable effects will arise. Consequently, these sites are eliminated from any further consideration in this HRA.

Map 1: SACs within 20km of South Staffordshire District



Map 2: Ramsar sites within 20km of South Staffordshire District



- 2.4 In assessing the implications of any plan or project on European sites, it is essential to fully understand the ecology and sensitivity of the sites, in order to identify how they may be affected. Appendix 1 summarises the generic conservation objectives for European sites and Appendix 2 provides detail of the relevant sites (as listed in Table 1), listing their qualifying features, describing the sites and providing links to the relevant detailed conservation advice from Natural England.

European sites to be considered in the screening of the plan and relevant impact pathways

- 2.5 Drawing on previous HRA work and the relative sensitivities of the European sites we can identify the European sites and possible impact pathways that could be relevant in the screening. These are set out in Table 2.

Table 2: Summary of European sites within 20km, potentially relevant impact pathways for those sites and those that can be eliminated from further consideration (grey shading). Mottey Meadows SAC row has no figure in the distance column as the site is within the South Staffordshire District boundary.

European site	Approx. distance (km) from District	Recreation	Water issues	Air quality	Notes and for grey shaded rows, reasons for elimination from rest of plan
SACs					
Cannock Chase SAC	0	✓		✓	On plateau above the District and so upstream of proposed allocations, therefore no hydrological links. Recreation a long standing issue. Site has roads within 200m.
Cannock Extension Canal SAC	0.75			✓	Boat traffic can be an issue but recreation eliminated as boat use carefully monitored by the Canals and Rivers Trust and regular dredging ensures water doesn't become turbid. Site has roads within 200m. Water quality highlighted in Site Improvement Plan (SIP) and supplementary advice but no hydrological links to District as Canal fed from Chasewater Reservoir (which is in Litchfield).
Fens Pools SAC	3.6				Freshwater site in the heart of the Dudley urban area. Outside the District boundary and no hydrological links. Qualifies as an SAC for Great-crested Newt population and no credible risks likely from development within S. Staffordshire.
Mottey Meadows SAC		✓	✓		Qualifies as an SAC for its hay meadows, grassland communities could be affected by water availability and water quality. No major roads nearby. No formal public access. Only conceivable risks from recreation likely to relate to development in close proximity.
Pasturefield Salt Marsh SAC	6.1			✓	Site managed by Staffordshire WT. Limited public access (only allowed outside bird breeding season and any visitors have to climb a locked gate), and no parking on site so no recreation concerns. Site spring-fed from deep underground. There is also surface run-off but from limited area – given location no hydrological links to District. Site has roads within 200m.
West Midlands Mosses SAC	4.6			✓	Freshwater site outside District boundary and no hydrological links to the District. However, air quality a concern and identified in SIP as an issue. Site has roads within 200m.
Ramsar					
Midland Meres and Mosses Ph. 1 Ramsar	10.2			✓	As for West Midlands Mosses SAC

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European site	Approx. distance (km) from District	Recreation	Water issues	Air quality	Notes and for grey shaded rows, reasons for elimination from rest of plan
Midland Meres and Mosses Ph. 2 Ramsar	4.4		✓		Freshwater site outside District boundary but fed by streams such as the Back Brook which run from the south and include parts of S. Staffordshire District. No roads within 200m of Aqualate Mere. The site is a National Nature Reserve but public access is limited, with a single small car park at the eastern end and two public rights of way, plus access to a bird hide. Given the habitats present, site layout and distance from the District, recreation is not a major concern. No major roads within 200m.

Recreation

- 2.6 Harmful ecological effects from recreational pressure relate to increased numbers of people living nearby and using sites for recreation. Issues relate to a range of activities including dog walking and mountain biking and impacts include trampling, vegetation wear, erosion, increased fire risk (barbeques etc), dog fouling and litter.
- 2.7 The most popular destinations can draw in visitors in great numbers from considerable distances. Less popular sites, or those with fewer facilities, have a smaller catchment, fewer visitors and the issue is typically less problematic. Alternatively, some sites managed specifically to encourage large numbers of visitors may be able to tolerate these pressures without experiencing significant harm.
- 2.8 Importantly, whilst individual allocations, unless large and in close proximity to a fragile European site, rarely result in likely significant effects alone from recreation, a number may have a cumulative effect that can result in likely significant effects in-combination. The issues from recreation pressure at Cannock Chase SAC have long been recognised and are set out in a range of studies (Liley, D et al., 2009; White et al., 2012). A strategic mitigation scheme has been established¹⁹ and has applied a zone of 15km used to identify where cumulative effects from housing growth are relevant.
- 2.9 Motte Meadows has very limited public access but there are two footpaths from Wheaton Aston village that cross the SAC. The site is a National Nature Reserve but access away from public rights of way is restricted to permit holders and guided walks only. As such, the only credible risks at Motte Meadows SAC would relate to development in close proximity to the site which could result in increased use of local footpaths and demand for access. Under the recreation impacts pathway we would include impacts such as challenges to land management, fly tipping, damage and vandalism that are all linked to access and can occur when urban areas are in close proximity to conservation sites.

Water Issues

- 2.10 Water issues include water quality and water quantity (i.e. water availability), and flood management. Run-off, outflow from sewage treatments and overflow from septic tanks can result in increased nutrient loads and

¹⁹ See [S. Staffordshire Council website](#) for details (accessed 25th August 2021)

contamination of water courses. Abstraction and land management can influence water flow and quantity, resulting in reduced water availability at certain periods or changes in the flow. Such impacts particularly relate to aquatic and wetland habitats.

- 2.11 The local utility companies (Severn Trent Water and South Staffs Water) have legal duties to provide drinking water and wastewater treatment for most new dwellings. The Environment Agency regulates such activities and also private solutions such as septic tanks and abstraction licences. Development that is carried out without the necessary infrastructure in place or that fails to meet established standards could compromise the conservation objectives of European sites.
- 2.12 Assessment of water related issues are primarily a check that the overall quantum of growth can be accommodated without compromising the ecological integrity of hydrologically sensitive European sites. Key evidence documents for such an assessment for local plans include the water cycle study (2020) prepared for the South Staffordshire local planning authorities by JBA consulting. This report assessed the potential impacts of the emerging housing projections for a number of local authorities across Staffordshire and provides advice to local planning authorities and developers in terms of the development of local plan policy and evidence needs for development proposals.
- 2.13 This noted that South Staffordshire is covered by South Staffs, Shelton, Stafford and Wolverhampton Water Resource Zones. The Water Resource Management Plans show a supply-demand deficit around 2024-26 for the South Staffordshire Water Resource Zone is no action is taken. However, both Severn Trent Water and South Staffs Water have confirmed that they would have adequate water resources for all the proposed development sites and they do not expect water supply to be a constraint to development.
- 2.14 Water issues therefore relate to water quality and are relevant for Motte Meadows SAC and the Midland Meres and Mosses Phase 2 Ramsar. Water pollution, hydrological change and water abstraction are all identified as current pressures or potential threats for Motte Meadows SAC in Natural England's site improvement plan for the site²⁰. Within the Midland Meres and Mosses Phase 2 Ramsar, Aqualate Mere SSSI is fed by streams from the south that flow through parts of South Staffordshire District. Water issues are not

²⁰ See <http://publications.naturalengland.org.uk/file/5135117454409728>

relevant for Cannock Chase Extension Canal as the Canal is fed by Chasewater Reservoir that is a SSSI and lies 8km to the north-east of the SAC.

Pasturefields Saltmarsh SAC is spring fed from deep underground, and as such there are no hydrological links with South Staffordshire. The West Midlands Meres and Mosses SAC/ Midland Meres and Mosses Phase 1 Ramsar can be ruled out for further consideration of water issues as there are no hydrological links with South Staffordshire and similarly there are no water related risks credible for Cannock Chase SAC as the European site is on a plateau above, and outside, South Staffordshire.

Air pollution

- 2.15 Development is typically associated with increased traffic and emissions which can increase the airborne concentration of nitrogen oxides (NO_x) and ammonia (NH₃), and the subsequent rate of nitrogen deposition from the atmosphere. This can lead to the nutrient enrichment and acidification of soils, encouraging more tolerant ruderal species at the expense of sensitive plant, lower plant and invertebrate communities. In high concentrations, ammonia can result in direct toxic effects on vegetation, a factor which may also be true of NO_x. Furthermore, it can exacerbate the effects of other factors such as climate change or pathogens, for example. In contrast, larger animals, such as small mammals and birds are considered immune to direct effects but can be vulnerable to change in their supporting habitats.
- 2.16 However, levels of nitrogen deposition fall quickly in the first few metres from the roadside before gradually levelling out; beyond 200m, they become difficult to distinguish from background levels. In other words, impacts at 10m, 50m or 200m can be very different from those at the roadside.
- 2.17 It can be seen, therefore, that the additional contributions that might arise from increased traffic are only likely to be significant where a European site lies within 200m of a road which is expected to experience an increase of traffic, and where a feature is known to be sensitive to such effects. Such relatively simple tests essentially represent the scope of a screening assessment leaving more detailed analysis and its relationship to the ecological characteristics of the European sites at risk to the appropriate assessment, should any European sites fall into the above categories. European sites where there are roads within 200m and where increased traffic could result in risks are: Cannock Chase SAC, Cannock Chase Extension Canal SAC, Pasturefield Saltmarsh SAC, and the West Midlands Meres and Mosses SAC/Midland Meres and Mosses Phase 1 Ramsar.

- 2.18 Importantly, and building on case law in Sussex (the Wealden case)²¹, the assessment of air pollution must be undertaken in-combination with plans and projects in neighbouring authorities and further afield.

²¹ Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and the South Downs National Park Authority (Defendants) and Natural England (Interested Party) [2017] EWHC 351 (Admin).

3. Screening the Local Plan for Likely Significant Effects

- 3.1 This section documents the screening stage of HRA (stage 1 of the 4 stage process), where the plan is screened for likely significant effects.
- 3.2 The screening for likely significant effects of a plan involves checking all aspects of the plan and identifying any areas of potential concern, which are then examined in more detail in the appropriate assessment (stage 2) of the HRA. The check for likely significant effects provides an initial test of the plan. It is undertaken to enable the plan maker as competent authority to do two things. Firstly, it narrows down and highlights those elements of the plan that may pose a risk to European sites. Secondly, where an option poses a risk but is a desired element of the plan, the screening exercise identifies where further assessment is necessary in order to determine the nature and magnitude of potential impacts on European sites and what could be done to avoid, cancel, reduce or eliminate those risks. Further assessment and evidence gathering after early screening may include, for example, the commissioning of additional survey work, modelling, researching scientific literature or setting out justifications in accordance with expert opinion.

What constitutes a likely significant effect?

- 3.3 Where the screening identifies risks that cannot be avoided with simple clarifications, corrections or instructions for project level HRA, a more detailed assessment is undertaken to gather more information about the likely significant effects and give the necessary scrutiny to potential mitigation measures. This is the appropriate assessment stage of HRA.
- 3.4 A likely significant effect could be concluded on the basis of clear evidence of risk to European site interest, or there could be a scientific and plausible justification for concluding that a risk is present, even in the absence of direct evidence. The latter is an example of the precautionary approach, which is embedded through the HRA process. The precautionary principle should be applied at all stages in the HRA process and follows the principles established in domestic and EU case law.

3.5 The screening in this report looks at policies prior to any avoidance/reduction/mitigation measures in line with People Over Wind²²; mitigation can only be considered at Appropriate Assessment stage. People Over Wind clarified the need to carefully explain actions taken at each HRA stage, particularly at the screening for likely significant effects stage. The Judgment highlights the need for clear distinction between the stages of HRA, and good practice in recognising the function of each. The screening for likely significant effects stage should function as a screening or checking stage (regardless of avoidance, reduction/mitigation measures), to determine whether further assessment is required. Assessing the nature and extent of potential impacts on European site interest features, and the robustness of mitigation options, should be done at the appropriate assessment stage.

The screening

3.6 Map 3 shows key elements of the Plan, including housing and allocations sites. Key zones are highlighted on the Map, showing the extent of the 15km zone of influence for recreation and Cannock Chase SAC.

3.7 The screening for likely significant effects within Table 3 below provides the screening assessment. The screening covers the whole plan. Where risks are highlighted and there is a possibility of significant effects on European sites, further and more detailed appropriate assessment is required. Inevitably there will be precaution in screening elements of the plan, as the purpose of screening for likely significant effects is to identify where there is either no possibility of an effect, or where there are uncertainties. This is the preferred options version of the Plan and the policy wording for many of the policies is still to be drafted, with the Plan setting the 'direction of travel'. These policies are shaded in the table and the screening is undertaken based on the direction of travel with further checks or considerations at this stage being flagged in the comments column.

3.8 Below the screening table, Table 4 summarises the distances from each of the allocation sites to each of the European sites. This gives further context.

²² People Over Wind: European Court Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta 12 April 2018

Map 3: Housing and Employment sites

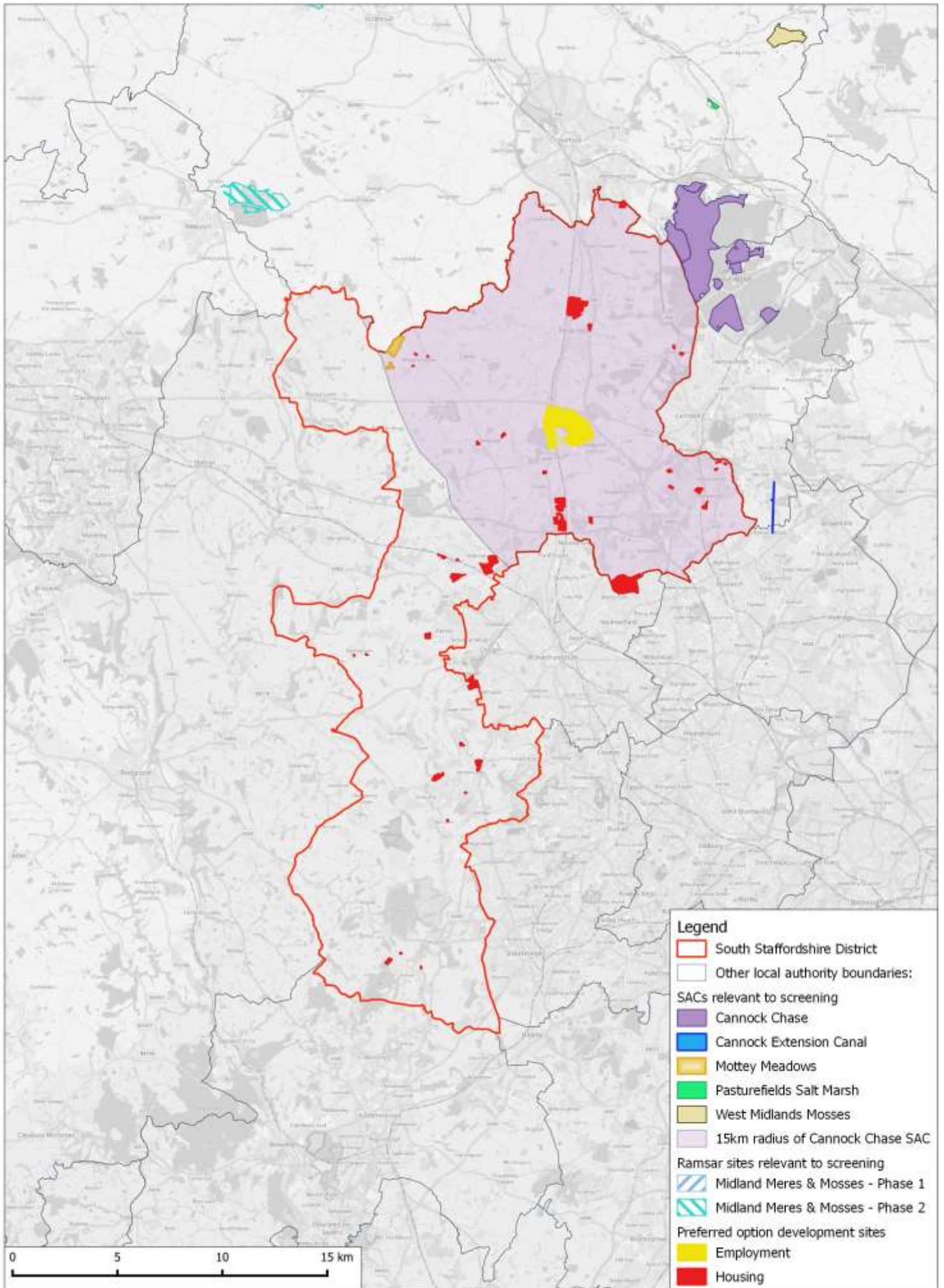


Table 3: Combined screening the publication version of the South Staffordshire Local Plan Review (Preferred Options) for likely significant effects (LSE). Red shaded rows indicate likely significant effects. Bold text indicates section headings within the Plan. Blue shading indicates development management policies that have not been fully drafted yet and are assessed on the basis of the direction of travel.

Plan section/policy	Description	LSE screening	Potential risks	Comments
1: Introduction	Introductory text on role of Local Plan	No LSE, administrative text.		
2: South Staffordshire: Setting the scene	Background and context	No LSE, administrative text and context.		
3: What does the Local Plan need to consider?	Summary of key issues providing context and background	No LSE, administrative text and context.		
Vision and Strategic Objectives	Sets an overall vision and 13 strategic objectives	No LSE, general statements too vague to have a significant effect on a particular site.		
4 Development Strategy				
Green Belt	Introduces Policy DS1	No LSE. Introductory text.		
Policy DS1 – Green Belt	Protective policy for Green Belt plus boundary alterations in relation to certain developments	No LSE, general policy that could not have any conceivable adverse effect on a site.		Policy relates to the green belt boundary rather than any growth or development in particular locations.
Open Countryside	Introduces Policy DS2	No LSE. Introductory text.		
Policy DS2 – Open Countryside	Policy for the Open Countryside setting criteria for development	No LSE, general plan-wide environmental protection.		
Housing	Context and justification for later housing policies. Identifies housing need of 243 dwellings per annum,	No LSE, general statements, context and justification for Policy DS3		Section is scene setting and details are set in Policy DS3

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
	sets target of 8,881 (2018-2038) and sets broad distribution			
Gypsies and Travellers	Sets out context and justification for later policies relating to Gypsies and Travellers	No LSE, general statements, context and justification for Policy DS3		Section is scene setting and details are set in Policy DS3
Employment	Provides background and context to estimates of necessary employment provision (up to 86ha) and need for updated Economic Development Needs Assessment (EDNA)	No LSE, general statements, context and justification for Policy DS3		Section is scene setting and details are set in Policy DS3
Spatial Strategy to 2038	Introductory text for Policy DS3	No LSE. Introductory text.		
Policy DS3 – the Spatial Strategy to 2038	Sets the overall quantum of growth (8,881 dwellings), the distribution, employment land provision and Gypsy, Traveller and Travelling Showpeople sites	LSE policy which may have a significant effect on a European site alone	Recreation (LSE triggered alone for and Cannock Chase SAC and Motte Meadows SAC) Water issues (LSE triggered alone for Motte Meadows SAC) Air Quality (LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).	Overall quantum of growth and distribution taken to appropriate assessment and relevant to recreation, water and air quality pathways. Distribution of growth such that Midlands Meres and Mosses Phase 2 Ramsar can be screened out for water issues as the catchment for this site is only the north-western part of the District, around Blymhill.
Longer term growth aspirations for a new settlement	Introductory text to policy DS4	No LSE. Introductory text.		
Policy DS4 – Longer term growth aspirations for a new settlement	A criteria based policy setting longer term aspiration of the	No LSE, policy listing general criteria and aspiration. Policy		The area of search does lie within the Cannock Chase 15km zone of

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
	Council to explore potential options for a new settlement	relates to exploring options for future plan making.		influence. Policy does highlight potential for good quality green and blue infrastructure and recreation opportunities. Potential for options to provide alternative destinations to Cannock Chase and good for these to be considered at an early stage.
5 Site Allocations				
Housing	Introductory text and context	No LSE. Introductory text.		
Strategic Masterplanning Locations	Introductory text for Policies SA1-SA4	No LSE. Introductory text.		
Policy SA1: Strategic development location: land east of Bilbrook	Identifies a strategic site for major housing growth (minimum of 848 dwellings), new school, on-site retail etc. Development will be informed by an SPD.	LSE.	Recreation (LSE triggered alone for Cannock Chase SAC) Air Quality (LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).	Location just touches the Cannock Chase SAC 15km zone and at is least 10km from any other European site. Taken to appropriate assessment for air quality on a precautionary basis.
Policy SA2 – Strategic development location: Land at Cross Green	Identifies a strategic site for major housing growth (1200 dwellings), new school, on-site retail etc. Development will be informed by an SPD.	LSE.	Recreation (LSE triggered in-combination for Cannock Chase SAC) Air Quality (LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh	Site is within the Cannock Chase 15km zone and is around 9.8km from Cannock Chase Extension Canal. At least 10km from any other European site. Taken to appropriate assessment for air quality on a precautionary basis.

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Plan section/policy	Description	LSE screening	Potential risks	Comments
			SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).	
Policy SA3 – Strategic development location: Land north of Linthouse Lane	Identifies a strategic site for major housing growth (1200 dwellings), new school, on-site retail etc. Development will be informed by an SPD.	LSE.	Recreation (LSE triggered alone for Cannock Chase SAC) Air Quality (LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).	Total dwellings potentially 1976, with 1200 by 2038. Site is within the Cannock Chase 15km zone and is around 6.5km from Cannock Chase Extension Canal. At least 10km from any other European site. Taken to appropriate assessment for air quality on a precautionary basis.
Policy SA4 – Strategic development location: Land north of Penkridge	Identifies a strategic site for major housing growth (1129 dwellings), new school, on-site retail etc. Development will be informed by an SPD.	LSE.	Recreation (LSE triggered alone for Cannock Chase SAC) Air Quality (LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).	Site is within the Cannock Chase 15km zone (around 5.0km at its closest) and is at least 10km from any other European site. Taken to appropriate assessment for air quality on a precautionary basis.
Housing allocations	Introductory text for SA5	No LSE. Introductory text.		
Policy SA5: Housing Allocations	25 different housing allocations totalling around 2863 dwellings.	LSE policy which may have a significant effect on a European site alone	Recreation (LSE triggered alone for Cannock Chase SAC and Motte Meadows SAC) Water issues (LSE triggered alone for Motte Meadows SAC) Air Quality	Distribution of growth such that Midlands Meres and Mosses Phase 2 Ramsar can be screened out for water issues as the catchment for this site is only the north-western part of the District, around Blymhill.

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
			(LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).	
Gypsy and Travellers				
SA6 Gypsy and Travellers Allocations	Allocates 33 pitches across 13 sites	LSE policy which may have a significant effect on a European site alone	Recreation (LSE triggered alone for Cannock Chase SAC)	While relatively small increase in accommodation, virtually all sites are within the Cannock Chase 15km zone.
Employment	Text listing employment sites and supply	LSE. Employment sites might be likely to have a significant effect in combination.	Air Quality (LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).	
SA7 – Employment allocation – West Midlands Interchange	A total of 297ha allocated for employment for the West Midlands Interchange and land removed from Green Belt	No LSE. Proposal for WMI not proposed by plan		WMI is a Nationally Significant Infrastructure Project. A Development Consent Order granted permission for the WMI in 2020. The Inspector's report confirms that an HRA was undertaken for the WMI and there were no likely significant effects identified.
6 Development Management Policies				

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
Homes and Communities				
HC1 – Housing mix	Policy will set out requirements for sizes of property and mix of affordable housing	No LSE, policy that cannot lead to development or other change		
HC2 – Housing density	Policy will set out a minimum density (35 dwellings per ha)	No LSE, policy that cannot lead to development or other change		
HC3 – Affordable housing	Policy will set proportion of affordable housing for major residential development and other aspects relating to affordable housing	No LSE, policy that cannot lead to development or other change		
HC4 – Homes for older people	Policy will set requirements relating to meeting the needs of ageing population	No LSE, policy that cannot lead to development or other change		
HC5 – Specialist housing schemes	Policy will give support for proposals for specialist housing and resist loss of specialist accommodation	No LSE, policy that cannot lead to development or other change		
HC6 – Rural exception sites	Policy will support sites that lie adjacent to villages in tiers 1-4 of settlement hierarchy and other aspects relating to rural exception sites	No LSE, policy that cannot lead to development or other change		
HC7 – Self & Custom Build Housing	Policy will provide support for self-build and custom housebuilding	No LSE, policy that cannot lead to development or other change		
HC8 - Gypsy, traveller and travelling showpeople	Policy will set criteria for proposals for Gypsy and Traveller pitches	No LSE, policy that cannot lead to development or other change		
Design and space standards				

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Plan section/policy	Description	LSE screening	Potential risks	Comments
HC9 – Design requirements	Policy will introduce requirements to ensure high quality design	No LSE, policy that cannot lead to development or other change		
HC10 – Protecting residential amenity	Policy will retain existing approach to protecting residential amenity	No LSE, policy that cannot lead to development or other change		
HC11 – Space about dwellings and internal space standards	Policy will retain external space about dwellings and set requirements to meet the governments Nationally Described Space Standard	No LSE, policy that cannot lead to development or other change		
HC12 – Parking standards	Policy will set parking standards as in the adopted core strategy and introduce additional standards relating to electric vehicle charging	No LSE, policy that cannot lead to development or other change		
Promoting successful and sustainable communities				
HC13 – Health and Wellbeing	Policy will ensure development maximises positive impact on promoting health and well-being	No LSE, policy that cannot lead to development or other change		
HC14 – Health Infrastructure	Policy will protect existing healthcare infrastructure and check capacity of healthcare facilities in relation to major residential developments	No LSE, policy that cannot lead to development or other change		
HC15 - Education	Policy will protect existing education infrastructure and cross-references to the latest Staffordshire Education Infrastructure Contributions Policy	No LSE, policy that cannot lead to development or other change		
HC16 – South Staffordshire College	Policy will support proposals for new development associated with South Staffordshire College	No LSE, policy that could not have any conceivable adverse effect on a site		Site is an established agricultural college south of Penkridge (Rodbaston). Policy does will not

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
				set any specific details for growth and development at the site.
HC17 – Open Space	Policy will protect existing open spaces and require 0.006ha of multi-functional open space per dwelling	No LSE, policy that cannot lead to development or other change		Green space provision could play a role in mitigation for recreation impacts and Cannock Chase but any such mitigation would be above and beyond the requirements in this policy. This policy will relate to general open space provision and is not mitigation.
HC18 – Sports facilities and playing pitches	Policy will protect existing sports facilities and pitches and require further provision from major developments	No LSE, policy that cannot lead to development or other change		
HC19 – Wider green infrastructure design principles	Policy will ensure opportunities to introduce green infrastructure provided for a range of functions, with further guidance to be set out in a Green Infrastructure SPD.	No LSE, policy that cannot lead to development or other change		Scope for the SPD to play a role in mitigation for Cannock Chase and recreation.
Economic vibrancy				
EC1 – Sustainable economic growth	Policy will ensure sufficient supply of employment land, with growth focussed at currently identified employment areas.	No LSE, policy that cannot lead to development or other change		
EC2 – Retention of employment sites	Policy will protect existing designated employment areas	No LSE, policy that cannot lead to development or other change		
EC3 – Inclusive Growth	Policy will require applicants (developments of 100 or more residential units or 5000sqm of	No LSE, policy that cannot lead to development or other change		

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
	commercial floorspace) to submit an Employment and Skills Plan			
EC4 – Rural employment and tourism	Policy will support rural diversification.	No LSE, policy that cannot lead to development or other change		
EC5 – Agricultural works dwellings and equine related development	Policy will support proposals for agriculture and related development and will support a range of horse related facilities and equine enterprises if they meet set criteria.	No LSE, policy that cannot lead to development or other change		Policy does not promote development or sites. Equine-related development close to Cannock Chase SAC could have particular risks and this would need to be checked at project-level HRA.
Community services, facilities and infrastructure				
EC6 - Retail	Policy will identify 3 tier hierarchy, set Impact Test threshold and ensure residential development doesn't result in the loss of essential services or facilities	No LSE, policy that cannot lead to development or other change		
EC7 – Protecting community services and facilities	Policy will support the provision of new services and facilities and seek to protect against loss.	No LSE, policy that cannot lead to development or other change		
EC8 – Wolverhampton Halfpenny Green Airport	Policy will support development proposals related to general aviation and existing businesses at the site (in line with EV13 in the adopted core strategy)	LSE policy with an effect on a site but unlikely to be significant alone, so need to check for likely significant effects in combination	Air Quality (LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar).	EV13 relates to replacement of existing outdated and unsustainable buildings and high-quality infill development. Located well away from any European site (e.g. around 28km from Cannock Chase SAC, around 23.5km from Cannock Chase Extension Canal SAC and 21km from Mottey Meadows SAC. LSE triggered on

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
				precautionary basis as growth at the site could result in increased traffic and possibly air quality risks relating to increased flights.
EC9 - Infrastructure	Policy will commit the council to working with infrastructure providers	No LSE, policy that cannot lead to development or other change		
EC10 – Developer contributions	Policy will retain commitment to use S106 payments to fund all types of infrastructure	No LSE, policy that cannot lead to development or other change		
EC11 – Sustainable transport	Policy will promoted joint working between District, County Council and neighbouring highways authorities and support/promote more sustainable travel options	No LSE, policy that cannot lead to development or other change		Policy could play a role in reducing air quality impacts to European sites
The Natural and Built Environment				
NB1 – Protecting, enhancing and expanding natural assets	Policy will promote the protection, enhancement and restoration of the natural environment	No LSE, general plan-wide environmental protection/site safeguarding policy		Policy wording to be finalised but will ensure protection for international sites. Need to check at final plan wording for reference to mitigation in case needs to be screened in for further consideration as part of appropriate assessment (following <i>People over Wind</i>)
NB2 - Biodiversity	Policy will employ use of mitigation hierarchy and require biodiversity net gain	No LSE, general plan-wide environmental protection/site safeguarding policy		Policy wording to be finalised but will ensure protection for international sites. Need to check at final plan wording for reference to mitigation in case needs to be screened in for further

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
				consideration as part of appropriate assessment (following <i>People over Wind</i>)
NB3 – Cannock Chase SAC	Specific mitigation requirements relating to recreation impacts and Cannock Chase SAC	Bespoke policy intended to avoid or reduce harmful effects on a European site. Screened in for further consideration as part of appropriate assessment.	Recreation Cannock Chase SAC	
NB4 Landscape Character	Policy will protect and enhance landscapes.	No LSE, general plan-wide environmental protection policy		
Climate change and sustainable development				
NB5 – Renewable and low carbon energy generation	Policy will indicate general in-principle support for renewable or sustainable energy schemes	No LSE, general plan-wide environmental protection policy		Policy wording to be finalised but will require checking with respect to policy is not supporting/promoting locations where risk for any mobile species associated with European sites (birds or bats)
NB6 – Energy and water efficiency, energy and heat hierarchies and renewable energy in new development	Policy will set requirements for carbon reduction, energy use etc	No LSE, general plan-wide environmental protection policy		
NB7 - NB7 – Managing flood risk, Sustainable drainage systems & water quality	Policy will set requirements for sustainable drainage and water quality	No LSE, general plan-wide environmental protection policy		Policy wording to be finalised. Need to check at final plan wording for reference to mitigation in case needs to be screened in for further consideration as part of appropriate assessment (following <i>People over Wind</i>)

South Staffordshire Local Plan HRA, preferred options

Plan section/policy	Description	LSE screening	Potential risks	Comments
NB8 – Hazardous and environmentally sensitive development	Policy will set out approach for development or sites that are hazardous or environmentally sensitive (e.g. contaminated land)	No LSE, general plan-wide environmental protection policy		
Enhancing the Historic Environment				
NB9 – Conservation and preservation of historic assets	Policy to promote the conservation and enhancement of the historic environment through the positive management of development proposals and the safeguarding of heritage assets and their setting.	No LSE, policy listing general criteria for testing acceptability of proposals		
NB10 – Canal network	Policy will set criteria for new canal-side development	No LSE, general plan-wide environmental protection policy		Policy wording to be finalised. Need to check at final plan wording in case any implications for the Cannock Chase Extension Canal SAC or in case policy includes reference to mitigation in case needs to be screened in for further consideration as part of appropriate assessment (following <i>People over Wind</i>)
7 Nest Steps	Outlines next steps and timing for next stages	No LSE, general administrative text		
Appendices	List of evidence base, maps for individual sites/proformas and glossary	No LSE, general administrative text and additional information		

Table 4: Summary of distances (km) from the closest part of each allocation to each of the relevant SAC sites. Grey shading in the column for Cannock Chase SAC indicates locations within 15km (the zone of influence for recreation impacts).

Site ref	Description	Location	Approx. no. dwellings	Policy ref	Distance (km) to nearest part						
					Cannock Chase SAC	Cannock Extension Canal SAC	Midland Meres & Mosses - Phase 1 Ramsar	Midland Meres & Mosses - Phase 2 Ramsar	Mottey Meadows SAC	Pasturefields Salt Marsh SAC	West Midlands Mosses SAC
5	Land off Cherrybrook Drive	Penkridge Y	88	SA5	4.9	11.3	15.8	15.3	8.7	11.8	15.8
10	Land at Lower Drayton Farm	Penkridge Y	445	SA4	5.1	12.6	15.2	14.4	8.3	11.1	15.2
16	Pear Tree Farm, Huntington	Huntington Y	39	SA5	2.0	7.9	15.0	19.4	12.7	11.4	15.0
79	Land south of Kiddemore Green Road	Brewood Y	43	SA5	12.3	14.1	23.4	14.4	5.2	19.4	23.4
82	Land between A449 Stafford Rd & School Lane	Coven	48	SA5	10.4	10.8	22.9	17.5	8.6	19.1	22.9
136	Land at Upper Landywood Lane (same as 13, 14, 16)	Great Wyrley Y	109	SA5	7.5	3.4	21.3	23.6	15.4	18.1	21.3
224	Land adjacent to 44 Station Road, Codsall	Codsall Y	85	SA5	16.7	15.5	28.9	18.0	9.0	24.9	28.9
239	west Wrottesley Park Rd south Safeguarded	Perton Y	150	SA5	19.8	16.9	32.3	21.3	12.7	28.4	32.3
251	Hall End Farm	Pattingham	0	SA5	23.1	20.7	30.5	21.4	13.7	31.1	35.1
255	Clive Road/Moor Lane	Pattingham	22	SA5	22.6	20.1	31.0	21.5	13.6	30.8	34.8
272	Land east of Dunsley Drive	Kinver Y	22	SA5	33.3	26.5	40.0	36.6	28.5	43.2	46.9
274	Land south of White Hill, Kinver	Kinver Y	82	SA5	33.7	27.2	38.5	36.0	28.1	43.3	47.1

South Staffordshire Local Plan HRA, preferred options

Site ref	Description	Location	Approx. no. dwellings	Policy ref	Distance (km) to nearest part						
					Cannock Chase SAC	Cannock Extension Canal SAC	Midland Meres & Mosses - Phase 1 Ramsar	Midland Meres & Mosses - Phase 2 Ramsar	Mottey Meadows SAC	Pasturefields Salt Marsh SAC	West Midlands Mosses SAC
284	Land off Gilbert Lane	Wombourne Y	45	SA5	23.7	17.8	37.1	28.2	19.4	33.4	37.1
285	Land off Poolhouse Road	Wombourne Y	83	SA5	25.0	19.7	36.1	27.9	19.5	34.5	38.2
286	Land adjacent 62 Sytch Lane	Wombourne Y	16	SA5	25.0	19.1	37.7	29.1	20.4	34.7	38.4
313	Land off Himley Lane	Swindon	0	SA5	26.5	20.6	37.5	30.1	21.6	36.2	39.9
397	Land adjacent Brinsford Lodge, Brookhouse Lodge	Featherstone Y	39	SA5	10.8	8.6	24.2	20.8	11.8	20.5	24.2
416	Land off Orton Lane (rear Strathmore Crescent)	Wombourne Y	57	SA5	23.0	17.8	36.3	26.8	18.1	32.5	36.3
420	Land north of Penkridge off A449 (east)	Penkridge Y	29	SA4	5.6	12.2	15.9	14.5	8.0	11.9	15.9
459	Land off Poolhouse Road (2), Wombourne	Wombourne Y	97	SA5	24.9	19.6	36.1	27.9	19.4	34.3	38.1
463	Land between Billy Buns Lane and Smallbrook Lane	Wombourne	72	SA5	23.3	17.5	36.7	27.8	19.1	33.0	36.7
519	Plan Land East of Bilbrook	Bilbrook	581	SA1	15.0	13.1	27.6	19.2	10.0	23.7	27.6
523	Wolverhampton Road Part 1	Cheslyn Hay	49	SA5	7.7	4.7	21.4	22.5	14.2	18.1	21.4
576	Land west of Hyde Lane	Kinver	22	SA5	33.2	26.6	38.8	35.8	27.8	42.9	46.6
582	land off Langley Road	West of Black Country	390	SA5	20.1	15.7	33.2	24.0	15.1	29.4	33.2

South Staffordshire Local Plan HRA, preferred options

Site ref	Description	Location	Approx. no. dwellings	Policy ref	Distance (km) to nearest part						
					Cannock Chase SAC	Cannock Extension Canal SAC	Midland Meres & Mosses - Phase 1 Ramsar	Midland Meres & Mosses - Phase 2 Ramsar	Mottey Meadows SAC	Pasturefields Salt Marsh SAC	West Midlands Mosses SAC
584		Land North Of Penkridge	0	SA4	5.4	12.4	15.6	14.5	8.1	11.6	15.6
591	Land at Oakland Farm	Huntington	44	SA5	1.8	7.4	15.2	19.8	13.1	11.7	15.2
610	0	Wheaton Aston	22	SA5	13.1	18.0	22.4	9.2	0.7	18.3	22.4
617	0	Brewood	63	SA5	11.0	12.9	22.4	14.9	6.0	18.4	22.4
638	Loades PLC	Great Wyrley	29	SA5	8.1	3.0	21.8	24.3	16.1	18.7	21.8
646	Land to the West of ROF Featherstone				10.7	9.8	23.6	18.9	9.9	19.9	23.6
704	Norton Lane	Great Wyrley	31	SA5	6.2	2.4	19.9	24.0	16.3	16.8	19.9
036c	Land South of Stafford	South of Stafford	168	SA5	2.1	14.9	10.2	15.7	11.9	6.1	10.2
119a	Land of Saredon Road Part A	Cheslyn Hay	60	SA5	6.9	4.8	20.7	21.9	13.8	17.3	20.7
419 a&b	Land at Keepers Lane (Safeguarded Land)	Bilbrook Y	317	SA5	16.6	14.7	29.1	19.1	10.1	25.2	29.1
426a	Bridge Farm	Wheaton Aston Y	15	SA5	12.6	17.5	22.0	9.7	1.3	17.9	22.0
486c	Land off Blackhalve Lane	North of Black Country	1200	SA3	12.1	6.5	25.9	23.6	14.5	22.4	25.9
536a	0	Great Wyrley	84	SA5	8.3	3.1	22.0	24.3	16.0	18.9	22.0
562/415	North of Pool House Road Part 1	Wombourne	38	SA5	24.7	19.3	36.3	27.9	19.4	34.2	37.9

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Site ref	Description	Location	Approx. no. dwellings	Policy ref	Distance (km) to nearest part						
					Cannock Chase SAC	Cannock Extension Canal SAC	Midland Meres & Mosses - Phase 1 Ramsar	Midland Meres & Mosses - Phase 2 Ramsar	Mottey Meadows SAC	Pasturefields Salt Marsh SAC	West Midlands Mosses SAC
646 a&b	Land to the West of ROF Featherstone	Coven Heath/ROF Featherstone	1200	SA2	11.4	9.8	24.4	19.4	10.3	20.6	24.4
SAD Site 136	Landywood	Great Wyrley	46	SA5	7.5	3.3	21.3	23.6	15.5	18.1	21.3
SAD Site 139	Pool View, Churchbridge	Great Wyrley	46	SA5	6.1	2.7	19.8	23.7	15.9	16.7	19.8
SAD Site 141	154a Walsall Road	Great Wyrley	31	SA5	6.5	2.7	20.2	23.8	15.9	17.1	20.2
SAD Site 168	Brinsford Lodge	Featherstone	60	0	10.7	8.6	24.0	20.6	11.7	20.3	24.0
SAD Site 228	Adult Training Centre off Histons Hill	Codsall	29	SA5	16.4	14.9	28.6	18.6	9.5	24.7	28.6
SAD Site 379	Land east of Ivetsy Road	Wheaton Aston	18	SA5	13.4	18.0	22.8	9.6	0.8	18.8	22.8

Screening conclusions

- 3.9 The screening for likely significant effects has identified a number of risks in terms of additional recreation pressure (Cannock Chase SAC), water issues (Mottey Meadows SAC and Midlands Meres and Mosses Ramsar Phase 2) and air quality (Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefields Salt Marsh SAC, West Midlands Meres and Mosses SAC/Midlands Meres and Mosses Phase 1 Ramsar). These issues are therefore taken forward to appropriate assessment.

4. Appropriate assessment: Recreation

Cannock Chase SAC

Relevant policies from LSE screening

4.1 Screening identified likely significant effects for Cannock Chase SAC for the following policies alone:

- Policy DS3: the Spatial Strategy to 2038
- Policy SA5: Housing Allocations
- Policy SA1: Strategic development location: land east of Billbrook
- Policy SA2: Strategic development location: Land at Cross Green
- Policy SA3: Strategic development location: Land north of Linthouse Lane
- Policy SA4: Strategic development location: Land north of Penkridge
- Policy SA5: Housing Allocations
- Policy SA6: SA6 Gypsy and Travellers Allocations

4.2 Policy NB3 will be a specific policy intended to avoid or reduce harmful effects on Cannock Chase SAC. As this will provide protection for Cannock Chase SAC, following People Over Wind it cannot be taken into account in the screening and the mitigation proposed needs to be considered as part of the appropriate assessment.

Cannock Chase SAC

4.3 Cannock Chase SAC is an area of lowland heathland of around 1,244ha which lies entirely within the Cannock Chase Area of Outstanding Natural Beauty (AONB). Situated on a high sandstone plateau with deeply incised valleys, the site is comprised of acidic soils that support a range of heathland, valley mire, ancient woodland and scrub types. It is designated as an SAC²³ for the following qualifying features:

- Northern Atlantic wet heaths with *Erica tetralix* (Wet heathland with cross-leaved heath);
- European dry heaths

4.4 The valley mire/wet heath communities are rare, threatened vegetation types, being some of the most floristically-rich and representative examples of their type

²³ See [the Natural England website](#) for detail about the qualifying features and the conservation objectives for the SAC

in central England. Within Cannock Chase they are found in the stream valley systems and around pools and depressions.

- 4.5 The area of lowland dry heathland at Cannock Chase is the most extensive in the Midlands. Its special interest also reflects an unusual floristic character, intermediate between heathlands of northern and upland England and Wales and those of southern counties. The hybrid bilberry *Vaccinium intermedium* has its main UK stronghold at Cannock Chase. The hot, dry soil conditions found in bare ground in early successional habitats across the dry heathland is important for invertebrates such as mining bees, ants and wasps.

Impacts of recreation

- 4.6 There are a range of current pressures and threats on the SAC²⁴ and one area of particular concern relates to increased visitor pressure and the cumulative impacts of recreation. Impacts from recreation on the nature conservation interest are summarised in a range of sources (Liley et al., 2009; White et al., 2012) and include:

- Disturbance to wildlife;
- Trampling, leading to path widening, vegetation wear, erosion & soil compaction;
- Trampling of invertebrate nest sites;
- Fragmentation of habitats from new desire lines & paths;
- Damage to tree roots where paths pass close to veteran trees;
- Increased risk of wildfire;
- Eutrophication (dog fouling);
- Spread of disease (Phytophthora);
- Contamination (e.g. dogs in water courses, litter)
- Vandalism;
- Challenges to achieving necessary management (e.g. grazing, spraying, scrub clearance)
- Resources drawn away from conservation management to deal with recreation.

- 4.7 Visitor surveys (Liley, 2012; Liley & Lake, 2012; Panter & Liley, 2019) show the main activities as dog walking, walking (without a dog), cycling/mountain biking and jogging. Data derived from the 2010/11 Visitor survey showed that visitors to Cannock Chase appeared to originate from a wider area than those for many similar sites across the UK, with half of all visitors living within 8km of the SAC and 75% within 15km. The range of the 75th percentile was used to establish a 'Zone of

²⁴ See the [site improvement plan](#) for overview

Influence' for assessment of impacts of new housing development, encompassing land within the boundary of seven different Local Planning Authorities.

The Cannock SAC Partnership

- 4.8 In response to the evidence of significant impact to Cannock Chase SAC linked to increasing 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 formalized under a Memorandum of Understanding in 2016. As Competent Authorities, local planning authorities have to ensure that policies in their Local Plans for new development does not lead to harm to the SAC. As such the SAC Partnership brings the planning authorities together, with other key stakeholders, to fulfil their duties to the SAC through a collaborative and coordinated approach. The MOU runs for 5 years (i.e. to 2021) after which it will be reviewed.
- 4.9 A suite of Strategic Access Management and Monitoring Measures ('SAMMM') were identified which would be funded through financial contributions from new housing developments within 8km of the SAC (the zone within which most frequent visitors originated).
- 4.10 In 2017 the Cannock Chase SAC stage 1 planning evidence base review was undertaken (Hoskin & Liley, 2017) 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 forward. The 2017 review concluded that, in the short term, the SAMMM remained fit for purpose, with the scale of works within it sufficient to mitigate the current level and rate of housing growth within the Zol. However, it was recognised that in the medium to long term the SAMMM (if not reviewed and expanded) was unlikely to remain a robust approach to the mitigation of growing visitor impact due to a number of factors greatly increasing the scale and rate at which housing development was likely to grow within the zone of influence.

2021 Review

- 4.11 Since the 2017 review, a further evidence base review has been undertaken. This identifies that the 15km zone is still appropriate and is supported by more recent visitor survey data (Panter & Liley, 2019).
- 4.12 Using data from surrounding local authorities, pooled by the SAC Partnership, the review sets out the potential future housing growth around the SAC through to 2040. This indicates a likely scale of growth of around 14% within 0-15km of the SAC, with a total of 42,529 new houses anticipated. While these figures are

necessarily indicative they do relate to all local authority boundaries that clip the 15km and therefore provide an indication of the scale of the in-combination effects of growth across authority boundaries.

- 4.13 In light of this growth, the review sets out the necessary mitigation required and draws in particular on the detailed implementation plans (relating to car-parking and to site-users) which have been commissioned by the SAC Partnership. The review summarises the costs and sets out the mitigation measures necessary, providing the detail to allow adverse effects on integrity to be ruled out for in-combination effects of recreation on Cannock Chase SAC. The review extends to the period to 2040 and it is anticipated that the current mitigation approach will run until 2022, when it will be updated in line with the Evidence Base Review.

Policy NB3

- 4.14 The current mitigation approach (as set out in the MOU) is scheduled to run until 2022, at which point it will be necessary to extend the formal agreement. Policy NB3 is yet to be finalised and the preferred options set the direction of travel. This may include reference to SANGs as a possible mitigation measure and a separate guidance or mitigation note or SPD will be produced. The strategic approach to mitigation at Cannock Chase SAC is well established, has worked well, and the work to date ensures that the approach can continue and has been brought up to date. The approach accords with other long established strategic mitigation approaches, such as the Dorset Heaths and the Thames Basin Heaths.
- 4.15 The policy will need checking at the next plan iteration and checks will need to ensure that the necessary mitigation is secured.

Conclusions: Cannock Chase SAC and recreation

- 4.16 In the absence of mitigation it is not possible to rule out adverse effects on integrity to Cannock Chase SAC from the Plan alone. The long-standing strategic approach to mitigation provides the mechanism to ensure that adverse effects on integrity can be ruled out for recreation impacts on Cannock Chase SAC, alone or in-combination with other plans or projects. The strategy is currently in place and is well established. A review of the strategy has considered the extent of new housing growth in relevant local authority plans (to 2040) and the necessary mitigation, and sets out further mitigation requirements to ensure the mitigation remains effective. Further updates to the HRA at later iterations of the Plan will need to check that the mitigation is fully secured and reflected in the finalised policy wording.

Mottey Meadows SAC

Relevant policies from LSE screening

4.17 Screening identified likely significant effects for Mottey Meadows SAC for the following policies alone:

- Policy DS3 – the Spatial Strategy to 2038
- Policy SA5: Housing Allocations

Mottey Meadows SAC and risks to the qualifying features

4.18 Mottey Meadows consists of a series of agriculturally-unimproved and seasonally-inundated meadows (approximately 40ha) near the village of Wheaton Aston. The meadows have been managed for hay making for many centuries. The site contains damp species-rich grassland with limited influence of agricultural intensification and there are valuable transitions to other dry and wet grassland types. The site is important for a range of rare meadow species.

4.19 The qualifying feature of the SAC is:

- H6510 Lowland Hay Meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

4.20 The supplementary conservation advice sets targets for the SAC and highlights the role of active and ongoing conservation management to protect and maintain the site for the Lowland Hay Meadows feature. Such meadows require continuation of traditional management, and the conservation advice highlights the need for grazing, cutting, scrub management, weed control and recreation/visitor management. In addition, retention of suitable land use/infrastructure patterns are necessary to enable site management (e.g. pastoral livestock farming). The site has consistently been managed by a regime of hay-making with aftermath grazing with cattle. Recently sheep have been used to graze the aftermath and the conservation advice highlights that this needs monitoring and may not therefore be the ideal long-term management.

4.21 Risks from recreation will relate to development in close proximity. There are limited public rights of way that cross the site and otherwise access is by permit or from guided walks only. The site is in a rural location and recreation is not identified in Natural England's site improvement plan²⁵ as a current pressure or

²⁵ See <http://publications.naturalengland.org.uk/publication/6519033218203648>

even a risk. However, the site improvement plan does identify that changes in land management are a threat to the site.

- 4.22 Risks from nearby development could result in impacts from recreation through:
- Pressure for increased access (and therefore additional infrastructure) from local residents, aware of the National Nature Reserve and attractive meadows on their doorstep;
 - People straying from footpaths, trampling the hay meadows (e.g. not walking in single file, picnics etc.);
 - Risks that the hay cut is contaminated through dog fouling;
 - Litter and fly tipping;
 - Risks that long-term management (grazing) is compromised and no longer possible due to recreation (e.g. from dog attacks, gates left open), possibly exacerbated through the loss of adjacent fields (through development) meaning farming systems no longer viable or effective.

4.23 It is clearly only development in close proximity that are of concern and the Plan includes three allocations in the neighbouring village of Wheaton Aston (see Map 4). There are no other villages or settlements in close proximity. Relevant allocations within the Plan are therefore:

- Site ref 610, approximately 22 dwellings;
- Site ref 426a: approximately 15 dwellings;
- SAD Site 379: approximately 18 dwellings.

4.24 This gives a combined total for the village of around 55 dwellings. Around 30% of households in the UK have been estimated to own a dog (e.g. Murray et al., 2015). Current (as of 2021) and therefore this could be an increase of around 17 households with dogs in the village. Postcode data indicates around 883 residential delivery points in Wheaton Aston, and the allocations combined therefore represent a growth of around 6%. As Map 4 shows, the sites are relatively far set back from the SAC with the closest (site 610) around 760m from the SAC (but with a direct footpath link).

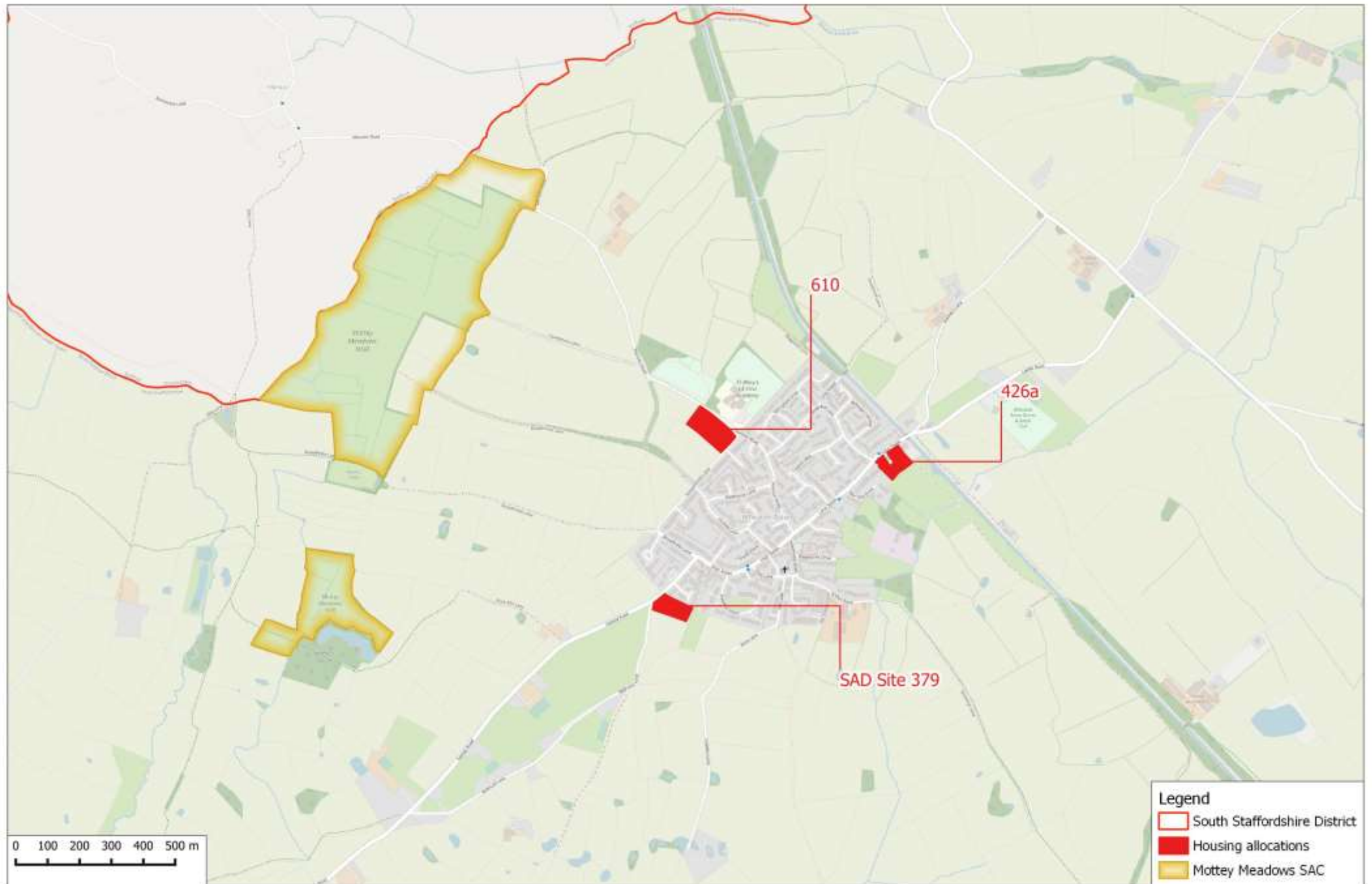
Conclusions: Motte Meadows SAC and recreation

4.25 Given the relatively low proportional increase in housing, and the distance from the SAC, risks are low and given the very localised issues, will depend to some extent on the site design, layout etc. In the absence of mitigation, it is not likely to be possible to rule out adverse effects on integrity as a result of the Plan alone. There are three Wheaton Aston allocations that are relevant and further iterations of the Plan will need to ensure that these can only come forward following site-specific checks and if necessary, mitigation is secured. With suitable wording

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added to the site proformas to ensure that any necessary mitigation is secured and project-level HRA undertaken, it should be possible to rule out adverse effects on integrity and this will need to be checked in the HRA of the Regulation 19 version of the Plan.

Map 4: Wheaton Aston Sites



5. Appropriate assessment: Water Issues

- 5.1 As described in the preamble to the screening assessment, water issues include water quality and water quantity (i.e. water availability), and flood management. Run-off, outflow from sewage treatments and overflow from septic tanks can result in increased nutrient loads and contamination of water courses. Abstraction and land management can influence water flow and quantity, resulting in reduced water availability at certain periods or changes in the flow. Such impacts particularly relate to aquatic and wetland habitats.
- 5.2 Key issues relate therefore to wastewater and water quality and the only sites where development in South Staffordshire could have impacts are Motte Meadows SAC and the Midlands Meres and Mosses Phase 2 Ramsar. Screening has ruled out impacts to the Midlands Meres and Mosses Phase 2 Ramsar as only growth in the north-western part of the District would have any hydrological links (the area around Blymhill, directly to the south of the Ramsar site), and there are no allocations within this area. Risks therefore only relate to Motte Meadows SAC.

Motte Meadows SAC

Relevant policies from LSE screening

- 5.3 Screening identified likely significant effects for Motte Meadows SAC for the following policies alone:
- Policy DS3 – the Spatial Strategy to 2038;
 - Policy SA5: Housing Allocations;

Site specific issues

- 5.4 Water pollution, hydrological change and water abstraction are all identified as current pressures or potential threats for Motte Meadows SAC in Natural England's site improvement plan for the site²⁶. The supplementary conservation advice²⁷ sets a target to restore water quality at the site and notes that surface water from the catchment is enriched by diffuse pollution sourced mainly from agriculture, with most of the water directed through the site by a system of ditches and drains. There are also targets to restore the water table, the flooding regime

²⁶ See <http://publications.naturalengland.org.uk/file/5135117454409728>

²⁷ See <http://publications.naturalengland.org.uk/publication/5720449535180800>

and the general hydrology. It seems that more work is needed to better understand the eco-hydrology of the site and the interactions between surface and ground water. Spring-lines are thought to arise along the gentle slope to higher ground along the eastern edge of the SAC.

5.5 There are three allocations in close proximity to the SAC (see Map 4) and these are:

- Site ref 610, approximately 22 dwellings;
- Site ref 426a: approximately 15 dwellings;
- SAD Site 379: approximately 18 dwellings.

5.6 These are all separated from the SAC by agricultural land and site 426a is also screened from the SAC by the village of Wheaton Aston. Nonetheless all three sites are within 1.5km of the SAC and at stage in the assessment it is not possible to identify whether there are hydrological links between the allocations and the SAC. There are potential risks that the sites might have direct run-off onto the SAC (e.g. diffuse pollution, surface run-off via ditches etc.) or could disrupt the springs and hydrology of the SAC. Without further checks it is not possible to rule out adverse effects on the integrity of the SAC, however the risks seem low.

5.7 The water cycle study (JBA Consulting, 2020) recommends a phase 2 study with checks on water quality for SSSIs, checks of flood risk from additional foul flow and further water quality modelling. This may provide the necessary evidence to complete the assessment or it may be that specific policy wording is required for the sites identified, such that development is dependent on specific requirements being met and checked at project-level HRA.

6. Appropriate assessment: Air Quality

Relevant policies from LSE screening

6.1 Screening identified likely significant effects for Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar from the following policies alone:

- Policy DS3 – the Spatial Strategy to 2038
- Policy SA1: Strategic development location: land east of Bilbrook
- Policy SA2 – Strategic development location: Land at Cross Green
- Policy SA3 – Strategic development location: Land north of Linthouse Lane
- Policy SA4 – Strategic development location: Land north of Penkridge
- Policy SA5: Housing Allocations
- Employment
- Policy EC8 – Wolverhampton Halfpenny Green Airport

Cannock Chase SAC, Pasturefields Salt March SAC, Cannock Extension Canal SAC, West Midlands Meres and Mosses/Midlands Meres and Mosses Phase 1 Ramsar site

6.2 As described in the preamble to the screening assessment, development is typically associated with increased traffic and emissions which can increase the airborne concentration of nitrogen oxides (NO_x) and ammonia (NH₃), and the subsequent rate of nitrogen deposition from the atmosphere. This can lead to the nutrient enrichment and acidification of soils, encouraging more tolerant ruderal species at the expense of sensitive plant, lower plant and invertebrate communities. In high concentrations, ammonia can result in direct toxic effects on vegetation, a factor which may also be true of NO_x. Larger animals, such as small mammals and birds are considered immune to direct effects but can be vulnerable to change in their supporting habitats. Furthermore, it can exacerbate the effects of other factors such as climate change or pathogens, for example.

6.3 In order to obtain the evidence to address this, traffic studies are typically required for those roads within 200m of a European site. Where this identifies increases in traffic (e.g. AADT of 1,000 for all traffic or 200AADT for Heavy Vehicles) amongst a range of other criteria, air quality analysis is typically pursued to predict the amount of nitrogen deposition. Where this exceeds 1% of the lowest critical load, adverse effects on the integrity of the site cannot be ruled out.

- 6.4 There is no evidence available at this time for this HRA to evaluate and it is premature to make any conclusions. However, the Council is seeking to commission both traffic and air quality modelling work, and it is understood that the Council is undertaking further evidence gathering and working with partners to consider potential mitigation measures (if necessary).
- 6.5 We have screened in Policy EC8 Wolverhampton Halfpenny Green Airport on a precautionary basis and further checks are also necessary as plan-making progresses. The policy is yet to be drafted, however the direction of travel for this policy is stated to relate to the replacement of existing outdated and unsustainable buildings and high-quality infill development. The airport is located well away from any European site (e.g. around 28km from Cannock Chase SAC, around 23.5km from Cannock Chase Extension Canal SAC and 21km from Mottey Meadows SAC. Risks could relate to increased traffic and possibly air quality risks relating to increased flights, but these can only be identified (and ruled out) once further work on the policy has been undertaken.
- 6.6 Until such time as the evidence is made available the Council is unable to ascertain that the Plan will not adversely affect the integrity of Cannock Chase SAC, Cannock Chase Extension Canal SAC, Pasturefields Salt March SAC, the West Midland Meres and Mosses SAC/Midland Meres and Mosses Phase 1 Ramsar site.

7. Conclusions

- 7.1 This HRA report accompanies the South Staffordshire Local Plan Review (preferred options). The HRA will continue to be developed and updated as plan-making progresses and will be finalised once the Plan has been subject to examination. At this, preferred options stage, there is still further evidence gathering to take place and some of the policies are yet to be drafted. As such the appropriate assessment sections are yet to be finalised and the plan has not been subject to a formal integrity test. The following conclusions can be drawn:
- 7.2 In terms of impacts on recreational pressure, there is a long-standing mitigation strategy in place for recreation impacts and Cannock Chase SAC. This is a strategic approach to mitigation and relates to a zone of influence of 15km around the SAC. The mitigation approach has been reviewed and revised in light of recent housing growth figures across different local authorities, including that in South Staffordshire and will be updated in 2022. Policy NB3 (yet to be drafted) will secure the mitigation within the Plan. Further checks are therefore necessary at the next iteration of the HRA to ensure the mitigation is secured and with such a strategic approach in place, it should be possible to conclude that the Plan will not adversely affect the integrity of Cannock Chase SAC, alone or in-combination with other plans or projects.
- 7.3 Recreation impacts are also identified for Mottey Meadows as a result of development in and around Wheaton Aston (3 allocations). In the absence of mitigation, it is not likely to be possible to rule out adverse effects on integrity as a result of the Plan alone. There are three Wheaton Aston allocations that are relevant and further iterations of the Plan will need to ensure that these can only come forward following site-specific checks and if necessary, mitigation is secured. With suitable wording added to the site proformas to ensure that any necessary mitigation is secured and project-level HRA undertaken, it should be possible to rule out adverse effects on integrity and this will need to be checked in the HRA of the Regulation 19 version of the Plan.
- 7.4 In terms of water issues, likely significant effects have been identified for Mottey Meadows SAC from housing in close proximity to the site (3 allocations in the vicinity of Wheaton Aston). The water cycle study (JBA Consulting, 2020) recommends a phase 2 study with checks on water quality for SSSIs, checks of flood risk from additional foul flow and further water quality modelling. This may provide the necessary evidence to complete the assessment or it may be that specific policy wording is required for the sites identified, such that development is dependent on specific requirements being met and checked at project-level HRA.

- 7.5 In terms of impacts on air pollution, the absence of key evidence means it cannot be ascertained at this point in time that the Plan will not adversely affect the integrity of Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefield Saltmarsh SAC, West Midlands Mosses SAC and Midlands Meres & Mosses Phase 1 Ramsar, alone or in-combination. These sites all have roads within 200m and it is necessary to further understand likely changes in traffic (and potentially air quality), as a result of the South Staffordshire Plan (and other plans and projects). Further evidence gathering is being undertaken by the Council and will inform the next iteration of the HRA.
- 7.6 We have included Policy EC8 Wolverhampton Halfpenny Green Airport on a precautionary basis and further checks are also necessary as plan-making progresses. Risks could relate to increased traffic and possibly air quality risks relating to increased flights, but these can only be identified (and ruled out) once further work on the policy has been undertaken.

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Appendix 1: Appendix 1: European Site Conservation Objectives

As required by the Directives, 'Conservation Objectives' have been established by Natural England and these define the required ecologically robust state for each European site interest feature. All sites should be meeting their conservation objectives.

When being fully met, each site will be adequately contributing to the overall favourable conservation status of the species or habitat interest feature across its natural range. Where conservation objectives are not being met at a site level, and the interest feature is therefore not contributing to overall favourable conservation status of the species or habitat, plans should be in place for adequate restoration.

Natural England has embarked on a project to renew all European site Conservation Objectives, in order to ensure that they are up to date, comprehensive and easier for developers and consultants to use to inform project level Habitats Regulations Assessments in a consistent way. In 2012, Natural England issued a set of generic European site Conservation Objectives, which should be applied to each interest feature of each European site.

The generic Conservation Objectives for each European site include an overarching objective, followed by a list of attributes that are essential for the achievement of the overarching objective. Whilst the generic objectives are standardised, they are to be applied to each interest feature of each European site, and the application and achievement of those objectives will therefore be site specific and dependant on the nature and characteristics of the site. The more detailed site-specific information to underpin these generic objectives, provides much more site-specific information, and this detail plays a fundamental role in informing HRA, and importantly gives greater clarity to what might constitute an adverse effect on a site interest feature.

For SPAs the overarching objective is to:

'Avoid the deterioration of the habitats of qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.'

This is achieved by, subject to natural change, maintaining and 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 populations of the qualifying features.
- The distribution of the qualifying features within the site.

For SACs the overarching objective is to:

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

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- The extent and distribution of qualifying natural 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

Conservation objectives inform any HRA of a plan or project, by identifying what the interest features for the site should be achieving, and what impacts may be significant for the site in terms of undermining the site's ability to meet its conservation objectives.

Appendix 2: Conservation Interest of European Sites

Links in the table cross-reference to the Natural England website and the relevant page with the site's conservation objectives. In the qualifying features column, for SPAs NB denotes non-breeding and B breeding features. For SACs, # denotes features for which the UK has a special responsibility. The descriptive text is adapted from Natural England's SIP. For Ramsar sites, the qualifying features and taken from the Natural England designated site view for the relevant site²⁸, and the link cross-references to the relevant Ramsar site information page.

Site	Reason for designation (# denotes UK special responsibility)	Pressures and threats (from relevant SIP)	
Cannock Chase SAC	H4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> H4030 European dry heaths	Undergrazing, drainage, hydrological changes, disease, air pollution (risk of atmospheric nitrogen deposition), wildfire/arson, invasive species.	Cannock Chase is a large, diverse area of semi-natural vegetation comprising the most extensive area of lowland heathland in the Midlands with alder woodland, oak wood pasture and valley mires. The character of the vegetation is intermediate between the upland or northern heaths of England and Wales and those of southern counties. It is home to breeding Nightjar, Woodlark, occasionally Dartford warbler and a diverse invertebrate fauna.

²⁸ <https://designatedsites.naturalengland.org.uk/>

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Site	Reason for designation (# denotes UK special responsibility)	Pressures and threats (from relevant SIP)	
Cannock Extension Canal SAC	S1831 <i>Luronium natans</i> : Floating water-plantain	Water pollution, invasive species, air pollution (risk of atmospheric nitrogen deposition).	Cannock Extension Canal SAC supports the largest known population of Floating Water-plantain <i>Luronium natans</i> in Staffordshire. Floating water-plantain is a rare, small white-flowered water plant only found in Europe. In the UK it is considered a nationally scarce plant. It is found in Wales, and central England, growing in lakes, reservoirs, ponds, slow-flowing rivers and canals. Floating water-plantain occurs as two forms: in shallow water with floating oval leaves; in deep water with submerged rosettes of narrow leaves. The assemblage of 34 aquatic plant species places this site in the top 20% of British canals. The site also has a good dragonfly assemblage.
Fens Pools SAC	S1166 <i>Triturus cristatus</i> : Great crested newt	Overgrazing, inappropriate scrub control, disease, water pollution, habitat fragmentation.	Fens Pool is located in the heart of the Dudley urban area. It is an SAC for its assemblage of Great Crested Newts and a SSSI for open and standing water as well as Amphibian populations. The Great Crested Newts are under constant pressure from activities including: fly tipping; off road vehicles; unlicensed grazing and under-management of areas including the pools, woodland and scrub areas.
Mottey Meadows SAC	H6510 Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>)	Water pollution, hydrological change, water abstraction, change in land management.	This site is an outstanding floristically-diverse mesotrophic grassland where traditional late hay cutting and aftermath grazing has been perpetuated, largely unaffected by modern agricultural practices. The site is important because of its large size, variety of grassland community types and presence of rare species. Furthermore it contains an extensive example of an alluvial flood meadow.

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Site	Reason for designation (# denotes UK special responsibility)	Pressures and threats (from relevant SIP)	
Pasturefields Salt Marsh SAC	H1340# Inland salt meadows	None.	Pasturefields Salt Marsh SAC is in the River Trent floodplain and is one of only two known extant brine marshes in the country. This extremely rare habitat contains a number of halophytic plants and is locally important for breeding waders including snipe, redshank and lapwing.
West Midlands Mosses SAC (note this SAC is comprised of four SSSIs, of which Chartley Moss SSSI is the only one within 20km of South Staffordshire District)	H3160 Natural dystrophic lakes and ponds (note this habitat is not present at Chartley Moss) H7140 Transition mires and quaking bogs	Water pollution, hydrological change, air pollution (risk of atmospheric nitrogen deposition), inappropriate scrub control, game management (pheasant rearing), forestry and woodland management, habitat fragmentation.	The West Midlands Mosses comprises four sites: Clarepool Moss, Abbots Moss, Chartley Moss and Wybunbury Moss. These support large basin mires which have developed as quaking bogs, known as Schwingmoors, together with a variety of associated hollows and pools showing various types and stages of mire development. This complexity of habitats gives rise to a diverse assemblage of associated plants and invertebrates of national significance.
Chartley Moss also lies within the Midlands Meres and Mosses Phase I Ramsar	Open water transition fen ('mere'), lowland raised bog ('moss') and associated habitats Wetland invertebrate assemblage Wetland plant assemblage		
Aqualate Mere SSSI and Cop Mere SSSI lie within the Midland Meres and Mosses Phase 2 Ramsar	Open water transition fen ('mere'), lowland raised bog ('moss') and associated habitats Wetland invertebrate assemblage Wetland plant assemblage		