



Habitats Regulations Assessment
(HRA) of the South Staffordshire
Local Plan Review 2023 - 2041
(Submission version)

Author: Durwyn Liley, Bernie Fleming and Emily Rush

FOOTPRINT ECOLOGY, FOREST OFFICE, BERE
ROAD, WAREHAM, DORSET BH20 7PA
WWW.FOOTPRINT-ECOLOGY.CO.UK
01929 552444



FOOTPRINT
ECOLOGY



Footprint Contract Reference: 591

Date: 6th December 2024

Version: Final

Recommended Citation: Liley, D., Fleming, B. & Rush, E. (2024). Habitats Regulations Assessment (HRA) of the South Staffordshire Local Plan Review 2023-2041 (Submission version). Report by Footprint Ecology for South Staffordshire Council.

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 nature conservation sites in and around their administrative areas. The task is achieved by means of a Habitats Regulations Assessment (HRA). Sites that are relevant to the assessment are 'European sites' and include Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites.

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'.

Following an appropriate assessment, a Plan may be adopted if an adverse effect on the integrity of the site can be ruled out, alone or in-combination with other plans or projects

This document is the HRA report for the South Staffordshire Local Plan Review at submission.

Following a complete screening of the Plan, likely significant effects were identified with respect to increased recreation (linked to new housing) for Cannock Chase SAC and Motte Meadows SAC. Likely significant effects were also triggered with respect to water issues (i.e. relating to water resources or water quality) for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC/Midlands Meres & Mosses Phase 1 Ramsar and Midlands Meres & Mosses Phase 2 Ramsar. In addition, likely significant effects were triggered with respect to air quality (and impacts from increased traffic) with respect to Cannock Chase SAC, Cannock Extension Canal SAC and Fens Pools SAC.

These issues and sites were taken to appropriate assessment. Following detailed assessment, and at this stage in the Plan making, it is concluded that the South Staffordshire Local Plan, submission version, is in conformity with the Habitats Regulations. At a plan level a conclusion of no adverse effects on European site integrity, alone or in-combination with other plans or projects, can be drawn.

The HRA will be finalised at adoption and will need to be further updated alongside any further modifications to the Plan as it proceeds through examination.

Contents

Summary.....	3
Contents.....	iv
Acknowledgements.....	vi
1. Introduction.....	1
Overview.....	1
The South Staffordshire Local Plan Review.....	1
Habitats Regulations Assessment process.....	2
<i>European sites</i>	2
<i>Role of the competent authority</i>	3
<i>Process</i>	4
<i>Definitions, references to case law and guidance</i>	6
2. European sites in and around South Staffordshire.....	9
Overview of potentially relevant European sites.....	9
European sites to be considered in the screening of the plan and relevant impact pathways.....	13
<i>Recreation</i>	16
<i>Water Issues</i>	16
<i>Air pollution</i>	17
3. Screening the Local Plan for Likely Significant Effects.....	23
What constitutes a likely significant effect?.....	23
The screening.....	24
Screening conclusions.....	26
4. Appropriate assessment: Recreation.....	29
Relevant policies and sites identified in the screening for likely significant effects....	29
Cannock Chase SAC.....	29
Impacts of recreation.....	30
Levels of growth and scale of change linked to the Plan.....	31
The Cannock SAC Partnership.....	31
<i>2021 Review</i>	32
<i>Policy NB3</i>	33
<i>Conclusions: Cannock Chase SAC and recreation</i>	33
Mottey Meadows SAC.....	33
<i>Conclusions: Mottey Meadows SAC and recreation</i>	35
5. Appropriate assessment: Water Issues.....	37
European site objectives and threats.....	38
<i>Cannock Chase SAC</i>	38
<i>Midland Meres and Mosses Phase 2 Ramsar</i>	38
<i>Chartley Moss</i>	39

<i>Motley Meadows SAC</i>	39
Water resources.....	40
<i>Water cycle study</i>	40
<i>River Basin Management Plans (RBMPs)</i>	40
<i>Water Resource Management Plans (WRMP)</i>	41
<i>Drought Plans</i>	43
Water quality.....	43
<i>Drainage and Wastewater Management Plan (DWMP)</i>	45
<i>Motley Meadows SAC</i>	45
<i>Aqualate Mere (Midlands Meres and Mosses Phase 2 Ramsar)</i>	45
Conclusions	46
6. Appropriate assessment: Air Quality.....	48
Relevant policies from LSE screening.....	48
General approach to assessment of air quality impacts	48
Cannock Chase SAC.....	48
<i>Relevant roads</i>	48
<i>Relevant qualifying features and conservation objectives</i>	49
<i>Critical loads/levels</i>	49
<i>Current (baseline) loads / levels and predicted change</i>	50
Appropriate assessment	50
<i>Nitrogen oxides (NOx)</i>	50
<i>Ammonia (NH₃)</i>	50
<i>Nitrogen deposition</i>	51
<i>Acidity</i>	52
Cannock Extension Canal	56
<i>Relevant roads</i>	58
<i>Relevant qualifying features and conservation objectives</i>	58
<i>Critical loads/levels</i>	59
<i>Current (baseline) loads / levels and predicted change</i>	59
Appropriate assessment	59
<i>Nitrogen oxides (NOx)</i>	59
<i>Ammonia (NH₃)</i>	60
<i>Nitrogen deposition</i>	60
<i>Considerations with respect to the ecology of the Floating Water Plantain</i>	60
Fens Pools.....	64
<i>Relevant roads</i>	64
<i>Relevant qualifying features and conservation objectives</i>	64
<i>Critical loads/levels</i>	64
<i>Current (baseline) loads / levels and predicted change</i>	65
Appropriate assessment	65
<i>Nitrogen oxides (NOx)</i>	65
<i>Ammonia (NH₃)</i>	65
<i>Nitrogen deposition</i>	66
<i>Considerations with respect to Great-crested Newt</i>	66

7. Integrity Test	69
References	73
Appendix 1: Conservation Objectives	76
Appendix 2: Conservation Interest of European Sites	78
Appendix 3: Screening for Likely Significant Effects	81
Appendix 4: Housing allocations (Policies SA1, SA2 and SA3) and distances to European sites	96

Acknowledgements

This report has been commissioned by South Staffordshire Council. Our thanks to Paul Rigby and Edward Fox for overseeing the report, for comments and useful discussion.

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.
- 1.2 The HRA has been updated at each stage of the Local Plan review. This HRA report accompanies the Publication version of the Plan (April 2024) 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. South Staffordshire 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 2041 and allocates the sites required to deliver that development. This includes residential (including Gypsy, Traveller and Travelling Showpeople accommodation) and employment uses. The Local Plan sets out the overall spatial strategy for growth and guides where development will in principle be supported and sets out the policies that will guide the determination of planning applications.
- 1.5 This HRA report has been produced alongside the Publication version of the Plan (April 2024). The council also undertook consultation on a Publication Plan (Regulation 19) in November 2022. However, significant proposed changes to national planning policy published in December 2022 lead the council to pause preparation in order to await clarity on the Government's intentions. HRA work was undertaken to accompany that previous Publication version also at Preferred Options (consultation October – December 2021). The preferred options were 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 HRA involves the assessment of a plan (or project) on nature conservation sites afforded the highest degree of protection in domestic law. These are:
- Special Protection Areas (SPA) originally classified under the 1979 Birds Directive
 - Special Areas of Conservation (SAC) originally designated under the 1992 Habitats Directive.
- 1.9 These form a 'national network' of sites referred to as Habitats sites. The overarching objectives of the national network are 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 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>

- 1.10 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.
- 1.11 Ramsar sites (wetlands of international importance, listed under the Ramsar convention) are not part of the national site network but according to long-established Government policy³ they are afforded the same level of protection and any proposals affecting Ramsar sites also require an HRA. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats.
- 1.12 As a matter of policy, potential SPAs (pSPAs), possible SACs (pSACs) and those providing formal compensation for losses to Habitats sites, are also given the same protection⁴.
- 1.13 In this report we use the term European sites to refer to those sites relevant to the HRA, including SAC, SPA and Ramsar sites.

Role of the competent authority

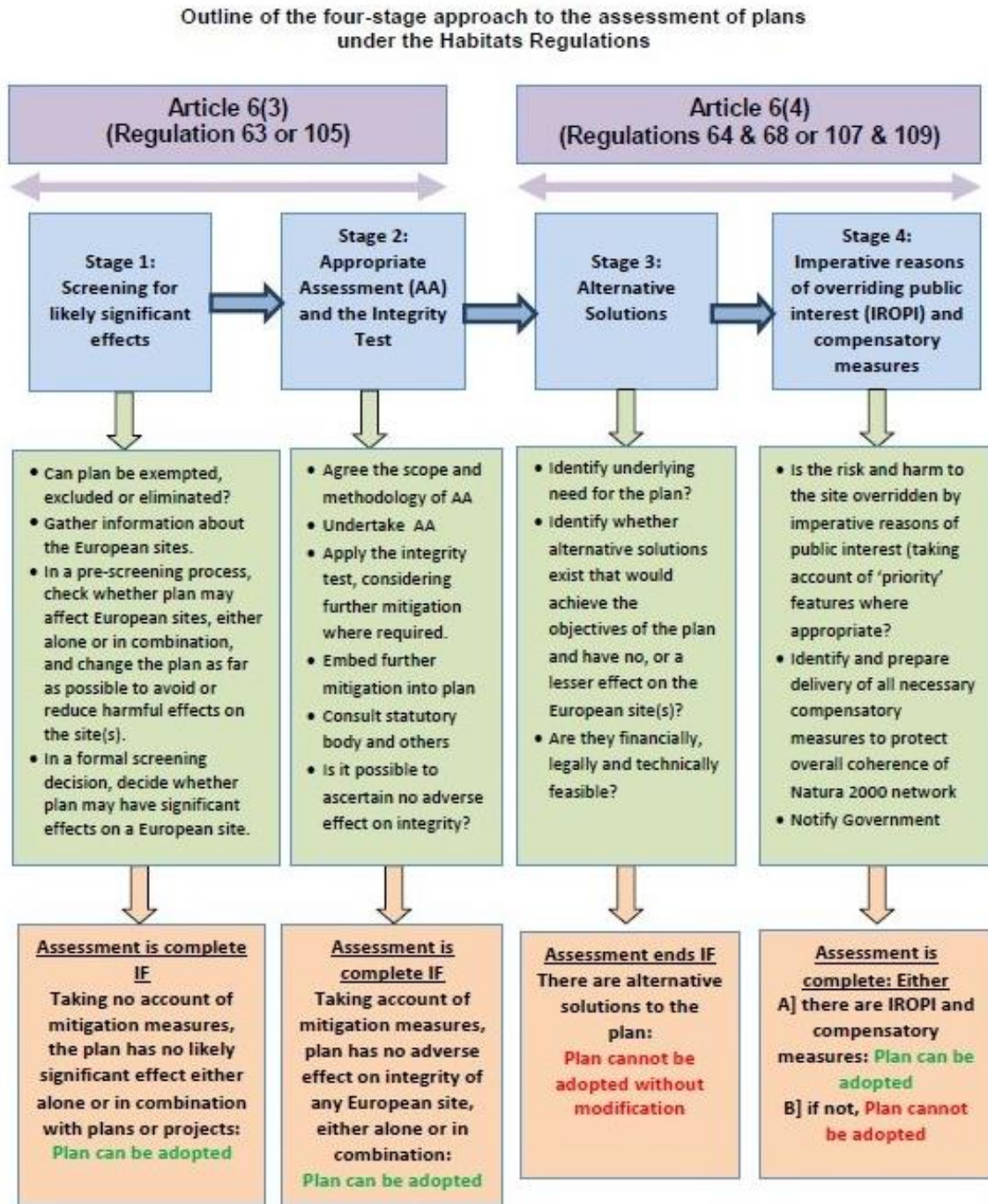
- 1.14 Although this HRA has been prepared to help the Council discharge its duties under the Habitats Regulations, the Council is the competent authority, and it must decide whether to accept this report or otherwise. Further, it should be noted that this HRA has been prepared for the purposes of preparing 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.

³ e.g. Changes to the Habitats regulations 2017, published 1/1/2021:
<https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017>

⁴ 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 ECs 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.

Process

1.15 The step-by-step process of HRA is summarised in Figure 1.



Extract from *The Habitats Regulations Assessment Handbook*, www.dtapublications.co.uk
 © DTA Publications Limited (October 2018) all rights reserved
 This work is registered with the UK Copyright Service

Figure 1: Outline of the assessment of plans under the Habitat Regulations. Though dated prior to the latest amendments to the Regulations, the same tests still apply and it remains valid.

- 1.16 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.
- 1.17 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.
- 1.18 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 qualifying features.
- 1.19 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.
- 1.20 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 impacts arising from a plan or project are fully mitigated for, or it does not proceed.
- 1.21 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 qualifying 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 network if such a plan or project is allowed to proceed. However, it is understood that the Council would not wish to pursue these derogations.

Definitions, references to case law and guidance

- 1.22 This HRA follows principles of case law, both UK and EU. It also refers as appropriate to the Habitats Regulations Assessment Handbook (Tyldesley and Chapman, 2013), to which Footprint Ecology subscribes. We also follow relevant government guidance.
- 1.23 Drawing on the Handbook, other relevant guidance and case law, we clarify the following terms used in the flow chart (Figure 1):
- 1.24 In Stage 1, A '**likely significant effect**' following Waddenzee⁵, 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 Sweetman⁶, as '*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*'.

⁵ Waddenzee: European Courts C-127/02 Waddenzee 7th September 2004, reference for a preliminary ruling from the Raad van State.

⁶ Sweetman: European Court C – 258/11 Sweetman 11th April 2013, reference for a preliminary ruling from the Supreme Court of Ireland

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

- 1.25 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.
- 1.26 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 a precautionary approach and means it is necessary to show the absence of harm.
- 1.27 Following Champion⁹ **'appropriate'** is not a technical term but simply indicates that the assessment needs to be appropriate to the task in hand.
- 1.28 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 classified¹⁰. An alternative definition, after Sweetman¹¹, is 'the lasting preservation of the constitutive characteristics of the site'.
- 1.29 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*".
- 1.30 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 effects of other relevant plans or projects alongside the plan under

⁸ *People Over Wind and Sweetman v Coillte Teoranta* (323-17) [2018] PTSR 1668

⁹ *R (on the application of Champion v North Norfolk District Council* [2015] 1 WLR 3170 at para 41

¹⁰ Para 20 of the ODPM Circ. 06/2005

¹¹ *Sweetman v An Bord Pleanála* (C-258-11) [2014] PTSR 1092 at paragraph 39

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 v Oxford City Council* [2011] EWHC 2699 Admin at paragraph 92

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 previous iterations of the HRA, was also used in the Core Strategy HRA in 2012 and Site Allocations Document HRA in 2018. Air quality impacts at plan level are typically considered to relate to a 10km distance (Chapman & Kite, 2021) while generic analysis of Footprint Ecology visitor data to countryside sites in the UK (Weitowitz et al., 2019) indicates that the majority of visitors originate within a 12.6km radius. The choice of 20km is therefore precautionary.
- 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 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. All 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	

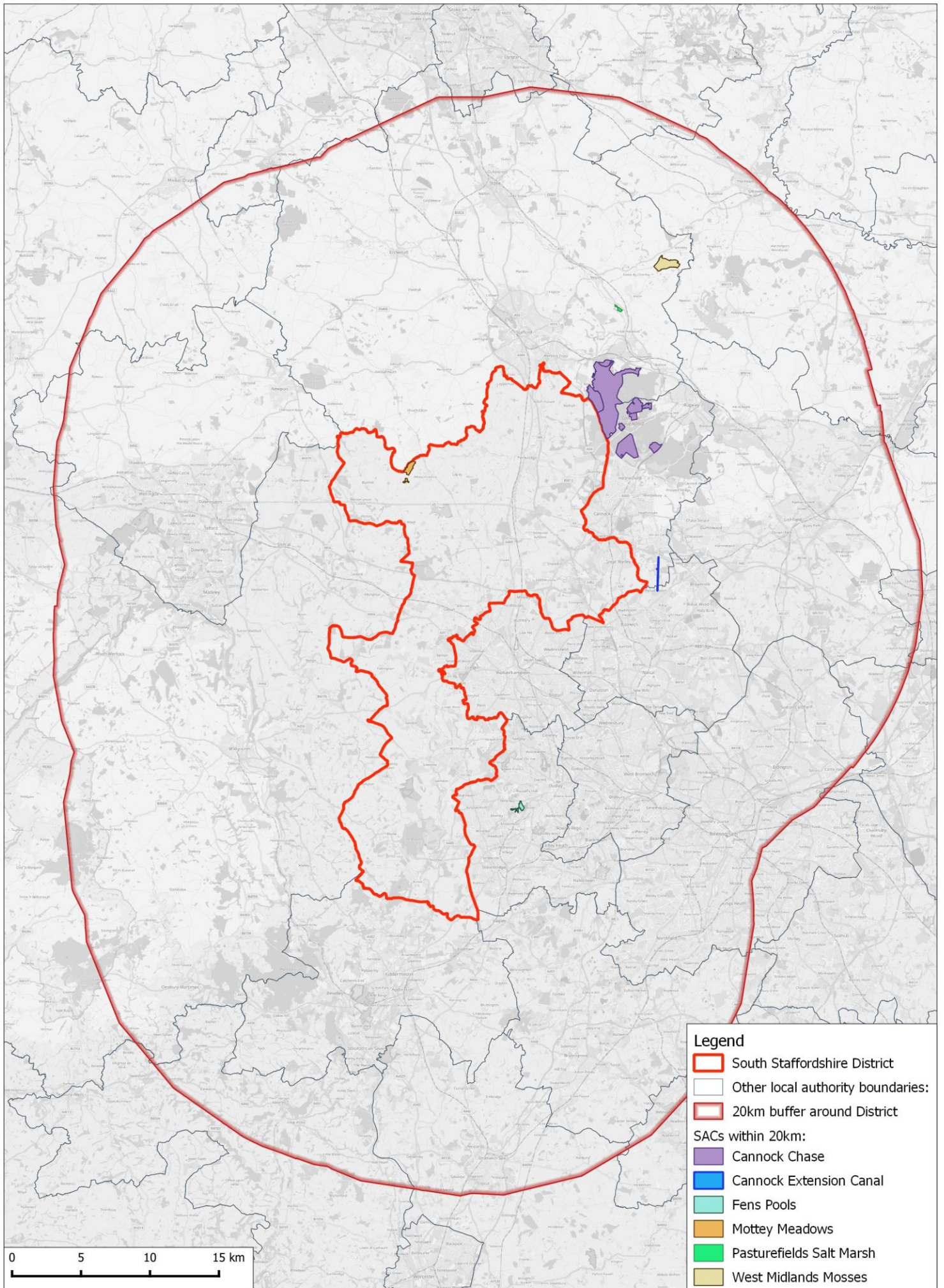
¹⁶ This Ramsar contains a range of component sites. It is Chartley Moss SSSI that is relevant to this assessment.

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

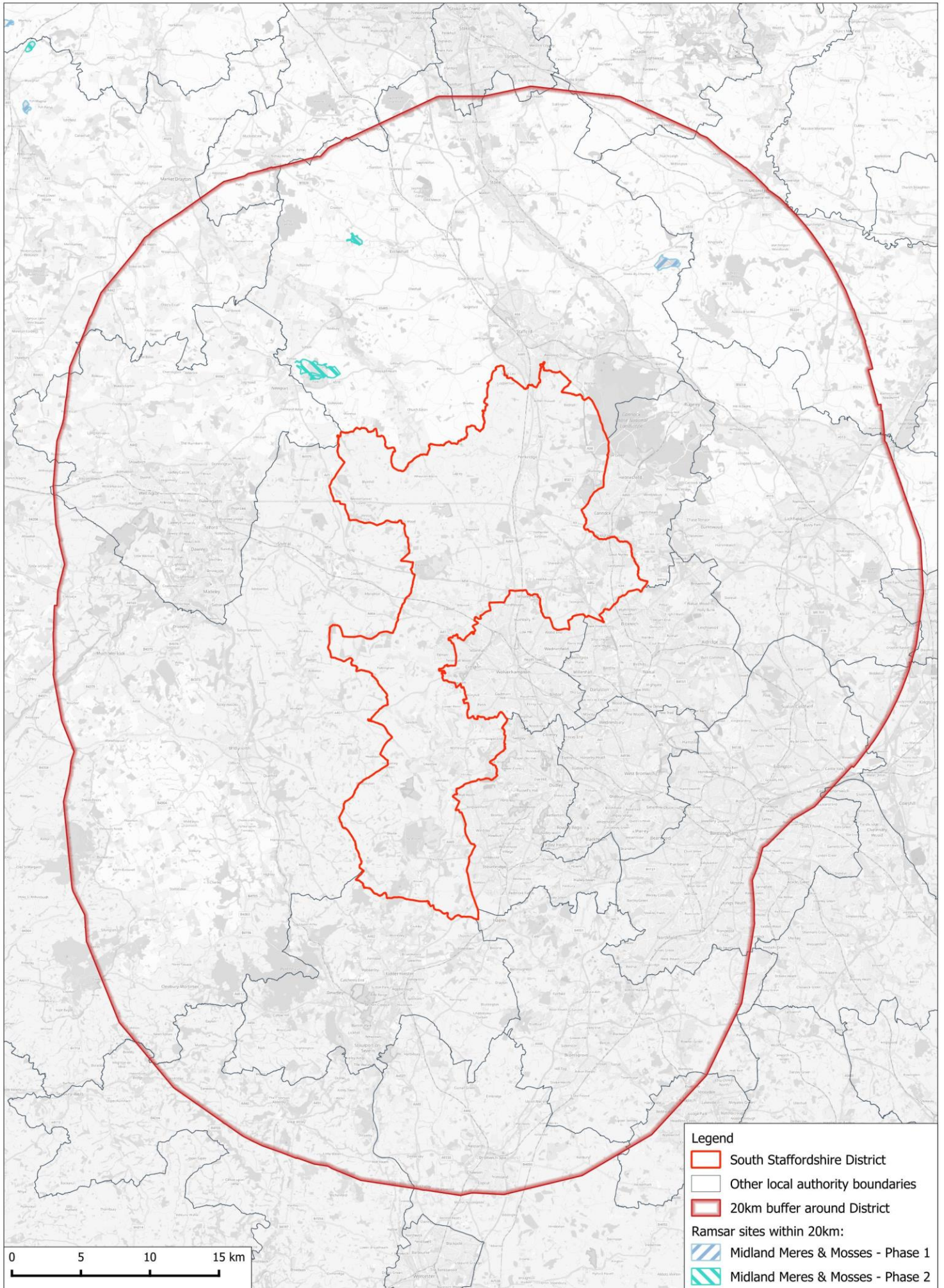
¹⁸ This SAC contains a range of component sites. It is Chartley Moss SSSI that is relevant to this assessment.

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 potentially relevant. However, the closest part of the Severn Estuary SAC lies approximately 74km distant, as the crow flies while the 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, 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 sites and possible impact pathways that could be relevant in the screening. These are set out in Table 2 below and the pathways and rationale for which sites are relevant to which pathway described in more detail after the table.

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 only hydrological links relate to groundwater and abstraction. Recreation a long-standing issue. Site has roads within 200m. Air quality modelling shows exceedance of 1% process contributions for various pollutants associated with traffic.
Cannock Extension Canal SAC	0.75			✓	Boat traffic can be an issue but recreation eliminated as boat use is 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 Lichfield). Site has roads within 200m. Air quality modelling shows exceedance of 1% process contributions for various pollutants associated with traffic.
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 only credible risk from increased traffic and the implications for air quality. Site has roads within 200m. Air quality modelling shows exceedance of 1% process contributions for various pollutants associated with traffic.
Mottey Meadows SAC		✓	✓		Qualifies as an SAC for its hay meadows; grassland communities could be affected by water availability and water quality (run-off). 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 and lies between the River Trent and the Canal. 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

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
					surface run-off but from a limited area and site is upstream from South Staffs – given location no hydrological links to District. Site has roads within 200m, but air quality modelling indicates no exceedance of 1% process contribution thresholds for any of the pollutants associated with traffic.
West Midlands Mosses SAC	10.2		✓		Relevant component is Chartley Moss. Freshwater site outside District boundary. Site improvement plan confirms small catchment for surface water and that site is also ground water fed, so abstraction only risk with respect to hydrology. Air quality a concern and identified in SIP as an issue and site has roads within 200m, however distance from the District and minor nature of roads means no risk from increased traffic.
<u>Ramsar</u>					
Midland Meres and Mosses Ph. 1 Ramsar	10.2		✓		As for West Midlands Mosses SAC.
Midland Meres and Mosses Ph. 2 Ramsar	4.4		✓		Relevant component site is Aqualate Mere (Cop Mere is 13.4km from the edge of the District and no hydrological links and also beyond distance air quality risks may be relevant). Aqualate Mere is fed by streams such as the Back Brook which run from the south and include parts of S. Staffordshire District. There are 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 *et al.*, 2010; White, McGibbon and Underhill-Day, 2012; Hoskin and Liley, 2017; Panter and Liley, 2019). 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 Mottey 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 Mottey 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

¹⁹ See [S. Staffordshire Council website](#) for details (accessed 19th March 2023)

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.

- 2.11 Water issues are relevant for Cannock Chase SAC, Motte Meadows SAC, the West Midlands Meres and Mosses SAC/ Midland Meres and Mosses Phase 1 Ramsar and the Midland Meres and Mosses Phase 2 Ramsar.
- 2.12 Cannock Chase SAC is on a plateau above, and outside, South Staffordshire and therefore there are no risks with respect to surface water, however the wet heath feature of the site is linked to groundwater as the mires are spring fed and so abstraction could be relevant. 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. For the West Midlands Meres and Mosses SAC/ Midland Meres and Mosses Phase 1 Ramsar there are no hydrological links in terms of run-off or the catchment for Chartley Moss, however abstraction could influence ground water. 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.
- 2.13 Water issues are not relevant for the Cannock Extension Canal as the Canal is fed by Chasewater Reservoir, a SSSI that 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.

Air pollution

- 2.14 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

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

small mammals and birds are considered immune to direct effects but can be vulnerable to change in their supporting habitats.

- 2.15 General guidance from JNCC (Chapman & Kite, 2021) refers to a 10km distance for local authorities in terms of the distance cumulative impacts from increased traffic might extend to. Natural England guidance (Natural England, 2018) applies a 200m zone of influence in terms of localised effects of air pollution from traffic. However, it should be noted that 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.
- 2.16 Whilst a road may be within 200m of a site, in some cases the spatial extent of the sites within 200m of the road, the sensitivity of the qualifying features to air pollution impacts and the feature distribution are such that, irrespective of any actual increased pollutant contribution from a road it would never represent a risk to the integrity of the site. 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 present and sensitive to such effects.
- 2.17 If the above criteria apply, screening thresholds (based on Natural England guidance) can then be used. Depending on the information available, these are expressed in terms of either the predicted average annual daily traffic flow ('AADT' as proxy for emissions) or the predicted emissions themselves (the actual process-contribution). Each of these parameters have guideline thresholds to check whether the predicted change is likely to be significant (e.g. 1000 AADT for traffic numbers or 1% of critical load or level for emissions), either alone or in-combination with other plans or projects.
- 2.18 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. The thresholds themselves do not imply any intrinsic environmental fields and simply used as benchmarks, flagging perceptible changes that requires further investigation.
- 2.19 European sites where there are roads within 200m (Map 3a and b) are:
- Cannock Chase SAC;

- Cannock Extension Canal SAC;
- Fens Pools SAC;
- Pasturefield Saltmarsh SAC;
- West Midlands Meres and Mosses SAC/Midland Meres and Mosses Phase 1 Ramsar (Chartley Moss); and
- West Midlands Meres and Mosses Phase 2 Ramsar (Aqualate Mere).

2.20 The brighter green shading in Map 3 indicates parts of the European site that are within 200m of any road.

2.21 Of the above sites, we can at this stage further rule out Chartley Moss, Aqualate Mere and Motte Meadows SAC from the need for any further consideration with respect to traffic. This has been checked and agreed with Natural England²¹. Chartley Moss is 10.2km from the District boundary and beyond the distance typically considered relevant for the consideration of air quality in local plans (Chapman and Kite, 2021 suggest that the consideration of impacts of traffic from local plans should extend to a maximum of 10km from the plan boundary). Furthermore, the only road (apart from access to private residences or minor, single tracked roads that do not provide any kind of likely travel route apart from very local traffic) is the A518 which lies to the north and is only just within 200m of the northern end of the site boundary. Just 170m of the A518 is within 200m and the only part of the European site within 200m is broad-leaved woodland (which is not a qualifying feature of the SAC designation, a criterion for its selection as a Ramsar site or a habitat upon which any qualifying species depend). Aqualate Mere and Motte Meadows SAC both only have very minor, local roads within 200m that cannot support any marked increase in traffic and therefore do not need to be considered.

2.22 Traffic modelling and forecasting was jointly commissioned by the relevant local authorities²² in and around Staffordshire in 2024 (Li, 2024), using the PRISM 5.3 model, acquired from Transport from West Midlands. This traffic modelling was subsequently used to inform air quality modelling at selected European sites (Shelton, 2024). Natural England advised on the selection of sites and modelling.

²¹See Evidence Base Brief produced by Middlemarch for S. Staffordshire and other authorities to inform commissioning of traffic and air quality work (Walsh, 2023)

²²Sweco Ltd were commissioned jointly by South Staffordshire District Council, Stafford Borough Council, East Staffordshire Borough Council, Lichfield District Council, Cannock Chase District Council, City of Wolverhampton Council, Dudley Metropolitan Borough Council, Walsall Metropolitan Borough Council and Sandwell Metropolitan Council. For background and specification to the work see Walsh (2023)

2.23 Forecast year traffic volumes were calculated for the scenarios:

- Future Year 'Do nothing' assessment (2042): AADT forecast by assuming no growth inside the joint strategic partnership authorities and Temprow²³ growth outside of the partnership authorities;
- Future Year with Local Plan 'In-combination' assessment (2042): AADT forecast by assuming local planning-based growth inside all joint strategic partnership authorities and Temprow growth outside of the joint strategic partnership authorities.

2.24 These traffic models²⁴ showed that the increase in AADT was more than 1000 for all four relevant European sites, i.e.:

- Cannock Chase SAC;
- Cannock Extension Canal SAC;
- Fens Pools SAC;
- Pasturefield Saltmarsh SAC.

2.25 The air quality modelling was undertaken at receptor grids across each European site within 200m of a modelled road link. The air quality modelling also provides further assessment beyond 200m and up to 1,000m from the closest modelled road link within each European site. Results are set out in Shelton (2024) and summarised in Table 3 (below), they show exceedance at numerous receptor points across all relevant European sites for multiple pollutants, with the exception of Pasturefield Saltmarsh SAC.

Table 3: Evidence for exceedance of 1% process contribution for different pollutants as set out in the air quality modelling report (see Appendix C of Shelton, 2024). Ticks indicate widespread evidence of exceedance at multiple receptor points within the given site.

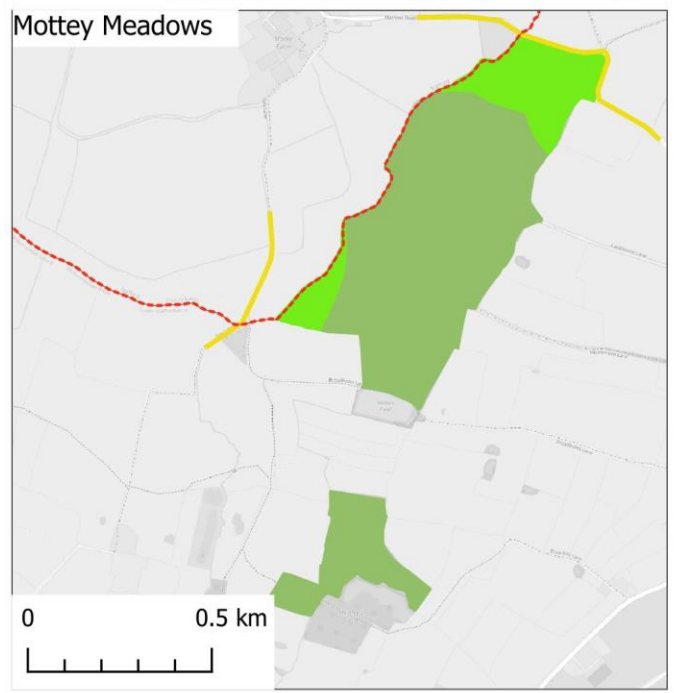
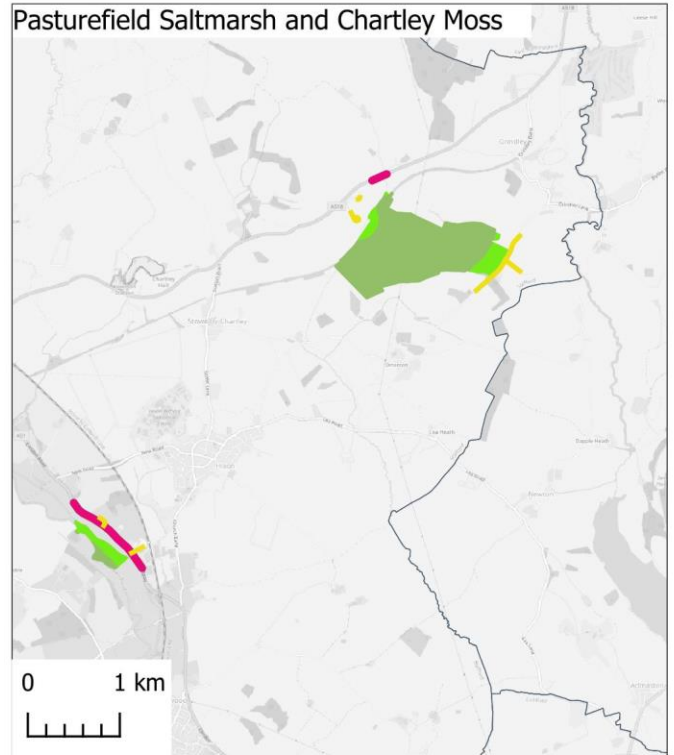
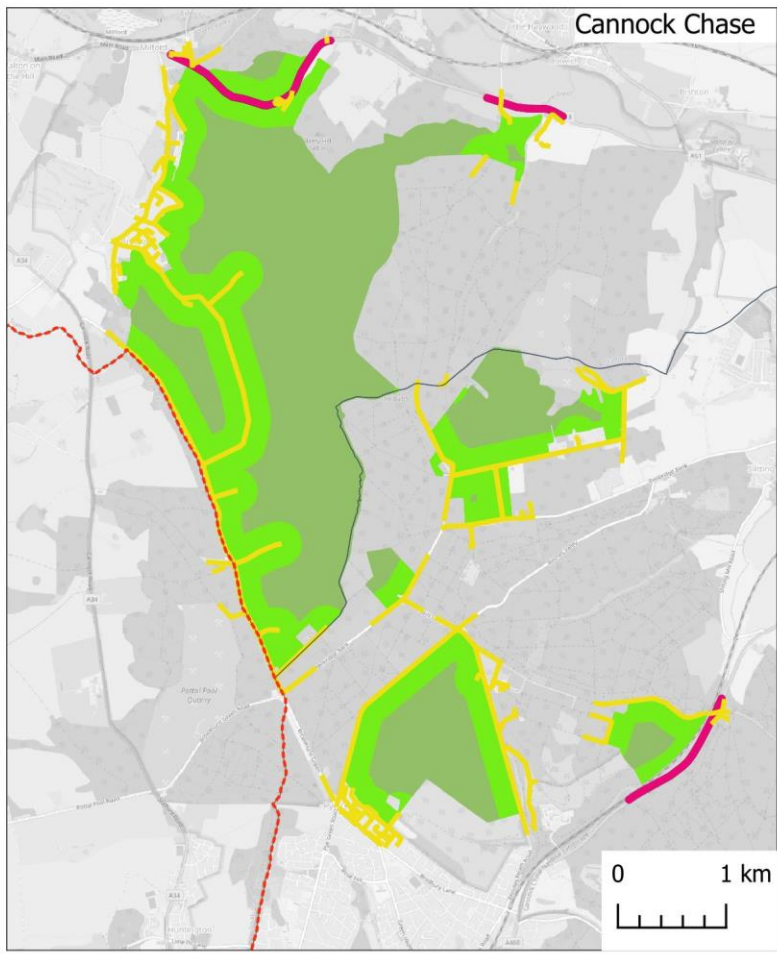
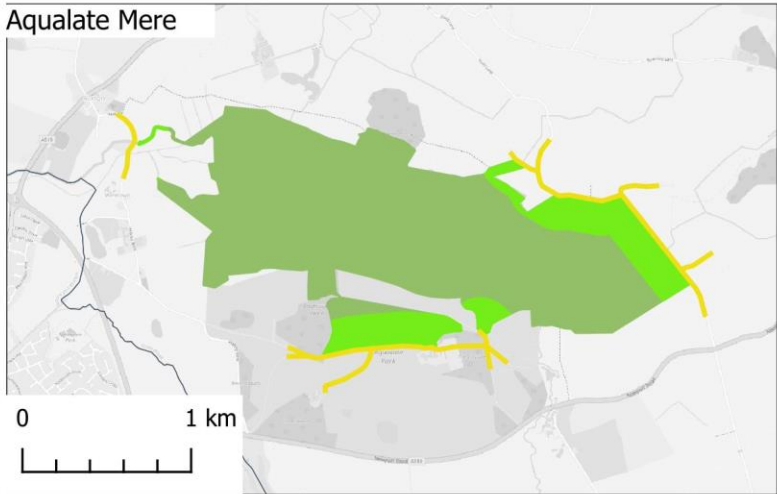
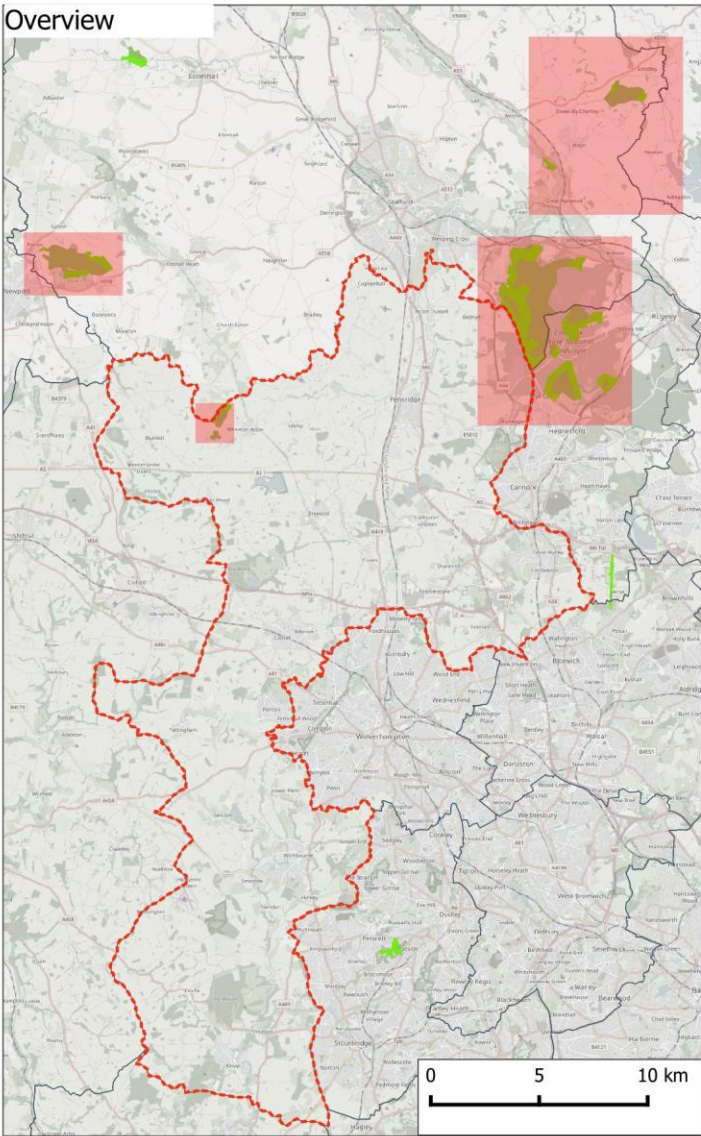
European site	NO _x	NH ₃	N deposition	Acidification
Cannock Chase SAC	✓	✓	✓	✓
Cannock Extension Canal SAC	✓	✓	✓	
Fens Pools SAC	✓	✓	✓	
Pasturefield Saltmarsh SAC				

2.26 From the above, Cannock Chase SAC, Cannock Extension Canal SAC and Fens Pools SAC are therefore all relevant to the screening and any plan elements or policies that could contribute to increased traffic will need to be screened in.

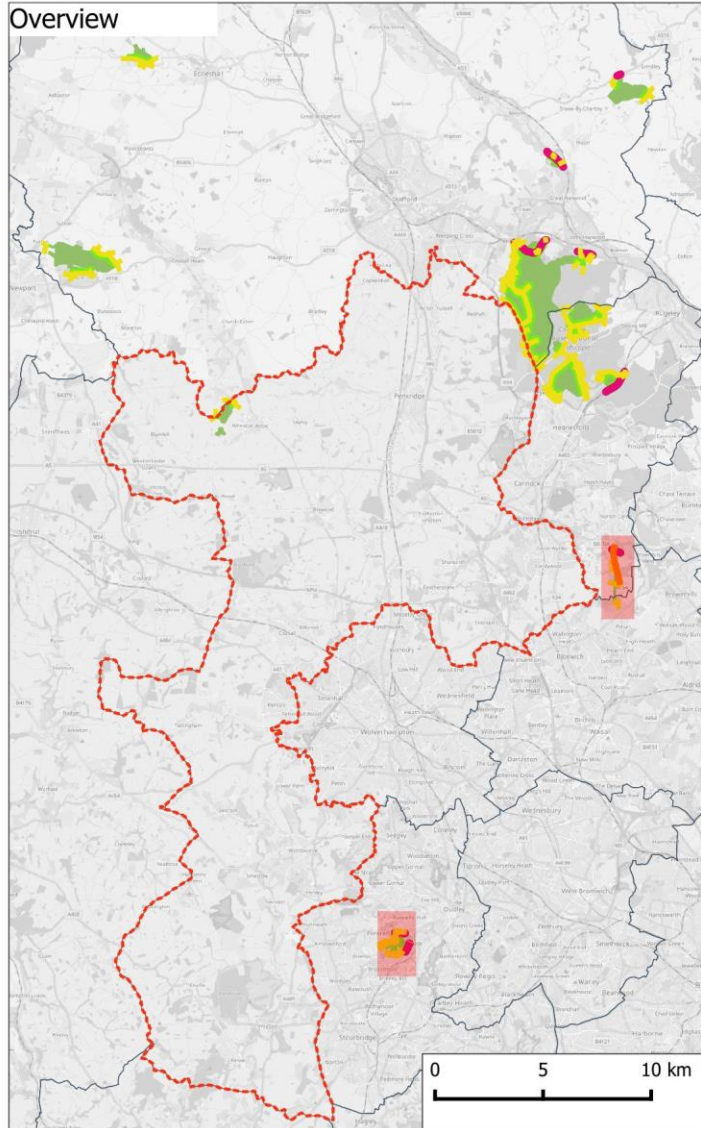
²³ 'Trip End Model Presentation Program' which is software for viewing the NTEM dataset, see <https://www.gov.uk/government/publications/temprow-downloads>

²⁴ See Table 8 in Shelton (2024)

Map 3a: Roads and relevant Habitats sites



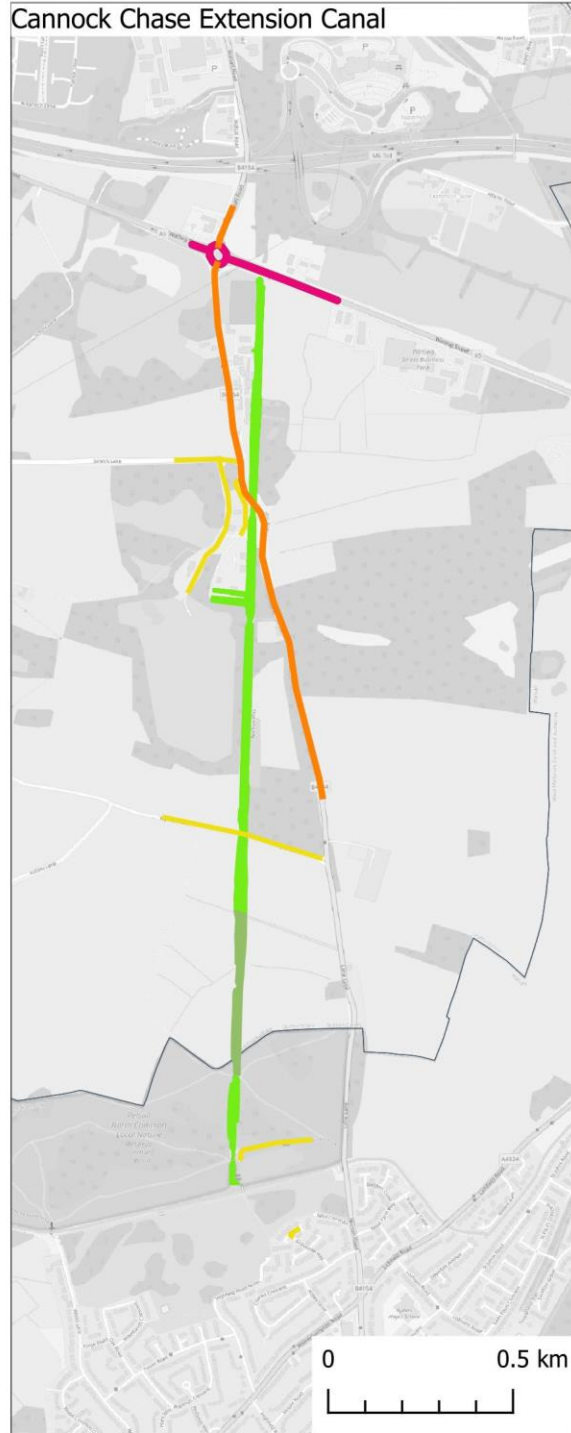
Map 3b: Roads and relevant Habitats sites



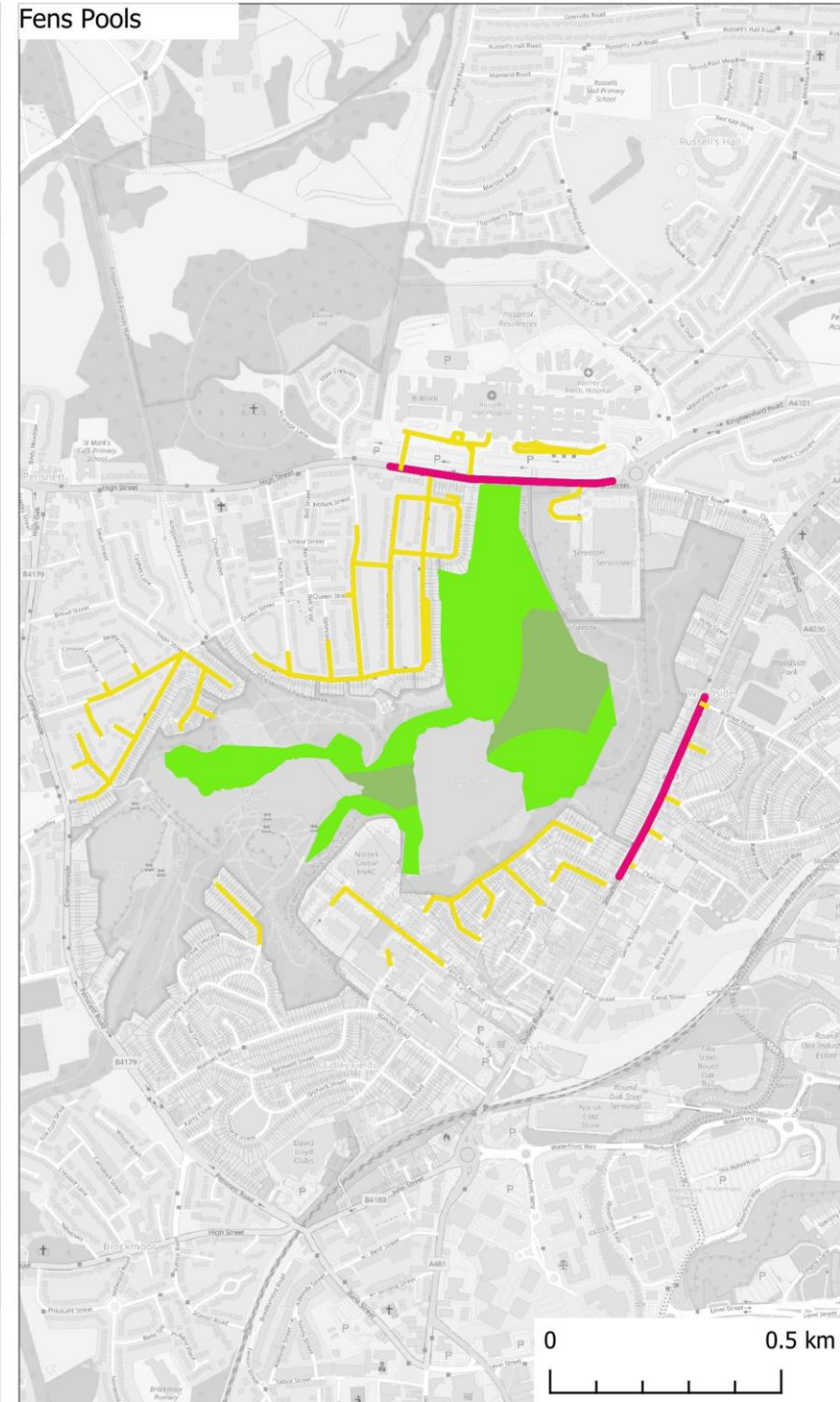
Legend

- South Staffordshire District
- Roads within 200m of Habitat sites:
- A Road
- B Road
- Unclassified/minor
- Habitats site within 200m of road
- Habitats site >200m from road

Cannock Chase Extension Canal



Fens Pools



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.

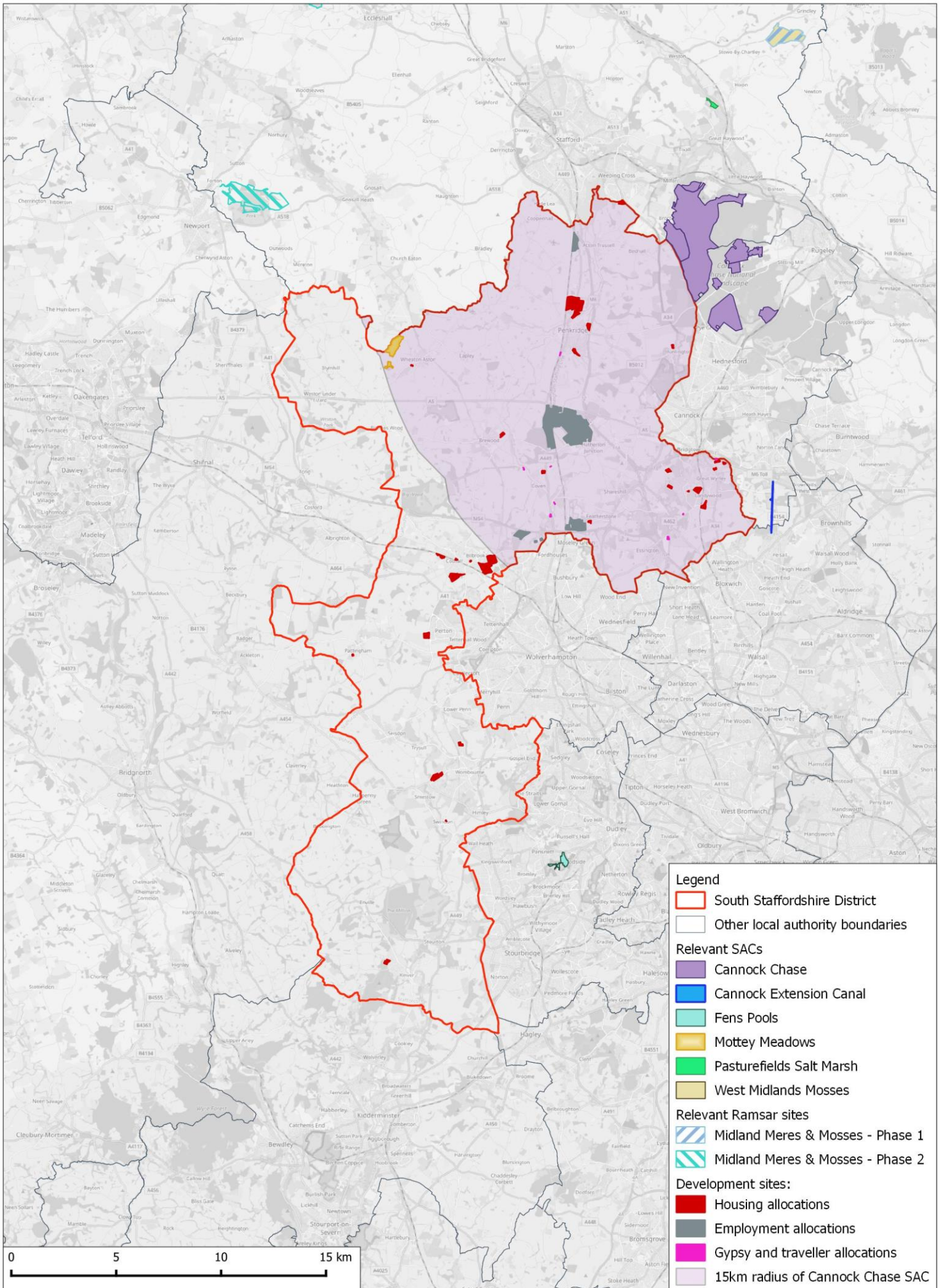
- 3.5 The screening in this report looks at policies prior to any avoidance/reduction/mitigation measures in line with People Over Wind²⁵; mitigation can only be considered at Appropriate Assessment stage. People Over Wind clarified the need to carefully explain actions taken at each HRA stage, particularly 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 4 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 is set out in Appendix 3 and provides the complete screening assessment of 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.
- 3.8 Appendix 4 further summarises the distances from each of the allocation sites to each of the European sites. This provides further context.

²⁵ People Over Wind: European Court Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta 12 April 2018

Map 4: Housing and Employment sites



Screening conclusions

- 3.9 For the majority of policies within the Plan there are no likely significant effects to any European site. The screening has however identified likely significant effects (in Appendix 3) in relation to 7 policies, involving the following pathway:
- Additional recreation pressure (Cannock Chase SAC, Motte Meadows SAC);
 - Water issues (Cannock Chase SAC, Motte Meadows SAC, the West Midlands Meres and Mosses SAC/ Midland Meres and Mosses Phase 1 Ramsar and the Midland Meres and Mosses Phase 2 Ramsar); and
 - Air quality (Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC).
- 3.10 The policies where likely significant effects were identified are summarised in Table 4 and these are therefore taken forward to appropriate assessment.
- 3.11 In addition, Policy NB3: Cannock Chase SAC sets out specific mitigation requirements relating to recreation impacts and Cannock Chase SAC. As such the policy is a bespoke policy intended to avoid or reduce harmful effects on a European site. In accordance with the People vs Wind judgement, mitigation measures have not been taken into account within the screening and this policy is considered as part of the appropriate assessment.

Table 4: Summary of screening conclusions: policies where likely significant effects identified

Plan section/policy	Description	Recreation	Water Issues	Air Quality	Comments
Policy DS4: Development Needs	Sets the overall quantum of growth (4,726 dwellings), 107.45 ha of employment land and 37 Gypsy and Traveller pitches.	LSE triggered alone for Cannock Chase SAC and Motte Meadows SAC	LSE triggered alone for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar	LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC.	Overall quantum of growth and relevant to recreation, water and air quality pathways.
Policy DS5: the Spatial Strategy to 2041	Determines the distribution of growth and settlement tiers.	LSE triggered alone for and Cannock Chase SAC and Motte Meadows SAC	LSE triggered alone for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar	LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC.	Overall quantum of growth and distribution taken to appropriate assessment and relevant to recreation, water and air quality pathways.
Policy SA1: Strategic development location: Land East of Bilbrook	Identifies a strategic site for major housing growth (minimum of 750 dwellings), new school, convenience store and community space.	LSE triggered in-combination for Cannock Chase SAC	LSE triggered in-combination for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar	LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC.	Location just touches the Cannock Chase SAC 15km zone and is at least 10km from any other European site. Taken to appropriate assessment for air quality on a precautionary basis.
Policy SA2: Strategic development location: Land north of Penkridge	Identifies a strategic site for major housing growth (1,029 dwellings), new school, on-site retail and community space.	LSE triggered alone for Cannock Chase SAC	LSE triggered in-combination for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar	LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC.	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.

South Staffordshire Local Plan HRA, Publication Version

Plan section/policy	Description	Recreation	Water Issues	Air Quality	Comments
Policy SA3: Housing Allocations	A summary of all (27) site allocations within DS5 by Tier within the plan period.	LSE triggered alone for Cannock Chase SAC and Motte Meadows SAC	LSE triggered in-combination for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar	LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC.	
SA4: Gypsy and Travellers Allocations	Allocates 37 pitches across 12 sites.	LSE triggered in-combination for Cannock Chase SAC	LSE triggered in-combination for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar	LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC.	While relatively small increase in accommodation, all sites are within the Cannock Chase 15km zone.
SA5: Employment allocations	Text listing employment sites and supply. A total of 372.5ha allocated for employment across 6 sites, including the West Midlands Interchange.		LSE triggered in-combination for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar	LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC.	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.
Policy NB3: Cannock Chase SAC	Specific mitigation requirements relating to recreation impacts and Cannock Chase SAC.				Policy sets specific mitigation requirements relating to the SAC and therefore taken to appropriate assessment (following <i>People over Wind</i>).

4. Appropriate assessment: Recreation

Relevant policies and sites identified in the screening for likely significant effects

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

- DS4: Development needs
- Policy DS5: the Spatial Strategy to 2041
- Policy SA2: Strategic development location: Land north of Penkridge
- Policy SA3: Housing Allocations

And the following in-combination with other policies within the plan:

- Policy SA1: Strategic development location: Land east of Bilbrook
- SA4: Gypsy and Travellers Allocations

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

4.3 Screening identified likely significant effects for Motte Meadows SAC for the following policies alone:

- DS4: Development needs
- Policy DS5: the Spatial Strategy to 2041
- Policy SA3: Housing Allocations

Cannock Chase SAC

4.4 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 SAC²⁶ for the following qualifying features:

²⁶ <http://publications.naturalengland.org.uk/publication/6687924741472256> for detail about the qualifying features and the conservation objectives for the SAC

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

4.5 The valley mire/wet heath communities are rare, threatened vegetation types, being some of the most floristically-rich and representative examples of their type in central England. Within Cannock Chase they are found in the stream valley systems, and around pools and depressions.

4.6 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

4.7 There are a range of current pressures and threats on the SAC²⁷ 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.

4.8 Visitor surveys (Liley, 2012; Liley and Lake, 2012; Panter and Liley, 2019) show the main activities as dog walking, walking (without a dog), cycling/mountain biking

²⁷ See the <http://publications.naturalengland.org.uk/publication/4957799888977920> for overview

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

Levels of growth and scale of change linked to the Plan

- 4.9 As of 2024²⁸, postcode data indicates that there are around 49,250 residential delivery points in the whole of South Staffordshire. Around 24,737 (i.e. 50%) of these are within 15km of Cannock Chase SAC. Looking more widely, within the entire 15km zone there are 267,182 delivery points, indicating that residential properties within South Staffordshire District account for around 9% of the housing within the 15km zone of influence.
- 4.10 Policy DS4, Development Needs, promotes the delivery of a minimum of 4,726 new homes 2023-2041), while providing approximately 10% additional homes to ensure plan flexibility.
- 4.11 The 15km zone is shown on Map 4. Those allocations within the 15km are highlighted in Appendix 4 and total around 2,726 dwellings. This is very approximate but potentially means something around an increase of just over 1% in the amount of housing within 15km of Cannock Chase SAC, as of 2020. Assuming recreation use to be proportionate to the amount of housing growth this would therefore suggest an increase in visitor use of around 1% from South Stafford District alone as a result of the Plan.

The Cannock SAC Partnership

- 4.12 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 Authorities²⁹, Staffordshire County Council, Natural England, and a number of key stakeholders) was formalized under a Memorandum of Understanding (MOU) 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

²⁸ We have used data from 2024 and it is intended as a guide only. The Plan covers the period from 2018 but the mitigation approach was updated in 2021 (the Planning Evidence Base Review).

²⁹ This has now expanded to 7 local planning authorities following the addition of Walsall MBC to the SAC partnership in 2022

authorities together, with other key stakeholders, to fulfil their duties to the SAC through a collaborative and coordinated approach. The MOU ran for 5 years (i.e. to 2021) after which it has been reviewed and it is now extended to cover the period to 2040.

- 4.13 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).
- 4.14 In 2017 the Cannock Chase SAC stage 1 planning evidence base review was undertaken (Hoskin and 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 zone of influence. 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

- 4.15 Since the 2017 review, a further evidence base review has been undertaken – the Planning Evidence Base Review. This identifies that the 15km zone is still appropriate and is supported by more recent visitor survey data (Panter and Liley, 2019).
- 4.16 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.
- 4.17 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 were 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.

- 4.18 The latest guidance on the South Staffordshire website³⁰ is dated 2022 and reflects the updated MOU (also dated 2022).

Policy NB3

- 4.19 Policy NB3 clearly sets out the need for mitigation and cross references to guidance and the latest MOU. The Policy is clear that the mitigation approach is cross-boundary and strategic, and therefore addresses in-combination effects. 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.

Conclusions: Cannock Chase SAC and recreation

- 4.20 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 effectiveness.

Mottey Meadows SAC

- 4.21 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.
- 4.22 The qualifying feature of the SAC is Lowland Hay Meadows. 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

³⁰ See [Cannock Chase SAC page](#) on S. Staffordshire Council website

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.

- 4.23 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 plan³¹ as a current pressure or even a risk. However, the site improvement plan does identify that changes in land management are a threat to the site.
- 4.24 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.
- 4.25 These have the potential to undermine the conservation objectives in terms of the structure and function (including typical species) and the supporting processes (on which the feature relies).
- 4.26 The only allocation in close proximity is in the neighbouring village of Wheaton Aston (see Map 5). There are no other villages or settlements in close proximity. The relevant allocation is therefore solely:
- Site 379: approximately 18 dwellings.
- 4.27 Postcode data (from 2021) indicates around 938 residential delivery points in Wheaton Aston, and the allocations therefore represents a growth of around 2%. Around 30% of households in the UK have been estimated to own a dog (e.g. Murray *et al.*, 2015; PDSA and YouGov, 2022). A total of 18 new homes could

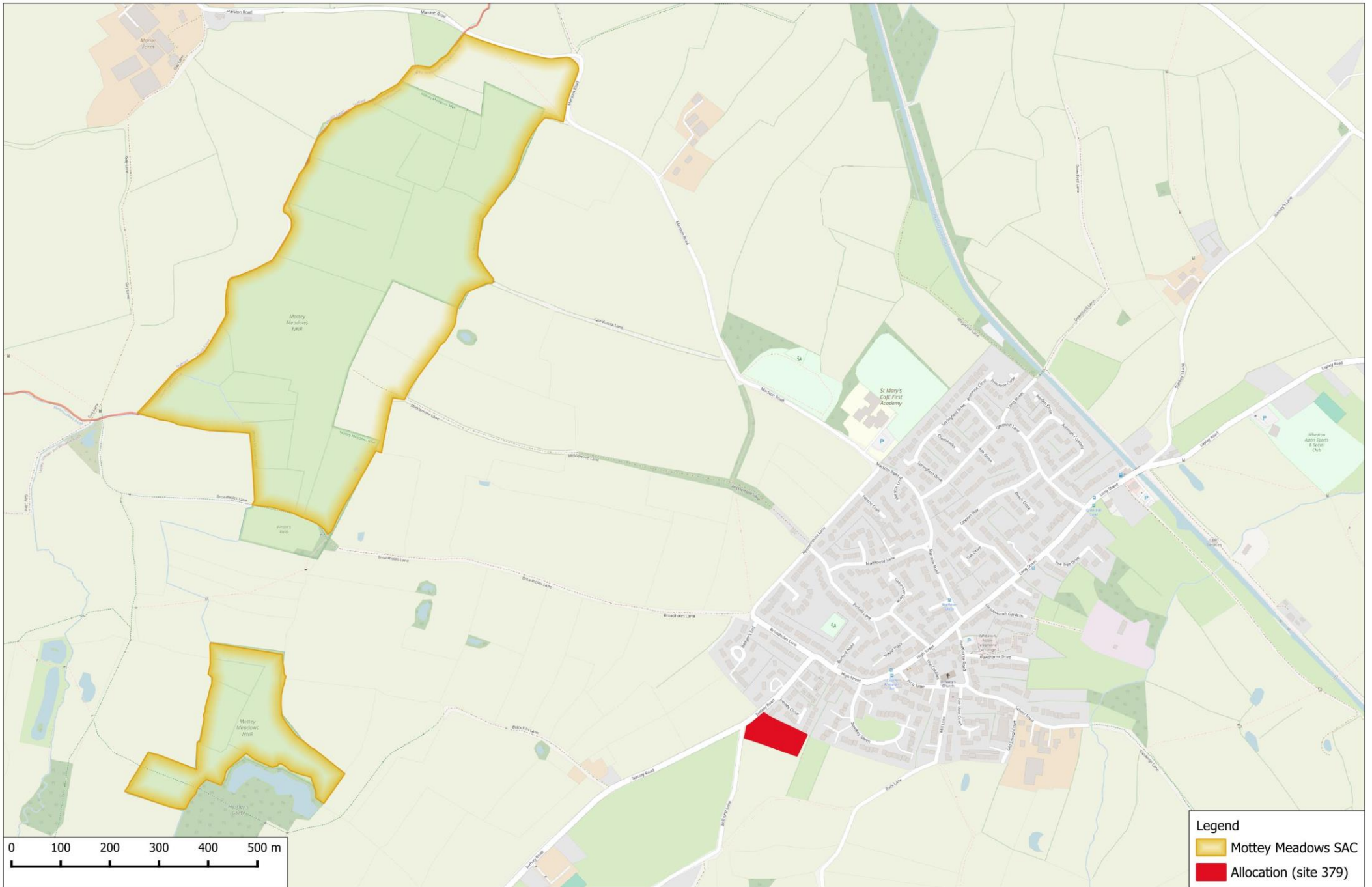
³¹ See <http://publications.naturalengland.org.uk/publication/6519033218203648>

therefore be an increase of around 6 households with dogs in the village. As Map 5 shows, the allocation is relatively far set back from the SAC at around 800m from the SAC (as the crow flies), and this would put the site beyond the typical short dog walk.

Conclusions: Motte Meadows SAC and recreation

- 4.28 Given the very low proportional increase in housing, scale of growth and the distance from the SAC, risks are low and potentially negligible. Adverse effects on integrity from recreation can be ruled out from the Plan alone. Given the very localised nature of the issues and isolation of Motte Meadows, in-combination assessment would not change the conclusion. There are no allocations, settlements or sites in the emerging Stafford Local Plan (which is the only other local authority in close proximity to Motte Meadows) that are in close proximity.
- 4.29 Project-level HRA can be relied on to check for adverse effects on integrity and ensure that adequate mitigation, if required, is secured. Given the very localised issues recreation patterns may be influenced to some extent on the site design, layout etc. and as such project level HRA will need to assess recreation impacts for the Wheaton Aston allocation. Given the low risk, signage (to ensure people stay on public footpaths), barriers to access (such as gates and hedges) and restrictions to parking near footpaths could be potential mitigation measures but may not be necessary. Suitable wording could be added to the site proforma to highlight the need to check recreation issues at project level, and this would give greater confidence to these conclusions, however Policy NB1 ensures lower tier assessment and compliance with the Habitat Regulations.

Map 5: Wheaton Aston sites



5. Appropriate assessment: Water Issues

5.1 Screening identified likely significant effects from the following policies:

- Policy DS4: Development needs
- Policy DS5: the Spatial Strategy to 2041
- Policy SA1: Strategic development location: Land east of Bilbrook
- Policy SA2 – Strategic development location: Land north of Penkridge
- Policy SA3: Housing Allocations
- SA4: Gypsy and Travellers Allocations
- SA5: Employment Allocations

5.2 And the following European sites:

- Cannock Chase SAC: potential risks from water quantity only with risks alone for the overall quantum of growth (DS4 and DS5) and in-combination for other policies.
- Motte Meadows SAC: potential risks from water quantity and water quality with risks alone from Policy DS4 and DS5 due to the overall quantum of growth and/or nearby allocation (at Wheaton Ashton) with direct hydrological links, policies SA1, SA2, SA3, SA4 and SA5 with risks in-combination due to water quantity.
- West Midlands Meres and Mosses SAC/Midland Meres and Mosses Phase 1 Ramsar: potential risks to Chartley Moss from water quantity only, with risks alone for the overall quantum of growth (DS4 and DS5) and in-combination for the other policies.
- Midland Meres and Mosses Phase 2 Ramsar (Aqualate Mere): potential risks from water quantity and water quality. Risks alone from Policy DS4, and DS5 due to the overall quantum of growth on water quantity and in-combination for the other policies.

5.3 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. Severn Trent Water cover the whole Local Plan area for sewage and part of the area for drinking water while South Staffs Water³² provide drinking water for the remaining area. The Environment Agency regulates such activities and also private solutions such as septic tanks and abstraction licences.

5.4 Development that is carried out without the necessary infrastructure in place or that fails to meet established standards could compromise the conservation

³² See <https://www.south-staffs-water.co.uk/media/2167/south-staffs-water-area-of-supply.pdf> for catchment

objectives of European sites. Decisions are informed by a range of studies including the River Basin Management Plans (RBMPs), Water Resource Management Plans (WRMPs), Drought Plans, Water Cycle Studies and Drainage and Wastewater Management plans (DWMPs) as appropriate.

- 5.5 Where relevant, these are subjected to HRA which explore the potential impact not only on 'water dependent' European sites as indicated in the Water Framework Directive but also take account of 'non-water dependent' sites to account for unintended consequences.

European site objectives and threats

- 5.6 Relevant details of each of the European sites listed above are described below.

Cannock Chase SAC

- 5.7 Cannock Chase SAC supports the most extensive lowland heathland in the Midlands. Natural England's 'supplementary advice' complements the high level objectives and state the following:

'Restore the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the site',

'Restore surface water and/or ground water quality and quantity to a standard which provides the necessary conditions to support and restore the ... wet heath feature', and

'Restore the natural hydrological regime at the catchment level to provide the conditions necessary to sustain the ... wet heath feature within the site'.

- 5.8 Furthermore, the SIP³³ identifies 'drainage' and 'hydrological changes' as important pressures on this site.

Midland Meres and Mosses Phase 2 Ramsar

- 5.9 Aqualate Mere is one of the eighteen components of the Midland Meres and Mosses Phase 2 Ramsar site, listed for its range of wetland habitats notably its extensive open water and reedswamp communities, wet woodland and fen pasture. As it is not designated as a SAC or classified as an SPA it lacks formal conservation objectives and a Site Improvement Plan (SIP) but given that the

³³ <http://publications.naturalengland.org.uk/publication/4957799888977920>

qualifying features are largely dependent on a favourable hydrological regime, it can be considered vulnerable to declines in water quality and availability.

Chartley Moss

5.10 Chartley Moss is one the four components of the West Midlands Mosses SAC and one of the sixteen component SSSIs of the Midland Meres and Mosses Phase 1 Ramsar site. It is listed for its basin fen and mire habitats and, notably, its associated transition mire and quaking bog (or schwingmoor) communities.

5.11 Natural England's 'supplementary advice'³⁴ complements the high level objectives and state the following:

'At a site, unit and/or catchment level restore natural hydrological processes to provide the conditions necessary to sustain the [basin mire] feature and associated species', and

'Restore the surface water and groundwater supplies supporting the hydrology of the component sites of the SAC to a natural, low-nutrient status'.

5.12 Furthermore, the SIP identifies 'water pollution' and 'hydrological changes' as the two primary pressures affecting this site.

Mottey Meadows SAC

5.13 Mottey Meadows is designated on account of the Lowland hay meadow community which includes flood-plain grassland. Natural England's 'supplementary conservation advice' 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. Spring-lines are thought to arise along the gentle slope to higher ground along the eastern edge of the SAC. It seems that more work is needed to better understand the eco-hydrology of the site and the interactions between surface and ground water.

5.14 The 'supplementary advice'³⁵ complements the high level objectives and state the following:

'Restore water quality and quantity to a standard which provides the necessary conditions to support the [lowland hay meadow qualifying] feature'.

'Restore a hydrological regime which provides a consistently near-surface water table ...'

³⁴ <http://publications.naturalengland.org.uk/publication/6449667604742144>

³⁵ <http://publications.naturalengland.org.uk/publication/5720449535180800>

'Restore a hydrological regime which provides a cumulative duration of annual surface flooding ...'

'At a site, unit and/or catchment level (as necessary) restore natural hydrological processes to provide the necessary conditions to support the [lowland hay meadow qualifying] feature'

- 5.15 Furthermore, the SIP identifies 'water pollution' as the primary pressure or threat followed immediately by 'hydrological changes' and 'water abstraction'.

Water resources

Water cycle study

- 5.16 The water cycle study³⁶ from 2020 indicates that Severn Trent Water have stated there are no constraints to development with respect to water supply.

River Basin Management Plans (RBMPs)

- 5.17 Water abstraction is managed through a licensing system originally introduced by the Water Resources Act 1963. The Environment Agency is the competent authority for the Water Framework Directive, and it oversees the publication of River Basin Management Plans (RBMPs). These plans set out how the management of water bodies will be undertaken, the roles of relevant bodies and the steps undertaken to ensure environmental targets are met. They are intended to inform spatial development strategies.
- 5.18 The first RBMPs were produced in 2009 and then updated in 2015 and 2022. Measures for European sites are expressed in the RBMPs through a range of actions required to restore the water-dependent aspects of the habitats and species at individual sites. Building on measures in the previous RBMPs, the latest plans include further licence changes to modify or reduce water use across some catchments where water resource issues are relevant. In some cases this could affect current volumes normally abstracted, and not just the 'unused' water allowed as headroom within licences.
- 5.19 The relevant RBMPs for South Staffordshire are the Humber and the Trent. These are further divided into catchments, with relevant catchments within the Humber

³⁶ Part of the local plan evidence base: https://www.sstaffs.gov.uk/sites/default/files/2023-02/water_cycle_study_2020.pdf

Basin being Trent Valley and the Tame, Anker and Mease. The relevant Severn catchments are the Severn Middle Worcestershire and Severn Middle Shropshire.

- 5.20 Both the 2022 Severn RBMP and 2022 Humber RBMP were subject to an HRA (Environment Agency, 2022b, 2022a). These both concluded that the measures can be implemented without having a likely significant effect on European sites alone or in-combination.
- 5.21 These RBMPs took account of predicted growth in the area and, therefore, these HRAs can be relied on by this HRA.

Water Resource Management Plans (WRMP)

- 5.22 It is a statutory requirement that every five years water companies produce and publish a WRMP. This should demonstrate that there are long-term plans in place to accommodate the impacts of population growth, drought, environmental obligations and climate change uncertainty in order to balance supply and demand. Severn Trent Water's current WRMP was published in 2019³⁷. This was accompanied by an HRA. Taking account of predicted growth, climate change and water supply and demand forecasts, amongst others, this found that unless measures were taken, a significant deficit would develop between supply and demand over the medium term. Actions proposed included a range of 'demand-side' (e.g. leakage reduction and promoting water efficiency amongst its customers) and 'supply-side' interventions (e.g. reducing abstraction, improving the flexibility of the network and land management). With these interventions in place, the WRMP indicates there is sufficient surplus of water with no need to increase abstraction beyond that provided for by existing licences.
- 5.23 The HRA found that the demand management solutions typically comprised small-scale and temporary activities largely concentrated in the urban environment far distant from any European site, and that impacts would be confined to the point of delivery. Consequently, likely significant effects alone or in-combination could be ruled out. Similarly, supply-side solutions were found to not result in likely significant effects on any European site. Whilst there was one exception to the latter, this was located in North Nottinghamshire far beyond the influence of the Local Plan allowing likely significant effects to be ruled out.
- 5.24 Severn Trent published the draft version of their next Water Resources Management Plan in 2022 with the aim that the final version would be published in the summer of 2024. The draft plan has been subject to HRA (Hale *et al.*, 2022).

³⁷ <https://www.severntrent.com/about-us/our-plans/>

This found that for the supply-side options (i.e. those involving increasing water supply, the main measures relevant to the assessment) there are sufficient standard and best practice mitigation measures that can be implemented during construction to avoid adverse effects. Further hydrological assessment and surveys to confirm presence and use of offsite functionally linked habitat will be required for a number of options ahead of project-level HRAs. Mitigation measures, including restrictions on abstraction licences (volumes, timings) may be required to avoid adverse effects.

- 5.25 One option in the plan that the HRA concluded as uncertain in terms of adverse effects was option 112 Croxton groundwater sources. For this option the abstraction location of the groundwater sources is not confirmed, and further hydrogeological assessment will be required to understand the impacts to the Midland Meres and Mosses Phase 2 Ramsar. However, this is an alternative option, and if required will not be developed until 2045/46, beyond the period covered in the Local Plan Review. There is sufficient time and subsequent WRMP cycles to confirm any effects.
- 5.26 South Staffs WRMP was published in 2024³⁸ and covers the period 2025-2050. It shows the company will need to reduce the amount of water it takes from existing groundwater sources in order to protect the environment from the impacts of climate change, and to help waterbodies to achieve good status as defined in the Water Framework Directive. By 2050 the Plan predicts a supply deficit of around 60 mega-litres per day. The WRMP sets out measures that mean the company expects to be able to balance supply and demand up to and beyond 2050. The HRA for the WRMP³⁹ found that some of the options identified in the Plan could have likely significant effects on European sites but it was considered that meaningful appropriate assessment of these options was not possible and the assessment could only be undertaken at the project level, when further details were available.
- 5.27 There are no reasons to suggest that the outcomes from these HRAs cannot be relied upon to inform this Local Plan. Therefore, it can be concluded that in terms of the WRMPs, adverse effects on the integrity of the European sites at risk can be ruled out alone or in-combination. As the latest round of WRMPs are likely to be finalised prior to the adoption of the South Staffordshire Local Plan Review, this conclusion should be further checked alongside any further updates to the HRA.

³⁸ <https://www.south-staffs-water.co.uk/media/rdydrzxq/sst-final-wrmp-aug-2024-v1.pdf>

³⁹ <https://www.south-staffs-water.co.uk/media/4gep0sce/appendix-p2-ssw-final-wrmp24-hra-report-issue-4.pdf>

- 5.28 However, given the reliance of the WRMPs on interventions to reduce water consumption, it would be reasonable and appropriate for the Local Plan to emphasise the need for future development to incorporate water-saving measures.

Drought Plans

- 5.29 Drought plans describe how a water company will manage the effects of a drought. Severn Trent's Drought Plan⁴⁰ and South Staffs Water's Plan⁴¹ were both completed in 2022 and were accompanied by HRA. The appropriate assessment for South Staffs Drought Plan indicates that, with avoidance and mitigation measures in place no adverse impacts would be observed either alone or in combination with other plans or projects.

Water quality

- 5.30 Wastewater or sewage can be very damaging to water bodies as it can contain large amounts of nutrients (such as phosphorus and nitrates), ammonia, bacteria, harmful chemicals and other damaging substances. Issues arise where sewage treatment technology to adequately reduce levels of phosphorus and harmful chemicals is not in place, where leakages occur from privately owned septic tanks and, in wet weather, storm overflows can discharge untreated sewage. Poorly installed domestic washing machines and even washing cars at home can, in places, also add to the pollution load. Outcomes can include increased turbidity, algal blooms, reduced dissolved oxygen and an overall increase in the nutrient status of receiving waterbodies. Simply, increases in housing increases pressure on the sewage network and the volume of wastewater.
- 5.31 The pollution of inland and coastal waters has received greater recognition in recent years and the significance of such potential impacts and the need to mitigate has been given emphasis by Natural England's demands that new development affecting vulnerable water bodies must achieve 'nutrient neutrality', i.e. avoid any net increase in nitrate and phosphate pollution. Whilst this relates primarily to the disposal of foul water, run-off from hard surfaces can also be a factor. This reflects contemporary case law (the Dutch case) which makes clear that where water quality targets of European sites are not being met, further inputs of pollutants should not be allowed.

⁴⁰ <https://www.severntrent.com/about-us/our-plans/>

⁴¹ <https://www.south-staffs-water.co.uk/media/4050/ssw-final-drought-plan-2022.pdf>

- 5.32 For the avoidance of doubt, none of the European sites potentially at risk are currently subject to these measures, but a range of other statutory and policy drivers still apply.
- 5.33 The RBMPs also provide the framework for protecting and enhancing the water environment and set out statutory objectives for protected areas and a programme of measures to achieve those objectives.
- 5.34 Severn Trent Water provides wastewater treatment for new development which it typically delivers by ensuring there is adequate capacity or headroom within the wastewater treatment system. Whilst it should be expected that all existing wastewater treatment works that lie within the catchment of these European sites operate within their licensed conditions and that all have capacity to accommodate predicted levels of growth, this is not known to the Council for certain. On the other hand, licenses for all wastewater treatment works and any changes to these would have been subjected to project-level HRAs and would not be permitted to operate if adverse effects could not be ruled out.
- 5.35 The water cycle study⁴² from 2020 identifies that all of South Staffordshire's housing need could be met by sites given a green RAG rating for wastewater collection indicating a lack of constraint with regards sewerage capacity. The study does however identify a need for further modelling and assessment work around water quality and wastewater treatment permit assessment.
- 5.36 The Infrastructure Delivery Plan⁴³ includes an appendix with site-by-site checks of each housing allocation and potential impacts on sewage infrastructure and surface water and all sites are assessed as either Low or in some cases Medium impact. In relation to the potential impact of surface water on sewerage infrastructure, suitable mitigation measures will be secured at the planning application stage (such as the use of SUDs) to ensure there is no unacceptable impact on sewerage infrastructure.

⁴² Part of the local plan evidence base: https://www.sstaffs.gov.uk/sites/default/files/2023-02/water_cycle_study_2020.pdf

⁴³ Part of the local plan evidence base: https://www.sstaffs.gov.uk/sites/default/files/2023-02/04_idp_november_2022.pdf

Drainage and Wastewater Management Plan (DWMP)

- 5.37 Drainage and Wastewater Management Plans (DWMP) require sewerage companies to set out 25 year long-terms plans (2025-2050) on how they intend to extend, improve, and maintain robust and resilient drainage and wastewater systems against future pressures such as climate change, population growth and urbanisation.
- 5.38 Severn Trent Water has prepared its first Drainage and Wastewater Management Plan (DWMP)⁴⁴ and this has been subject to an indicative HRA (Mott MacDonald, 2023). This HRA was highly precautionary, high level and identified further assessment would be necessary when relevant information is available. The HRA is so high level and precautionary as the DWMP lacks concrete proposals. The DWMP will inform the preparation of Severn Trent's Business Plan (PR24) which sets out the investment plans for the period 2025-2030. The DWMP is one of the many inputs into the PR24 and as the locations and nature of interventions in each of the wastewater catchments is refined, further assessment (which may include HRA and Environmental Impact Assessment) will take place.

Mottey Meadows SAC

- 5.39 There is one allocation in close proximity to the SAC (see Map 4):
- Site 379: approximately 18 dwellings.
- 5.40 This site is around 800m from the SAC, lies uphill and is separated from the SAC by agricultural land. There could be direct hydrological links between the site and the SAC. The risk relates to direct run-off onto the SAC (e.g. diffuse pollution, surface run-off via ditches etc.) or the very slight risk that it could disrupt the springs and hydrology of the SAC. All risks are low and can be addressed at project level through site design and the incorporation of Sustainable Urban Drainage Systems (SuDs). Policy NB1 ensures general compliance with the Habitat Regulations and Policy NB7 provides the necessary confidence that development can only proceed where water quality issues have been addressed including appropriate consideration given to sources of pollution and appropriate SuDS measures.

Aqualate Mere (Midlands Meres and Mosses Phase 2 Ramsar)

- 5.41 The catchment for Aqualate Mere and tributaries is mapped by Defra and shown in Map 6. It can be seen that none of the allocations within the Plan fall within the catchment and risks to the site in terms of run-off and pollution from surface

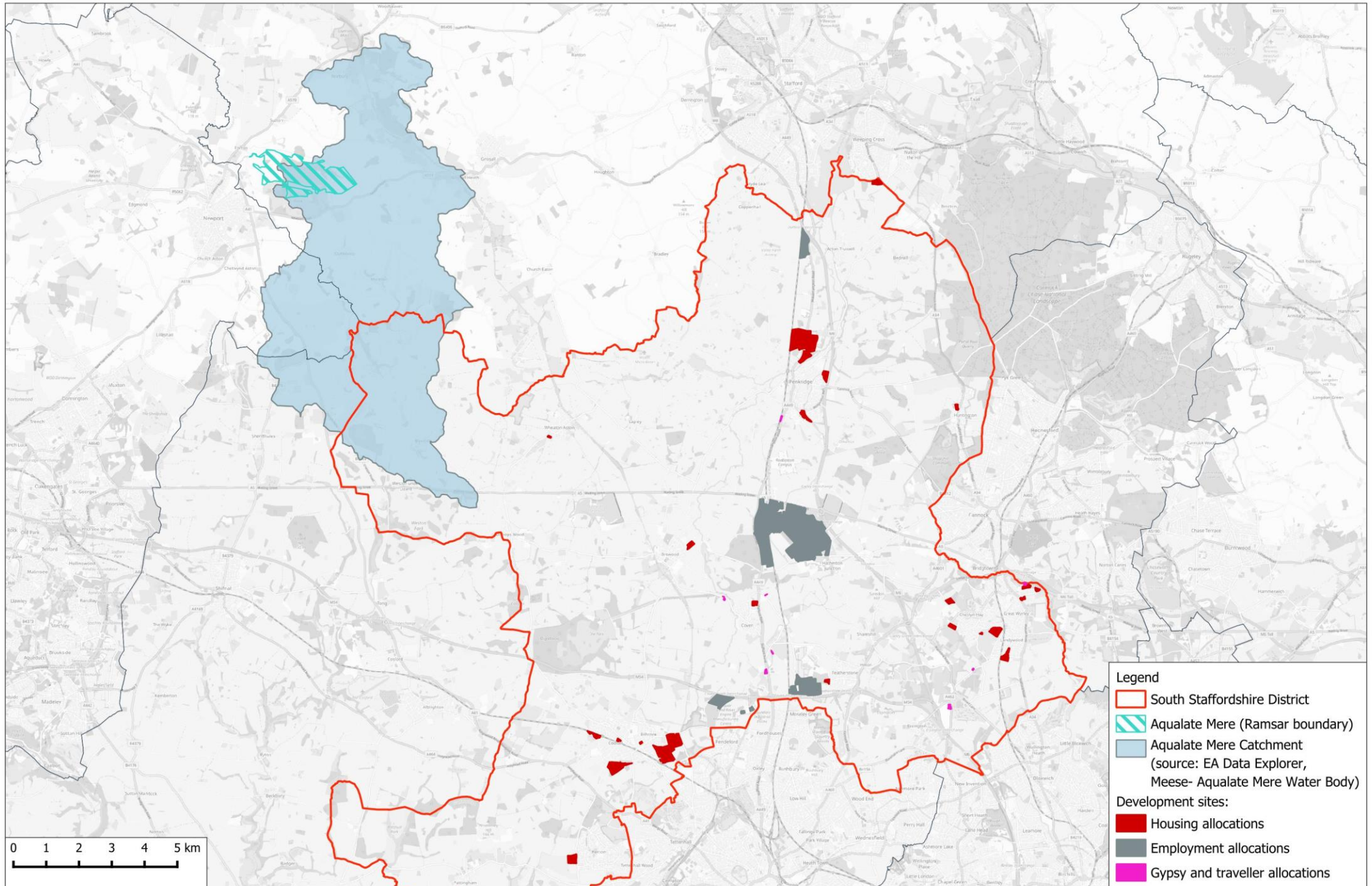
⁴⁴ <https://www.severntrent.com/about-us/our-plans/>

water will relate solely to windfall. Policy NB1 ensures general compliance with the Habitat Regulations and ensures and Policy NB7 provides the necessary confidence that development can only proceed where water quality issues have been addressed including appropriate consideration given to sources of pollution and appropriate SuDS measures.

Conclusions

- 5.42 The outcomes of the RBMP and WRMP HRAs and other relevant sources provide confidence at a strategic level that adverse effects on the integrity of the European sites potentially at risk from hydrological issues (i.e. water resources and water quality) can be avoided. Policy NB1 ensures general compliance with the Habitat Regulations and Policy NB7 provides the necessary confidence that development can only proceed where water supply and quality issues have been addressed.
- 5.43 The latest round of WRMPs are likely to be finalised prior to the adoption of the South Staffordshire Local Plan Review, we therefore recommend the Council check the findings of the final WRMP HRAs alongside any updates or further changes to the Plan (and this HRA).

Map 6: Aqualate Mere Catchment



6. Appropriate assessment: Air Quality

Relevant policies from LSE screening

6.1 Screening identified likely significant effects alone for Cannock Chase SAC, Cannock Extension Canal SAC and Fens Pools SAC as a result of the overall quantum of growth in the plan and for selected policies in-combination:

- Policy DS5 – the Spatial Strategy to 2041
- Policy SA1: Strategic development location: Land east of Bilbrook
- Policy SA2 – Strategic development location: Land north of Penkridge
- Policy SA3: Housing Allocations
- SA4: Gypsy and Travellers Allocations
- SA5: Employment Allocations

General approach to assessment of air quality impacts

6.2 In accordance with Natural England guidance to competent authorities (Natural England, 2018), the need for appropriate assessment was triggered on the basis that the traffic from the local plan contributed >1% of the relevant critical load/levels for relevant sites. The 1% threshold is not intended to be used as an adverse effect threshold and the Natural England guidance is clear on this point (see para 5.13).

6.3 The purpose of an appropriate assessment is to assess the implications of a predicted exceedance of 1% of a critical load in view of the conservation objectives. As emphasised in the NE guidance, other factors beyond the exceedance of the 1% threshold need to be taken into account in reaching a decision as to whether there is a threat to the integrity of a site, or not. These factors include the need to consider the spatial scale and duration of the predicated impact and the ecological functioning of the affected area.

Cannock Chase SAC

Relevant roads

6.4 Cannock Chase has two different A roads within 200m: the A460 in the south and A513 in the north. The A513 bisects part of the SAC with around 1.3km of its length directly adjacent to the SAC. Around 1.3km of the A460 lies within 200m, here the road is 70-115m from the SAC, with woodland and a railway line separating the two. There are also numerous minor roads around the SAC, including Chase Road which bisects the SAC and Penkridge Bank which directly connects with Penkridge

(see Map 3a and 3b). The air quality modelling was focussed around road assessment points ('RAP's): the A513 (RAP1), the A460 Rugeley Road (RAP2) and Camp Road (RAP 3). The latter is an unclassified road and while not a strategic road link, was included for completeness (see Map 7 for modelled roads).

Relevant qualifying features and conservation objectives

6.5 Cannock Chase SAC supports the most extensive lowland heathland in the Midlands. The site qualifies as an SAC for the following habitats:

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

6.6 And the conservation objectives⁴⁵ are to:

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

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

6.7 Natural England's 'supplementary advice'⁴⁶ complements the high-level conservation objectives and sets a target for air quality to:

'Restore the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for the [wet and dry heath qualifying features]' ...'

6.8 The Site Improvement Plan⁴⁷ identifies 'air pollution: impact of atmospheric nitrogen deposition' as an important pressure on this site.

Critical loads/levels

6.9 Critical levels or loads for Cannock Chase, as used in the air quality modelling report, are summarised in Table 5.

⁴⁵ <https://publications.naturalengland.org.uk/file/4840312833048576>

⁴⁶ <http://publications.naturalengland.org.uk/publication/6687924741472256>

⁴⁷ <https://publications.naturalengland.org.uk/file/4810429419225088>

Table 5: Critical loads and critical levels at Cannock Chase SAC as assessed in the air quality report (Shelton, 2024)

Qualifying feature	Nox Annual Critical Level ($\mu\text{g}/\text{m}^3$)	NH3 Annual Mean Critical Level ($\mu\text{g}/\text{m}^3$)	N Deposition Critical Load (kg N/ha/yr)	Acid N Deposition Critical Load (Keq/ha/yr)
European Dry Heaths	30	1	10-20 ^a	1.285
Wet heathland with cross-leaved heath	30	1	10-20 ^a	1.285

^a Note that since the air quality modelling report was produced, these levels have been revised to 5-15

Current (baseline) loads / levels and predicted change

6.10 Background (2022) and future year (2042) modelled background concentrations reported in the Air Quality Report (Shelton, 2024, table 6) are:

- NOx below the annual mean critical levels in both scenarios.
- NH3 annual mean background concentrations exceed the relevant critical levels with levels in 2022 at 1.7-2.2 $\mu\text{g}/\text{m}^3$, remaining the same in 2042.
- Nitrogen deposition rates in both the baseline and future years exceed the respective lower critical loads. Levels in 2022 are projected to be 17.6-32.5 kgN/ha/yr, with levels in 2042 decreasing to 15.7-29.1 kgN/ha/yr.
- Acid deposition rates attributed to nitrogen are above the respective critical loads in 2022 (1.3 – 2.4 keq/ha/yr) with levels in 2042 remaining the same.

Appropriate assessment

Nitrogen oxides (NOx)

6.11 The Air Quality Report (Shelton, 2024) reports that from a total of 9,788 modelled receptors, 123 were modelled to exceed the 1% significance screening criterion for in-combination impacts, these were exclusively located directly adjacent to the A513 (RAP 1) that passes through the northern area of the SAC. The report predicated a maximum modelled annual mean concentration in the 'with plans' scenario (12.6 $\mu\text{g}/\text{m}^3$) that is well below the critical level for NOx (30 $\mu\text{g}/\text{m}^3$). The contribution of NOx to nitrogen deposition is considered separately (see below).

Ammonia (NH₃)

6.12 Shelton (2024) had a total of 9,788 modelled receptors (i.e. points across the SAC where predictions were generated), of which 731 were modelled to exceed the 1% significance screening criterion for in-combination impacts. These were

predominantly focussed within 50m either side of the A513 (RAP 1). A narrow band of in-combination impacts above the 1% criterion was modelled up to 30m within the SAC adjacent to A460 Rugeley Road (RAP 2), with an even finer band of exceedance of less than 5m adjacent to Camp Road (RAP 3). The entire site was reported to exceed the critical level ($1 \mu\text{g}/\text{m}^3$) in both the Future Baseline and With Plans scenarios.

- 6.13 These exceedances are mapped in Figure 5.1 within Shelton (2024), which shows the narrow bands beside the roads that are affected. These areas define the parts of the SAC that are the focus for this assessment in relation to NH_3 and the map is reproduced here (Map 7).
- 6.14 These areas are considered in detail in Table 6. It can be seen that the relatively small areas identified as exceeding the 1% screening threshold for ammonia are virtually all wooded and advice from Natural England indicates these largely reflect site fabric in that they are within the SAC and SSSI boundary but are not part of the special interest of the site and nor do they contribute to the interest in any way. Their inclusion in the site boundary reflect pragmatic decisions around where the boundary is drawn and convenience in defining an area. Many European site boundaries encompass small car parks, areas of hard standing and parts of road verges that are part of a site but are not expected to make a contribution to the achievement of conservation objectives. See Natural England (2018) for definition and discussion. The only heathland habitat (0.01ha) is within unit 010 (German Cemetery) and within 5m of Camp Road – this area potentially affected is so small as to be negligible.
- 6.15 Checks by the South Staffordshire ecologist with relevant land managers⁴⁸ for the units has confirmed that none of the habitat within the 1% exceedance area has been proposed to be restored, or has the potential to be restored to wet or dry heathland given appropriate management.

Nitrogen deposition

- 6.16 The critical load range which has been used in the air quality modelling report (Shelton, 2024) and applied to both the qualifying features (i.e. wet and dry heath) is 10-20kgN/ha/yr. This load range was specified in the original brief by Middlemarch (and agreed with Natural England at the time). Since the air quality modelling work, APIS (the Air Pollution Information System) has changed the critical road to a lower range of 5-15kgN/ha/yr.

⁴⁸ The National Trust

- 6.17 From a total of 9,788 modelled receptors, 310 were predicted by Shelton to exceed the 1% significance screening criterion for in-combination impacts. These were all focussed within a 40m band either side of the A513 (RAP 1). The entire site was also reported to exceed the lower critical load threshold used (10 kgN/ha/yr) in both the Future Baseline and With Plans scenarios. This exceedance across the whole site is in part due to the high existing background levels.
- 6.18 The area affected (i.e. where the 1% screening criterion was exceeded) is mapped in Figure 6.1 within Shelton (2024) and shown below in Map 8. The area is a component of the area considered in the Ammonia section above (see Table 6). Within the area mapped site surveys by the South Staffordshire ecologist and consultation with Natural England indicated there is no qualifying heathland habitat, the land is site fabric and furthermore – from consultation with relevant land managers – there is no aspiration to restore the area to heathland habitat. While the modelling is based on a higher threshold than is now recommended on APIS, the application of a lower threshold is unlikely to have a marked effect on the distance band affected.

Acidity

- 6.19 Shelton (2024) reported predictions of extensive exceedance of the lower critical load within Cannock Chase SAC, both in the 2042 Future Baseline and 2042 With Partnership Local Plans scenarios. However, the area of in-combination impact above the 1% criterion was relatively marginal within the SAC. From a total of 9,788 modelled receptors, 127 were modelled to exceed the 1% significance screening criterion for in-combination impacts, exclusively located directly adjacent to the A513 (RAP 1) that passes through the northern area of the SAC. All of the SAC was expected to exceed the lower critical load (1.285 keqN/ha/yr) in both the Future Baseline and With Plans scenarios, given that the baseline acid deposition rate is 1.3 keq/ha/yr as a minimum.
- 6.20 The areas where exceedance was predicted are shown in Figure 7.1 within the Shelton report. The map shows areas directly adjacent to the carriageway itself as affected. The maximum worsening from roads (i.e. not taking into account background levels but including other future road contributions) immediately adjacent to the A513 was 0.03keq/N/ha/yr. The relevant areas affected are summarised in Table 6.
- 6.21 With no predicted exceedance of the critical level for NO_x at the SAC and noting a general improvement in the trends for NO_x (see Shelton, para 5.4.4), direct toxicity is not likely to have an adverse impact on the qualifying habitats of the SAC. Adverse effects from NH₃, acidity and Nitrogen deposition can similarly be ruled

out due to the very small parts of the SAC that are affected, these virtually all encompassing 'site fabric' rather than qualifying habitat.

Table 6: Habitat and other information relevant to the assessment for Cannock Chase SAC within the area of exceedance of the 1% criterion for different pollutants. Site visit observations provided by South Staffordshire Council’s ecologist (October 2024) and other considerations extracted from HRA for Wolverhampton’s Local Plan at Regulation 19⁴⁹ (‘WLP HRA’). Natural England advice summarised from a meeting on 14th November with the relevant local planning authorities.

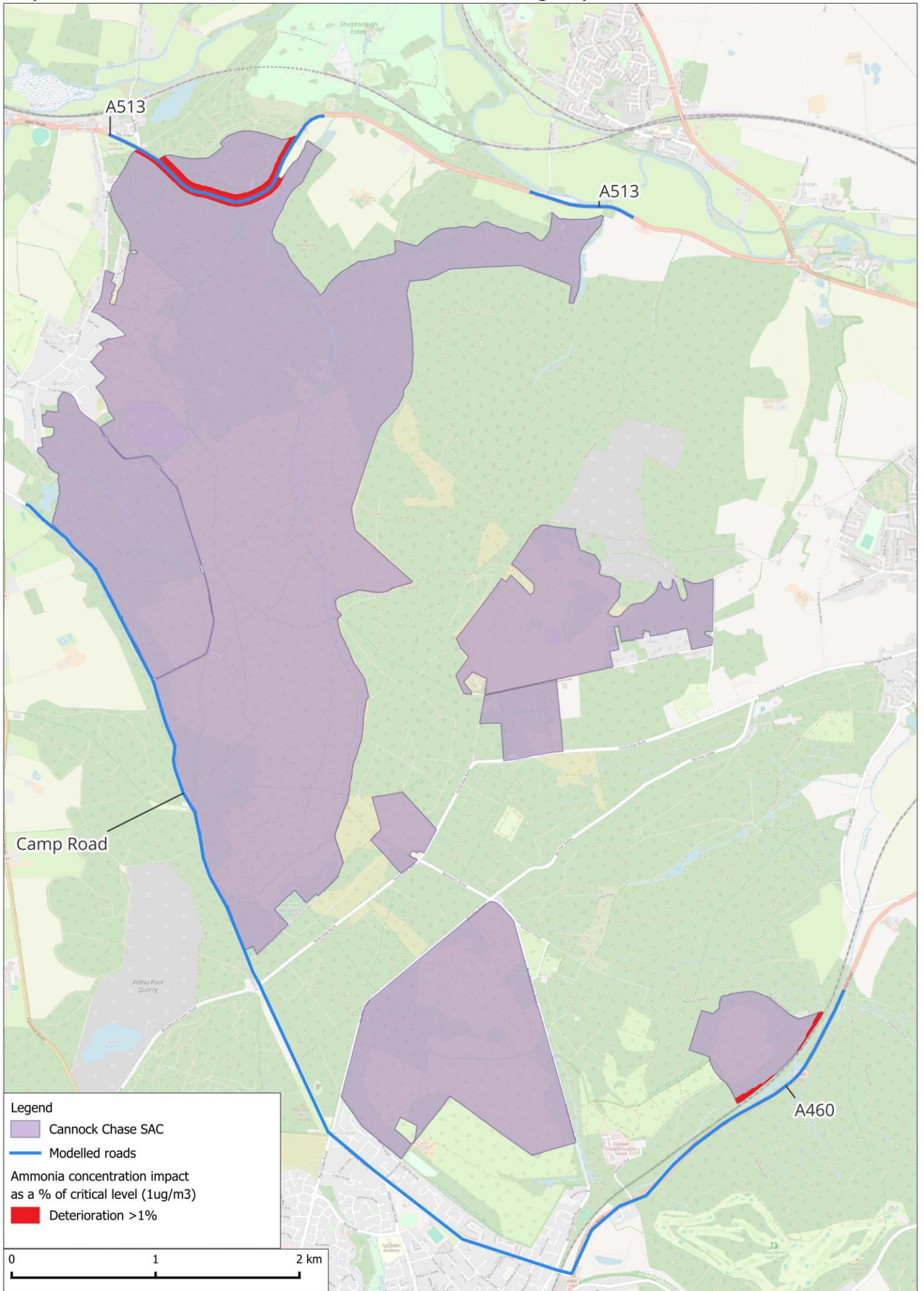
Relevant road	RAP	Max distance (m) from road for 1% exceedance: NH ₃	Max distance (m) from road for 1% exceedance: N deposition	Max distance (m) from road for 1% exceedance: Acidity	SSSI unit	Main habitat (for unit, from NE designated site viewer)	Site visit observations and other considerations	Natural England advice
A460	02	30	0	0	001 Moor’s Gorse	Lowland draw shrub heath	Not visited. WLPHRA indicates no records of lichens or bryophytes.	Area affected is site fabric
A513	01	50	40	Immediately adjacent areas only	020 Oat Hill	Lowland draw shrub heath	Almost all oak and birch woodland with an understorey of prolific bracken. WLPHRA indicates no records of lichens or bryophytes.	Area affected is site fabric
					021 Sherbrook Alder Carr	Lowland broadleaved mixed and yew woodland	Almost all oak and birch woodland with an understorey of prolific bracken. WLPHRA indicates no records of lichens or bryophytes.	Area affected is site fabric
					022 Santnall Hills	Lowland draw shrub heath	Almost all oak and birch woodland with an understorey of prolific bracken. WLPHRA indicates no records of lichens or bryophytes.	Area affected is site fabric
Camp Road	03	<5	0	0	010 German Cemetery	Lowland draw shrub heath	WLPHRA indicates no records of lichens or bryophytes and indicates the area of heathland is approximately 0.01ha, the	Area potentially affected is so small as to be negligible and unlikely to result in an

⁴⁹ <https://www.wolverhampton.gov.uk/sites/default/files/2024-11/WLP%20Reg%2019%20Habitat%20Regulations%20Assessment%202024%20-%20Main%20Report.pdf>

South Staffordshire Local Plan HRA, Publication Version

Relevant road	RAP	Max distance (m) from road for 1% exceedance: NH ₃	Max distance (m) from road for 1% exceedance: N deposition	Max distance (m) from road for 1% exceedance: Acidity	SSSI unit	Main habitat (for unit, from NE designated site viewer)	Site visit observations and other considerations	Natural England advice
							rest of the affected area being wooded.	adverse impact on site integrity on the SAC.
					011 Anson's Bank	Lowland draw shrub heath	WLPHRA indicates no records of lichens or bryophytes and identifies the area affected as woodland rather than heathland.	No heathland qualifying features in area affected.
					024 Brockton LNR	Lowland draw shrub heath	WLPHRA indicates no records of lichens or bryophytes and identifies the area affected as woodland rather than heathland	No heathland qualifying features in area affected

Map 7: Cannock Chase SAC, modelled roads and areas exceeding 1% process contribution for Ammonia



Map 8: Cannock Chase SAC, modelled roads and areas exceeding 1% process contribution for N deposition



Cannock Extension Canal

Relevant roads

6.22 The A5 dual carriageway (Watling Street) runs along the north edge of the canal and connects directly to South Staffordshire at Great Wyrley, where it links to the M6 toll (which largely runs parallel to the A5 and just to north, but beyond 200m from the canal). There is also the B4145 (Lime Lane) which runs alongside the canal and crosses the canal about a third of the way along the SAC. Two road links within 200m of the Canal were included in the air quality modelling: the A5 Watling Street (RAP10) and B4154 Lime Street (RAP 11) (Map 9).

Relevant qualifying features and conservation objectives

6.23 The qualifying feature of the Cannock Extension Canal is:

- S1831 Floating water-plantain, *Luronium natans*

6.24 And the conservation objectives⁵⁰ are to:

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

- *The extent and distribution of the habitats of qualifying species*
- *The structure and function of the habitats of qualifying species*
- *The supporting processes on the habitats of qualifying species rely*
- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site.*

6.25 Natural England's supplementary conservation advice⁵¹ sets a restore target with regards to air quality:

'Restore the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for the [Floating water-plantain]' ...'

6.26 This accords with the Site Improvement Plan⁵² which recognises air pollution as a current pressure for the floating water-plantain feature and states that nitrogen

⁵⁰ <https://publications.naturalengland.org.uk/publication/5063623810482176>

⁵¹ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012672.pdf>

⁵² <https://publications.naturalengland.org.uk/publication/6103368296562688>

deposition exceeds the site relevant critical load and the site could be affected by major roads, industrial estates and farming in the vicinity.

Critical loads/levels

6.27 Critical levels or loads for the Cannock Extension Canal, as used in the air quality modelling report, are summarised in Table 7. The Nitrogen critical load class used is that for permanent oligotrophic lakes, ponds and pools (including softwater lakes) and the Nitrogen deposition load of 10kgN/ha/yr cited in the table represents the upper end of the 2-10 kgN/ha/yr range usually used for this habitat. The habitat is very broad and includes a wide range of waterbodies – the lower limit of 2kgN/ha/yr is intended for alpine lakes and is not appropriate in this situation (see APIS website for background).

Table 7: Critical loads and critical levels for the Cannock Extension Canal SAC as assessed in the air quality report (Shelton, 2024)

Qualifying feature	Nox Annual Critical Level ($\mu\text{g}/\text{m}^3$)	NH3 Annual Mean Critical Level ($\mu\text{g}/\text{m}^3$)	N Deposition Critical Load (kg N/ha/yr)	Acid N Deposition Critical Load (Keq/ha/yr)
Floating water plantain	30	3	10	N/A

Current (baseline) loads / levels and predicted change

6.28 Background (2022) and future year (2042) modelled background concentrations reported in the Air Quality Report (Shelton, 2024, Table 6) are:

- NOx below the annual mean critical levels in 2022 and 2042.
- NH3 annual mean background concentrations in both the baseline and future years were not predicted to exceed the relevant critical levels of 3 $\mu\text{g}/\text{m}^3$, with levels in 2022 at 1.8 $\mu\text{g}/\text{m}^3$, remaining similar (1.8-1.9 $\mu\text{g}/\text{m}^3$) in 2042.
- Nitrogen deposition rates in both the baseline and future years were predicted to exceed the lower critical load (10kgN/ha/yr). Levels in 2022 were projected to be 17.2-17.3 kg/ha/yr, with levels in 2042 decreasing to 15.4-15.5 kgN/ha/yr.

Appropriate assessment

Nitrogen oxides (NOx)

6.29 The air quality modelling report (Shelton, 2024) reports 72 of 179 receptors exceeded the 1% criterion, focussed adjacent to the south of A5 Watling Street (RAP 10) and north of Lime Lane (RAP 11). The report predicts a maximum modelled annual mean concentration in the 'with plans' scenario (21.8 $\mu\text{g}/\text{m}^3$) that

is well below the critical level for NO_x (30 µg/m³). With no predicted exceedance of the critical level at the SAC and noting a general improvement in the trends for NO_x (see Shelton, para 5.4.4), direct toxicity is not likely to have an adverse impact on the qualifying feature of the SAC. The contribution of NO_x to nitrogen deposition is considered separately (see below).

Ammonia (NH₃)

- 6.30 Shelton (2024) reports that approximately 40% of the SAC area was predicted to experience in-combination impacts above the 1% significance screening criterion, mainly encompassing the area of the SAC between the south of A5 Watling Street (RAP 10) and north of Lime Lane (RAP 11). The maximum modelled annual mean concentration in the With Plans scenario (3.0 µg/m³), modelled directly adjacent to A5 Watling Street, is equal to the critical level (3 µg/m³). This represents a maximum increase of 0.1 µg/m³ from the Future Baseline scenario (2.9 µg/m³).
- 6.31 These exceedances are mapped in Figure 5.2 within Shelton (2024), which shows exceedance for all areas of the SAC between the A5 and where Lime Lane crosses the canal as well as some parts of the canal to the south of the Lime Lane crossing point.

Nitrogen deposition

- 6.32 Approximately 50% of the SAC area was predicted by Shelton (2024) to experience an in-combination impact above the 1% significance screening criterion, encompassing the entirety of the SAC between the south of A5 Watling Street (RAP 10) and north of Lime Lane (RAP 11). In addition, in-combination impacts above the criterion were modelled for the area of the SAC within 200m to the south of where Lime Lane intersects the SAC. The entire SAC was predicted to exceed the lower critical load (10 kgN/ha/yr) in both the Future Baseline and With Plans scenarios.
- 6.33 The area exceeding the 1% screening criterion is shown in Figure 6.2 in the Shelton report.

Considerations with respect to the ecology of the Floating Water Plantain

- 6.34 The SAC qualifies for a single species, and it's ecological requirements are important to consider. Floating water-plantain is a stoloniferous perennial of mesotrophic or oligotrophic lakes, pools and slow-flowing rivers, and abandoned or little-used canals. In deep or fast-flowing water it persists as a carpet of plants with rosettes of linear-lanceolate submerged leaves, and sometimes with cleistogamous flowers, but it produces expanded floating leaves and flowers freely in quieter or shallower water or on exposed mud (Stroh *et al.*, 2020).

- 6.35 A detailed account of the ecology is provided by Lansdown and Wade (2003). They highlight that the plant has a number of apparently discrete reproductive strategies that include annual flowering, perennial flowering, and perennially vegetative. They also state that the species, while rare, has been found in a range of wetland/aquatic habitat types that include still water (from small temporary ponds to large permanent lakes) and flowing waters (fast flowing streams to large sluggish rivers). This would suggest the species is tolerant of a range of conditions.
- 6.36 Lansdown and Wade also highlight that while often described as typical of acid water it has been recorded from water with a wide range of pH values and different geologies. It has been found in oligotrophic and eutrophic waters. The main conclusion is therefore that Floating Water-plantain has a very wide range of chemical and substrate tolerances and chemical or substrate-related factors are unlikely to limit distribution or abundance. The key limiting factor that accounts for the species' rarity is its intolerance to competition.
- 6.37 Natural England have confirmed that Cannock Extension Canal SAC supports the submerged phenotype, which will be less sensitive to the effects of atmospheric deposition. Given the specific ecology of Floating Water-plantain and its submerged nature at the Cannock Extension Canal SAC it seems relatively robust with respect to air quality. Given the species is the sole qualifying feature, risks for the SAC are consequently low.

Fens Pools

Relevant roads

6.38 Lying to the east of South Staffordshire, there are two A roads within 200m, the A461 to the south and the A4101 to the north; both connect to roads in South Staffordshire. There are also numerous small roads within 200m. Two road links within 200m of Fens Pools SAC were included in the air quality modelling: the A4101 High Street (RAP12) and A461 (RAP 13) (Map 11).

Relevant qualifying features and conservation objectives

6.39 Fens Pools SAC comprises three canal feeder reservoirs and a series of smaller pools. The pools are within an area of high-density housing in Dudley, between the areas of Pensnett and Brierley Hill

6.40 The SAC qualifies for the population of Great-crested Newt *Triturus cristatus* present on the site. The overarching conservation objectives are the same as for the Extension Canal (see paragraph 6.24)

6.41 Natural England's 'supplementary advice'⁵³ complements the high-level conservation objectives and states the following:

6.42 '*Maintain concentrations and deposition of air pollutants at or below the site-relevant Critical Load or Level values given for Great Crested Newt supporting habitats*'...

6.43 The site improvement plan does not list air quality as a current pressure or threat to the site.

Critical loads/levels

6.44 Critical levels or loads for Fens Pools, as used in the air quality modelling report, are summarised in Table 8. APIS does not provide critical loads and therefore the report applies values for permanent oligotrophic waters (soft water lakes) as a proxy. The critical load for Nitrogen deposition applied is 10kgN/ha/yr, based on the upper level of the range for permanent oligotrophic waters (soft water lakes) as this is most relevant to Fens Pools.

⁵³ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030150.pdf>

Table 8: Critical loads and critical levels for Fens Pools SAC as assessed in the air quality report (Shelton, 2024)

Qualifying feature	Nox Annual Critical Level ($\mu\text{g}/\text{m}^3$)	NH3 Annual Mean Critical Level ($\mu\text{g}/\text{m}^3$)	N Deposition Critical Load (kg N/ha/yr)	Acid N Deposition Critical Load (Keq/ha/yr)
Great-crested Newt	30	3	10	N/A

Current (baseline) loads / levels and predicted change

6.45 Background (2022) and future year (2042) modelled background concentrations reported in the Air Quality Report (Shelton, 2024, table 6) are:

- NOx below the annual mean critical levels in 2022 and 2042.
- NH3 annual mean background concentrations in both the baseline and future years were not predicted to exceed the relevant critical levels of $3 \mu\text{g}/\text{m}^3$, with annual mean background in 2022 ranging from $1.8\text{-}1.9 \mu\text{g}/\text{m}^3$ and in 2042 a mean of $1.9 \mu\text{g}/\text{m}^3$.
- Background nitrogen deposition rates in both the baseline and future years were projected to exceed the relevant lower critical loads across the SAC. Levels in 2022 were predicted to be $16.6\text{-}17.0 \text{ kgN}/\text{ha}/\text{yr}$ reducing in 2042 to $14.9\text{-}15.2 \text{ kgN}/\text{ha}/\text{yr}$

Appropriate assessment

Nitrogen oxides (NOx)

6.46 The air quality modelling report (Shelton, 2024) reports a total of 61 of the 3,851 modelled receptors as predicted to exceed the 1% criterion, all of which are focussed within 50m of the A4101 High Street (RAP 12) within the north of the SAC. The maximum modelled annual mean concentration in the 'with plans' scenario ($26.3 \mu\text{g}/\text{m}^3$) that is well below the critical level for NOx ($30 \mu\text{g}/\text{m}^3$). With no predicted exceedance of the critical level of nitrogen deposition at the SAC and noting a general improvement in the trends for NOx (see Shelton, para 5.4.4), direct toxicity from NOx is not likely to have an adverse impact on the qualifying feature of the SAC. The contribution of NOx to nitrogen deposition is considered separately (see below).

Ammonia (NH₃)

6.47 Shelton (2024) reports that 83 of the 3,851 modelled receptors were predicted to experience in-combination impacts above the 1% significance screening criterion. The maximum modelled annual mean concentration in the With Plans scenario ($3.3 \mu\text{g}/\text{m}^3$), with 6 receptors in total exceeding the critical level ($3 \mu\text{g}/\text{m}^3$).

- 6.48 These exceedances are mapped in Figure 5.3 within Shelton (2024) and reproduced here in Map 11, which only shows the SAC and those areas within the SAC where the 1% process contribution was predicted to be exceeded.

Nitrogen deposition

- 6.49 Approximately 10% of the SAC area was predicted by Shelton (2024) to experience an in-combination impact above the 1% significance screening criterion, focussed within 70m to the south of the A4101 High Street (RAP 12). Additional, in-combination impacts above the 1% criterion were modelled up to 20m within the SAC adjacent to the east of Tennyson Street and in the far north-eastern part of the SAC. The area exceeding the 1% screening criterion is shown in Figure 6.3 in the Shelton report and reproduced here in Map 12. Map 12 only shows the SAC and those areas within the SAC where the 1% process contribution was predicted to be exceeded.
- 6.50 The entire SAC was predicted to exceed the lower critical load (10 kgN/ha/yr) in both the Future Baseline and With Plans scenarios. The modelling indicates that both the future baseline and the in-combination 'with plans' scenario will result in an exceedance of the upper critical load for nitrogen deposition of 10kgN/ha/yr across the SAC. It should be noted that this is the upper critical load for the open water habitat and that higher loads may be relevant for other habitats within the SAC).
- 6.51 Nitrogen deposition is predicted in general to reduce at the site from 2022 (16.6-17.0kgN/ha/yr) to 2021 (14.9-15.2kgN/ha/yr). The modelling results indicate that background levels of Nitrogen deposition provide a large contribution to exceedances of the critical load across the SAC with a maximum worsening as a result of the in-combination effects of the local plans of 0.8kgN/ha/yr. The highest maximum nitrogen deposition level in the 'with plans' scenario within the SAC designation boundary is located on the SAC boundary within 20m of the A4101 High Street (see Figure 6.3 of Shelton 2024).

Considerations with respect to Great-crested Newt

- 6.52 As reported in the HRA for the Wolverhampton Local Plan⁵⁴ around 2ha (10%) of the SAC is located within 200m of the A4101 and a total of 0.9ha (4%) within 200m of the A461.

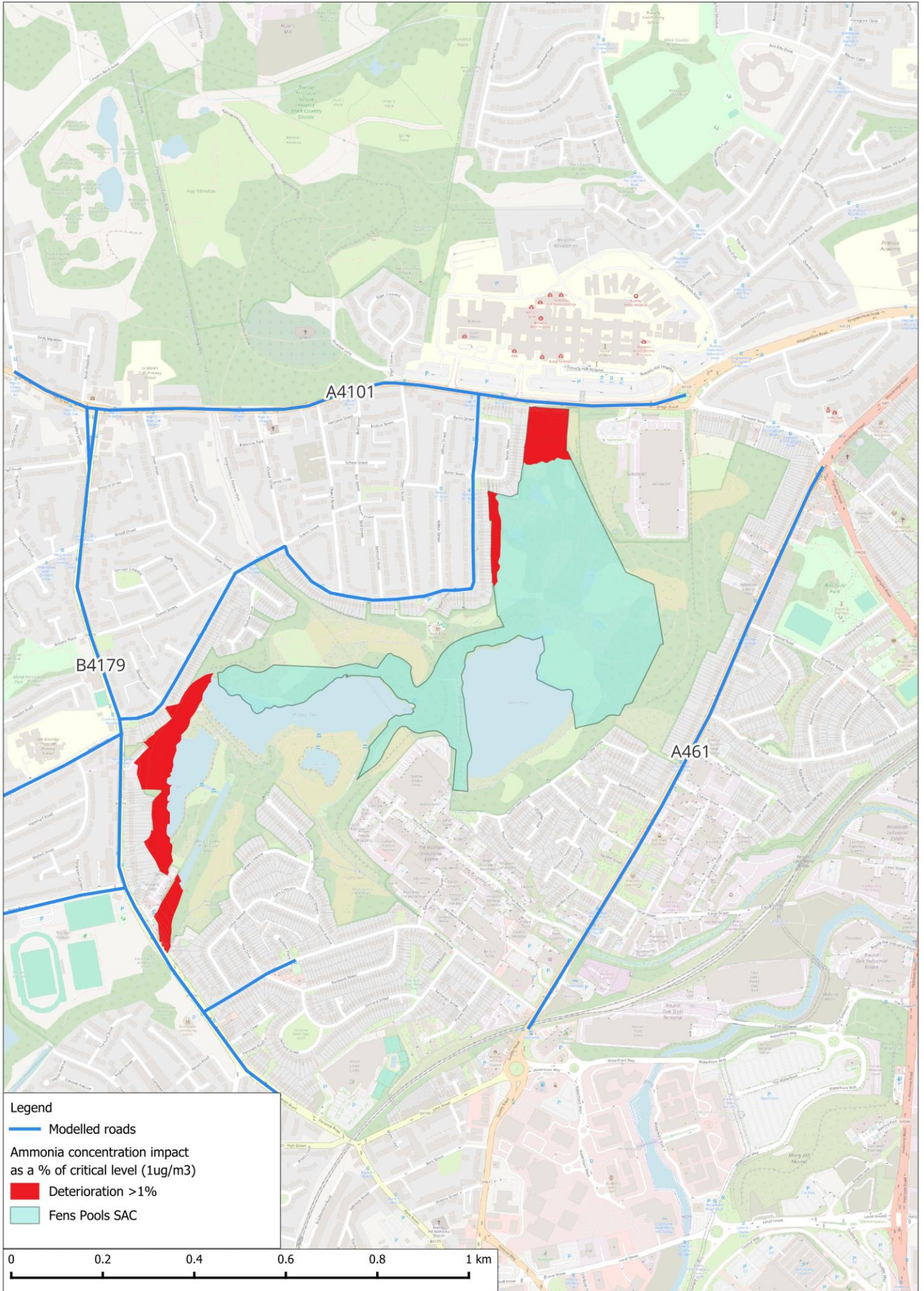
⁵⁴ At Regulation 19: <https://www.wolverhampton.gov.uk/sites/default/files/2024-11/WLP%20Reg%2019%20Habitat%20Regulations%20Assessment%202024%20-%20Main%20Report.pdf>

- 6.53 The supplementary conservation advice⁵⁵ for the SAC describes how Great-crested Newts require aquatic habitats for breeding. Eggs are laid singly on pond vegetation in spring, and larvae develop over summer to emerge in August - October, normally taking 2-4 years to reach maturity. Juveniles spend most time on land, and all terrestrial phases may range a considerable distance from breeding sites. Fens Pools SAC comprises a number of pools (these areas of open water providing the breeding habitat), with associated swamp and fen habitats and also neutral and acidic grassland and scrub communities. The pools are surrounded by grassland and scrub slopes. Rough, tussock-rich grassland and areas of scrub and trees offer valuable terrestrial habitat for enabling newts to move across the site and provide newts with hibernacula during the winter. Impacts of nitrogen deposition and reduced air quality are potentially less of a risk for Great-crested Newts, given the role of the terrestrial habitats for Great-crested Newt in providing cover, hibernacula and connectivity between breeding ponds.
- 6.54 The HRA for the Wolverhampton Local Plan reports that the closest breeding pond used by the Great-crested Newts to the A4101 is over 300m, well beyond the 200m limit that any impacts of pollution might occur. The closest breeding pond to the A461 is approximately 150m to the west. None of the breeding pools are in areas that are predicated to exceed the 3 µg/m³ threshold for NH₃ in the 'with plans' scenario and none of the breeding pools are within the area where the 1% screening threshold is exceeded for Nitrogen deposition. Fens Pools SSSI is larger than the SAC and to some extent provides a buffer and protection for the core areas used by the newts.
- 6.55 Recent monitoring data of Great-crested Newts at Fens Pools (summarised in the Wolverhampton Local Plan HRA at Regulation 19) shows that it is the smaller ponds on the site that support the qualifying feature and that these are in good condition, with Great-crested Newts recorded at each.
- 6.56 Given the ecology of the interest feature, the locations of the breeding ponds and the good current status of the species at the site, risks from further deterioration in air quality as a result of traffic increases are minimal, particularly given the scale of change that the increased traffic will generate.

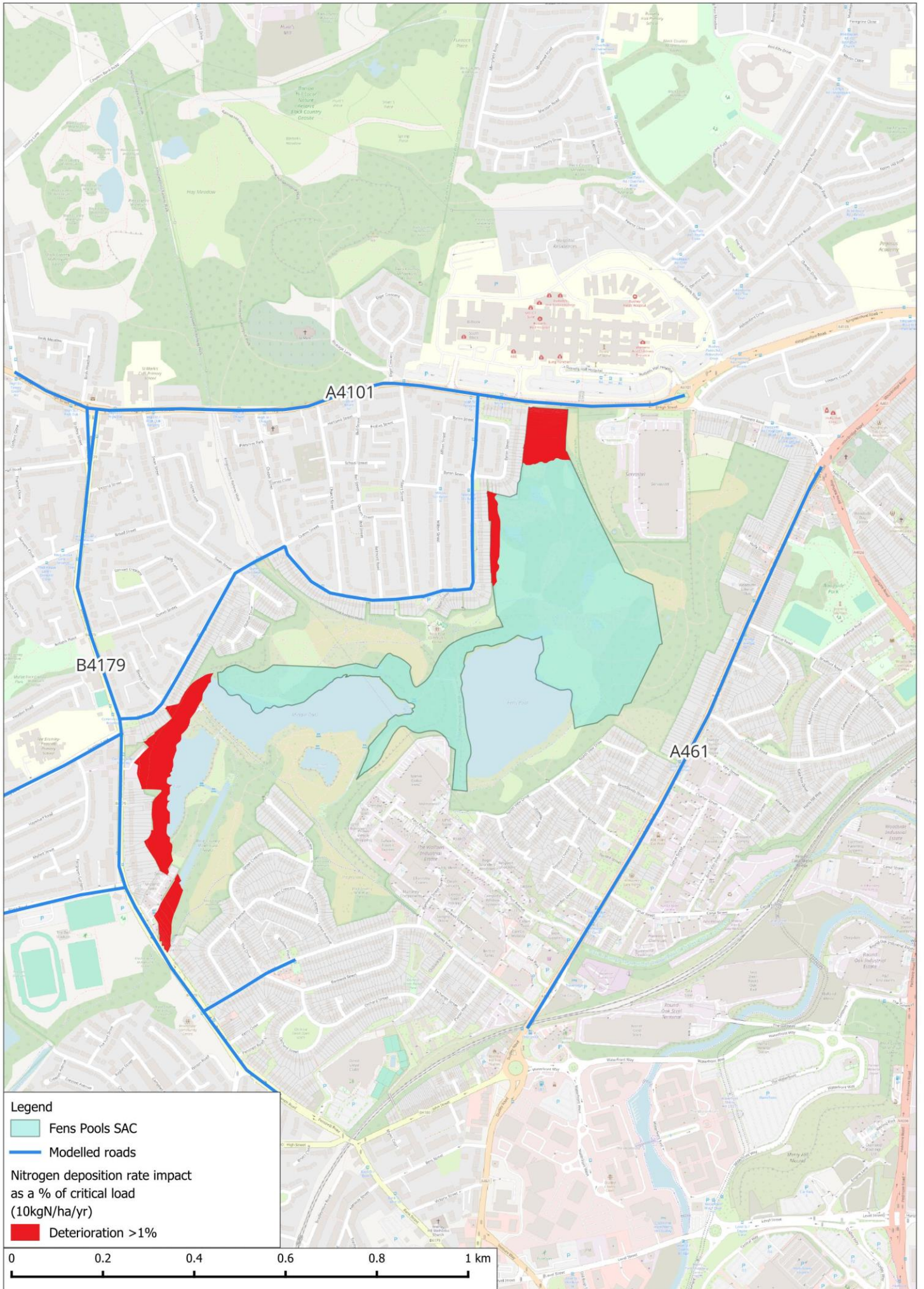
55

<https://designatedsites.naturalengland.org.uk/Terrestrial/TerrestrialSiteDetail.aspx?SiteCode=UK0030150&SiteName=fens&SiteNameDisplay=Fens%20Pools%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

Map 11: Fens Pools SAC, modelled roads and areas exceeding 1% process contribution for NH3



Map 12: Fens Pools SAC, modelled roads and areas exceeding 1% process contribution for Nitrogen deposition



7. Integrity Test

- 7.1 The South Staffordshire Local Plan Review at Submission has been subjected to an appropriate assessment and integrity test according to the statutory provisions laid out in the Habitats Regulations 2017 as amended.
- 7.2 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 effectiveness. Dedicated policy NB3 in the Plan secures mitigation and conforms with the strategic approach adopted by neighbouring authorities within the 15km zone of influence. With the mitigation secured strategically adverse effects on integrity are eliminated and there is no need for in-combination assessment.
- 7.3 Likely significant effects were also identified from recreation for Motte Meadows SAC as a result of development in and around Wheaton Aston (1 allocation, 18 dwellings). Given the limited access provision at the SAC, the scale of growth and the distance from the SAC, risks are low and potentially negligible. Recreation patterns may be influenced to some extent by the site design, layout etc. and as such project level HRA will need to assess recreation impacts for the allocation and any windfall. Lower tier, project-level assessment can be relied on to check for issues and ensure that adequate mitigation, if required, is secured. Adverse effects on integrity at Plan-level from recreation can therefore be ruled out, alone. Given the very localised nature of the issues and isolation of Motte Meadows, in-combination assessment would not change the conclusion. There are no allocations, settlements or sites in the emerging Stafford Local Plan (which is the only other local authority in close proximity to Motte Meadows) that are in close proximity.
- 7.4 Likely significant effects from water issues (relating to water quantity and quality) were triggered for Motte Meadows SAC, Cannock Chase SAC, West Midlands Meres and Mosses SAC/Midland Meres and Mosses Phase 1 Ramsar (Chartley Moss) and Midland Meres and Mosses Phase 2 Ramsar (Aqualate Mere). The appropriate assessment defers to conclusions from other competent authorities (the Environment Agency) and the relevant plans produced by the utility companies (which have been subject to HRA). Furthermore, Policy NB1 ensures general compliance with the Habitat Regulations and Policy NB7 provides the

necessary confidence that development can only proceed where water quality and supply issues have been addressed. As such adverse effects on integrity can be ruled out alone or in-combination.

- 7.5 We highlight that the latest round of WRMPs are likely to be finalised prior to the adoption of the South Staffordshire Local Plan Review, we therefore recommend the Council check the findings of the final WRMP HRAs alongside any updates or further changes to the Plan (and this HRA).
- 7.6 Likely significant effects were identified in the screening with respect to deterioration in air quality as a result of increased traffic associated with the overall quantum of growth, strategic allocations, housing and employment allocations. Relevant European sites are: Cannock Chase SAC, Cannock Extension Canal SAC and Fens Pools SAC.
- 7.7 At Cannock Chase SAC, modelling shows only very small parts of the SAC are affected, and these virtually all encompassing 'site fabric' rather than qualifying habitat. With an absence of heathland habitat and the confirmation that the relevant areas have not been identified or proposed for restoration, the conservation objectives for the SAC cannot be undermined. Adverse effects on integrity from reduced air quality can therefore be ruled out, alone or in-combination.
- 7.8 With respect to Cannock Extension Canal SAC it is possible to rule out adverse effects on integrity, alone or in-combination from air quality, given the specific ecology of Floating Water-plantain and its submerged nature at the Cannock Extension Canal SAC. The species is the sole qualifying feature of the SAC. The situation is unique in that the species in this growth form has unusual requirements that mean it is relatively robust with respect to changes in air quality. Natural England have confirmed they support this conclusion.
- 7.9 For Fens Pools SAC, it can be concluded that there will be no risks to the Great-crested Newt population or their supporting habitats in relation to reduced air quality caused by the relevant local plans, alone or in-combination. The SAC targets in respect of air quality to "restore concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site on the APIS" set out in the supplementary conservation advice will not be compromised as a result of the relevant local authority plans. This conclusion can be reached due to a range of factors:
- The breeding ponds are well away from the roads,
 - Areas of exceedance of the relevant thresholds do not coincide with Great-crested Newt breeding ponds,

- The impacts of air quality are of less relevance for Great-crested Newts away from the breeding ponds, as the air quality changes will have little implication in terms of impacting the role of the habitat to provide cover, connectivity and hibernacula,
- There is a reduction in 'with plans' contributions across the SAC as distance from road link increases,
- The good status of the newt populations within Fens Pools SAC.

7.10 As such it is concluded that the South Staffordshire Local Plan, submission version, is in conformity with the Habitats Regulations, and at a plan level a conclusion of no adverse effects on European site integrity, alone or in-combination with other plans or projects, can be drawn.

References

- Chapman, C. and Kite, B. (2021) *Guidance on decision-making thresholds for air pollution*. JNCC Report 696. Peterborough: JNCC.
- Environment Agency (2022a) *River basin management plan for the Humber River Basin District. Habitats Regulations Assessment*. Bristol: Environment Agency. Available at: https://assets.publishing.service.gov.uk/media/63524462d3bf7f193d35a0f7/Humber_river_basin_management_plan_2022_HRA.pdf.
- Environment Agency (2022b) *River basin management plan for the Severn River Basin District. Habitats Regulations Assessment*. Bristol: Environment Agency. Available at: https://assets.publishing.service.gov.uk/media/635247738fa8f554c470abf5/Severn_river_basin_management_plan_2022_HRA.pdf.
- Hale, R. *et al.* (2022) *Habitats Regulations Assessment Draft Water Resources Management Plan 2024 Severn Trent Water*. Ricardo.
- Hoskin, R. and Liley, D. (2017) *Cannock Chase SAC - Planning Evidence Base Review*. Unpub. Report 387. Footprint Ecology / Staffordshire County Council.
- Lansdown, R.V. and Wade, P.M. (2003) *Ecology of the Floating Water-plantain Luronium natans*. Conserving Natura 2000 Rivers Ecology Series 9. English Nature.
- Lee, H. *et al.* (2013) 'Impacts of aircraft emissions on the air quality near the ground', *Atmospheric Chemistry and Physics*, 13(11), pp. 5505–5522. Available at: <https://doi.org/10.5194/acp-13-5505-2013>.
- Li, S. (2024) *Traffic modelling to inform an assessment of air quality impacts on European sites in Staffordshire, Wolverhampton, Walsall, Sandwell, and Dudley*. Report by Sweco Ltd for local authority partnership.

- Liley, D. *et al.* (2010) *Evidence Base relating to Cannock Chase SAC and the Appropriate Assessment of Local Authority Core Strategies*. Footprint Ecology / Stafford Borough Council.
- Liley, D. (2012) *Cannock Chase SAC Visitor Report*. Unpublished Report. Footprint Ecology.
- Liley, D. and Lake, S. (2012) *Cannock Chase visitor observation study*. Footprint Ecology.
Wareham: Footprint Ecology.
- Mott MacDonald (2023) *Severn Trent DWMP Indicative habitats regulations assessment stage 1 screening report*. Available at: <https://www.severntrent.com/content/dam/stw-plc/about-us/drainage-and-wastewater-management-plan/2023/SVE-fDWMP23-Appendix-11-Indicative-Habitats-Regulation-Assessment.pdf>.
- Murray, J.K. *et al.* (2015) 'Assessing changes in the UK pet cat and dog populations: numbers and household ownership', *Veterinary Record*, 177(259). Available at:
<https://doi.org/10.1136/vr.103223>.
- Natural England (2018) *Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations*. NEA 001. Natural England. Available at:
<http://publications.naturalengland.org.uk/file/5431868963160064>.
- Panter, C. and Liley, D. (2019) *Cannock Chase Visitor Survey 2018*. Unpub. 494. Footprint Ecology / Cannock Chase SAC Partnership.
- PDSA and YouGov (2022) *PAW PDSA Animal wellbeing report 2022*.
- Pitcher, C. *et al.* (2022) *Habitats Regulations Assessment Revised Draft Water Resources Management Plan 2024*. South Staffordshire Water. Ricardo.

- Shelton, L. (2024) *Assessment of Air Quality Impacts on European Sites in Staffordshire, Wolverhampton, Walsall, Sandwell, and Dudley*. Report by Sweco Ltd for local authority partnership.
- Stroh, P.A. *et al.* (2020) 'Luronium natans (L.) Raf.', in *BSBI Online Plant Atlas 2020*. Available at: <https://plantatlas2020.org/atlas/2cd4p9h.fff>.
- Tyldesley, D. and Chapman, C. (2013) *The Habitats Regulations Handbook*. April 2024 update. DTA Publications. Available at: <https://www.dtapublications.co.uk/handbook/>.
- Walsh, C. (2023) *Creation of an Air Pollution Evidence Base Brief to Support Local Plan HRA*. Middlemarch.
- White, J., McGibbon, R. and Underhill-Day, J.C. (2012) *Impacts of recreation to Cannock Chase SAC*. Unpublished Report. Wareham: Footprint Ecology / Staffordshire County Council.

Appendix 1: 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.

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:

- 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 site⁵⁶, 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.

⁵⁶ <https://designatedsites.naturalengland.org.uk/>

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.
Motte 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.

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 lies 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		

Appendix 3: Screening for Likely Significant Effects

Screening for the publication version of the South Staffordshire Local Plan Review for likely significant effects (LSE). Red shaded rows indicate likely significant effects. Bold text indicates section headings within the Plan, with grey shading reflecting the main headings.

Plan section/policy	Description	LSE screening	Potential risks	Comments
PART A: CONTEXT AND DEVELOPMENT STRATEGY				
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.		
4 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.		
5 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.
Green Belt compensatory improvements	Introduces Policy DS2.	No LSE. Introductory text.		

South Staffordshire Local Plan HRA, Publication Version

Plan section/policy	Description	LSE screening	Potential risks	Comments
Policy DS2: Green Belt compensatory improvements	Policy ensuring adequate compensation for Green Belt release.	No LSE, general policy that could not have any conceivable adverse effect on a site.		
Open Countryside	Introduces Policy DS2.	No LSE. Introductory text.		
Policy DS3: Open Countryside	Policy for setting criteria for development in the Open Countryside.	No LSE, general plan-wide environmental protection.		
Housing	Context, justification and broad distribution for later housing policies. Sets target of 227 houses per annum, a provision of 4,726 dwellings to be delivered across the plan period (2023-2041).	No LSE, general statements, context and strategic text.		Section is scene setting and details are set (and assessed) in later policy.
Gypsies and Travellers	Sets out context and justification for later policies relating to Gypsies and Travellers.	No LSE, general statements and context.		Section is scene setting and details are set (and assessed) in later policy.
Employment	Provides background and context to estimates of necessary employment provision (107.45 ha).	No LSE, general statements and context.		Section is scene setting and details are set (and assessed) in later policy.
Development Needs and Spatial Strategy to 2041	Introductory text for Policy DS4.	No LSE. Introductory text.		
Policy DS4: Development Needs	Sets the overall quantum of growth (4,726 dwellings), 107.45 ha of employment land and 37 Gypsy and Traveller pitches.	LSE, policy which may have a significant effect on a European site alone.	Recreation (LSE triggered alone for and Cannock Chase SAC and Mottey Meadows SAC); Water issues (LSE triggered alone for Cannock Chase SAC, Mottey Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1	Overall quantum of growth and relevant to recreation, water and air quality pathways.

Plan section/policy	Description	LSE screening	Potential risks	Comments
			Ramsar, Midlands Meres & Mosses Phase 1 Ramsar); Air Quality (LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC).	
Policy DS5: the Spatial Strategy to 2041	Determines the distribution of growth and settlement tiers.	LSE, policy which may have a significant effect on a European site alone.	Recreation (LSE triggered alone for and Cannock Chase SAC and Mottey Meadows SAC); Water issues (LSE triggered alone for Cannock Chase SAC, Mottey Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar); Air Quality (LSE triggered alone for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC).	Overall quantum of growth and distribution taken to appropriate assessment and relevant to recreation, water and air quality pathways.
PART B: SITE ALLOCATIONS				
6 Site Allocations				
Housing	Introductory text and context.	No LSE. General policy that could not have any conceivable adverse effect on a site. Policy simply states overview rather than sets any specific details for allocations.		

South Staffordshire Local Plan HRA, Publication Version

Plan section/policy	Description	LSE screening	Potential risks	Comments
Strategic Master Plan Locations	Introductory text for MA1 and Policies SA1-SA2.	No LSE. Introductory text.		While not mentioned in the Policy, Master Plans could contribute to site mitigation by ensuring high quality green infrastructure that deflects access away from European sites.
Policy MA1: Master Planning Strategic Sites	Requires a comprehensive and deliverable site-wide Strategic Master Plan (SMP) for each of the strategic sites set out in Policies SA1-SA2.	No LSE. General policy that could not have any conceivable effect on a site.		
Land East of Bilbrook	Introductory text for strategic site.	No LSE. Introductory text.		
Policy SA1: Strategic development location: Land East of Bilbrook	Identifies a strategic site for major housing growth (minimum of 750 dwellings), new school, convenience store and community space.	LSE, policy which may have a significant effect a European site alone.	<p>Recreation (LSE triggered in-combination for Cannock Chase SAC);</p> <p>Water issues (LSE triggered in-combination for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar);</p> <p>Air Quality (LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC.)</p>	Location just touches the Cannock Chase SAC 15km zone and is least 10km from any other European site. Taken to appropriate assessment for air quality on a precautionary basis.
Land North of Penkrige	Introductory text for strategic site.	No LSE. Introductory text.		

South Staffordshire Local Plan HRA, Publication Version

Plan section/policy	Description	LSE screening	Potential risks	Comments
Policy SA2: Strategic development location: Land north of Penkridge	Identifies a strategic site for major housing growth (1,029 dwellings), new school, on-site retail and community space.	LSE, policy which may have a significant effect on a European site alone.	Recreation (LSE triggered alone for Cannock Chase SAC); Water issues (LSE triggered alone for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar); Air Quality (LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC).	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 SA3.	No LSE. Introductory text.		
Policy SA3: Housing Allocations	A summary of all (27) site allocations within DS5 by Tier within the plan period.	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 Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar); Air Quality (LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC).	

Plan section/policy	Description	LSE screening	Potential risks	Comments
Gypsy and Travellers	Introductory text for SA4.	No LSE. Introductory text.		
SA4: Gypsy and Travellers Allocations	Allocates 37 pitches across 12 sites.	LSE. Policy may have a significant effect on a European site alone.	<p>Recreation (LSE triggered in-combination for Cannock Chase SAC);</p> <p>Water issues (LSE triggered in-combination for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar);</p> <p>Air Quality (LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC).</p>	While relatively small increase in accommodation, all sites are within the Cannock Chase 15km zone.
Employment	Introductory text for SA5. Sets out individual employment sites.	No LSE. Introductory text.		
SA5: Employment allocations	Text listing employment sites and supply. A total of 372.5ha allocated for employment across 6 sites, including the West Midlands Interchange.	LSE. Policy may have a significant effect on a European site in-combination	<p>Water issues (LSE triggered in-combination for Cannock Chase SAC, Motte Meadows SAC, West Midlands Mosses SAC; Midlands Meres & Mosses Phase 1 Ramsar, Midlands Meres & Mosses Phase 1 Ramsar);</p> <p>Air Quality (LSE triggered in-combination for Cannock Chase SAC, Cannock Extension Canal SAC, Fens Pools SAC).</p>	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.

Plan section/policy	Description	LSE screening	Potential risks	Comments
PART C: HOMES AND COMMUNITIES				
7 Delivering the right homes				
Policy HC1: Housing Mix	Policy sets out requirements for property sizes and mix of affordable housing.	No LSE. Policy that cannot lead to development or other change.		
Policy HC2: Housing Density	Policy sets a minimum density (35 dwellings per ha) in Tier 1 settlements and infill locations (Tiers 1-3).	No LSE, policy that cannot lead to development or other change		
Policy HC3: Affordable Housing	Policy sets 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.		
Policy HC4: Homes for older people and others with special housing requirements	Policy will set requirements relating to meeting the needs of ageing population.	No LSE. Policy that cannot lead to development or other change.		
Policy HC5: Specialist Housing	Policy gives support for proposals for specialist housing and resists loss of specialist accommodation.	No LSE. Policy that cannot lead to development or other change.		
Policy HC6: Rural Exception Sites	Policy sets out criteria for affordable housing in rural settings and will support the developments where local needs are being met.	No LSE. Policy that cannot lead to development or other change.		
Policy HC7: First Homes Exception Sites	Policy with criteria whereby small exception sites of primarily First Homes will be supported.	No LSE. Policy that cannot lead to development or other change.		
Policy HC8: Self-build & Custom Housebuilding	Policy provides support for self-build and custom housebuilding.	No LSE. Policy that cannot lead to development or other change.		

Plan section/policy	Description	LSE screening	Potential risks	Comments
Policy HC9 – Gypsies, Travellers and Travelling Showpeople	Policy sets criteria where proposals for Gypsy and Traveller pitches will be supported.	No LSE. Policy that cannot lead to development or other change.		
8 Design and space standards				
Policy HC10: Design Requirements	Policy sets requirements to ensure high quality design.	No LSE. Policy that cannot lead to development or other change.		
Policy HC11: Protecting Amenity	Policy sets general principles relating to local amenity, addressing privacy, noise and disturbance and pollution.	No LSE. Policy that cannot lead to development or other change.		
Policy HC12: Space about dwellings and internal space	Policy states criteria for dwellings to meet layout requirements, internal space (to government standard) and external space requirements.	No LSE. Policy that cannot lead to development or other change.		
Policy HC13: Parking Provision	Policy sets parking standards within developments, including on-site, street and electric car parking (and charging).	No LSE. Policy that cannot lead to development or other change.		
9 Promoting successful and sustainable communities				
Policy HC14: Health Infrastructure	Policy protects existing healthcare infrastructure and ensures capacity of and access to healthcare facilities in relation to major residential developments.	No LSE. Policy that cannot lead to development or other change.		
Policy HC15 - Education	Policy provides support for expansion and/or improvement of educational facilities or construction of new schools to	No LSE. Policy that cannot lead to development or other change.		

South Staffordshire Local Plan HRA, Publication Version

Plan section/policy	Description	LSE screening	Potential risks	Comments
	meet demand from children in new development. Policy also protects existing education infrastructure and cross-references to the latest Staffordshire Education Infrastructure Contributions Policy.			
Policy HC16: South Staffordshire College (Rodbaston)	Policy supports 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 not set any specific details for growth and development at the site.
Policy HC17: Open Space	Policy protects 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.
Policy HC18: Sports Facilities and Playing Pitches	Policy protects existing sports facilities and pitches and require further provision from major developments.	No LSE. Policy that cannot lead to development or other change.		
Policy HC19: Green Infrastructure	Policy supports the protection, maintenance and enhancement of a network of interconnected, multi-functional and accessible green and blue spaces.	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.
PART D: ECONOMIC PROSPERITY				

South Staffordshire Local Plan HRA, Publication Version

Plan section/policy	Description	LSE screening	Potential risks	Comments
10 Building a strong local economy				
Policy EC1: Sustainable Economic Growth	Policy ensures sufficient supply of employment land, with growth focussed at currently identified employment areas.	No LSE. Policy that cannot lead to development or other change.		
Policy EC2: Retention of employment sites	Policy protects existing designated employment areas.	No LSE. Policy that cannot lead to development or other change.		
Policy EC3: Employment and skills	Policy states that sites between 100 or more residential units or 5000sqm of commercial floorspace must provide an Employment and Skills Plan (ESP).	No LSE. Policy that cannot lead to development or other change.		
Policy EC4: Rural Economy	Policy sets out criteria for rural employment (including development), to be in keeping with the natural landscape and character of the area.	No LSE. Policy that cannot lead to development or other change.		
Policy EC5: Tourist accommodation	Policy states that tourism development should be proportionate and sets criteria for small scale or expansion of existing tourism development.	No LSE. Policy that cannot lead to development or other change		Increased tourism could be linked to increased recreation at European sites, however there is no specific growth or sites promoted and policy is simply a very general and criteria-based approach.
Policy EC6: Rural workers dwellings	Criteria based policy setting out where new isolated dwellings in the countryside for rural workers will be permitted.	No LSE. Policy that cannot lead to development or other change.		Policy does not promote development or sites.
Policy EC7: Equine related development	Policy with criteria relating to horse related facilities.	No LSE. Policy that cannot lead to development or other change.		Policy itself cannot lead to development and therefore no LSE. Equine-related development close

Plan section/policy	Description	LSE screening	Potential risks	Comments
				to Cannock Chase SAC could however have risks (recreation increases) and this would need to be checked at project-level HRA.
11 Community services, facilities and infrastructure				
Policy EC8: Retail	Policy sets out a 3-tier hierarchy and ensures that any proposals preserve the local character, distinctiveness and community.	No LSE. Policy that cannot lead to development or other change.		
Policy EC9: Protecting community services and facilities	Policy supports the provision of new services and facilities and seek to protect against loss.	No LSE. Policy that cannot lead to development or other change.		
Policy EC10: Wolverhampton Halfpenny Green Airport	Policy supports development proposals related to general aviation and existing businesses at the site.	No LSE, policy or proposal the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in-combination with other policies in this plan or other plans and projects).		Airport currently used for private flights, tuition etc. While there is a risk of development perhaps leading to increased flights or traffic, there is no link to any European site. Policy EC10 simply supports development including replacement of existing outdated and unsustainable buildings and high-quality infill development. Policy is specific highly strategic and there is no detail to assess as to the potential for increased traffic or flights. Air quality impacts at ground level from aviation relate to planes flying low to the ground (landing and take-off) as clarified by Lee <i>et al</i> (2013); see also the

Plan section/policy	Description	LSE screening	Potential risks	Comments
				APIS website ⁵⁷ . The airport is therefore located too far from any European site (e.g. around 28km from Cannock Chase SAC, around 23.5km from Cannock Extension Canal SAC and 21km from Motte Meadows SAC). The Policy is clear that development proposals should be consistent with other Local Plan policies which ensures that Policy NB1 also applies.
Policy EC11: Infrastructure	Policy ensures planning permission will only be granted for proposals that have made suitable arrangements for the improvement or provision of necessary infrastructure.	No LSE. Policy that cannot lead to development or other change.		
Policy EC12: Sustainable transport	Policy maximises opportunities for sustainable travel and sets criteria for new development.	No LSE. Policy that cannot lead to development or other change.		Policy could play an incidental role in reducing air quality impacts to European sites, however it is not included in the Plan as mitigation and as such does not need be screened in for further consideration as part of appropriate assessment (following <i>People over Wind</i>).
Policy EC13: Broadband	Policy requires provision of fast and reliable broadband with new development.	No LSE. Policy that cannot lead to development or other change.		

⁵⁷ <https://www.apis.ac.uk/srcl/modelling-emissions>

Plan section/policy	Description	LSE screening	Potential risks	Comments
PART E: THE NATURAL AND BUILT ENVIRONMENT				
Policy NB1: Protecting, enhancing and expanding natural assets	Policy ensures the protection, enhancement and restoration of the natural environment.	No LSE. General plan-wide environmental protection/site safeguarding policy.		Policy wording ensures protection for European sites and highlights the requirements of the Habitats Regulations in a general manner. Wording is not specific in terms of mitigation requirements and therefore does not need be screened in for further consideration as part of appropriate assessment (following <i>People over Wind</i>).
Policy NB2: Biodiversity	Policy requires new development proposals to consider biodiversity and secures biodiversity net gain.	No LSE. General plan-wide environmental protection/site safeguarding policy.		General policy with benefits for biodiversity.
Policy 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 alone (Cannock Chase SAC).	Policy sets specific mitigation requirements relating to the SAC and therefore taken to appropriate assessment (following <i>People over Wind</i>).
Policy NB4: Landscape Character	Policy protects and enhance landscapes.	No LSE. General plan-wide environmental protection policy.		
13 Climate change and sustainable development				
Policy NB5: Renewable and low carbon energy generation	Policy indicates general in-principle support for renewable or sustainable energy schemes and sets criteria for such proposals.	No LSE. Policy that cannot lead to development or other change.		Policy does not promote any specific sites or locations.

Plan section/policy	Description	LSE screening	Potential risks	Comments
Policy NB6A: Net zero build residential development (operational energy)	Policy sets out general criteria for new proposals to achieve net zero.	No LSE. General plan-wide environmental protection policy.		
Policy NB6B: New build non-residential development (operational energy)	Policy that supports the use of on-site renewable energy and encourages energy efficiency (a minimum of 15%).	No LSE. General plan-wide environmental protection policy.		
Policy NB6C: Embodied carbon and waste	Policy encourages the lifetime assessment of carbon for new developments and aims to limit embodied carbon in larger scale developments.	No LSE. Policy that cannot lead to development or other change.		
Policy NB7: Managing flood risk, Sustainable urban drainage systems & water quality	Policy sets requirements for sustainable drainage and water quality.	No LSE. General plan-wide environmental protection policy.		Potentially beneficial for European sites. Wording is not specific in terms of mitigation requirements or European sites and therefore does not need be screened in for further consideration as part of appropriate assessment (following <i>People over Wind</i>).
14 Enhancing the Historic Environment				
Policy NB8: Protection and enhancement of the historic environment and heritage assets	Policy to promote the conservation and enhancement of the historic environment and resist the loss of heritage assets.	No LSE. General plan-wide protection policy.		
Policy NB9: Canal Network	Policy sets criteria for any new canal-side development and encourages the use of canals for recreation benefits, highlighting their importance as part of the community.	No LSE. General plan-wide environmental protection policy.		Cannock Extension Canal SAC is a European site but lies just outside the Local Plan area, as such it will not be affected by this policy. Policy highlights the importance of Canals for recreation and promotion of

Plan section/policy	Description	LSE screening	Potential risks	Comments
				the Canal network for recreation may help deflect recreation pressure from more sensitive sites.
PART F: MONITORING				
Appendices	List of evidence base, maps for individual sites/proformas and glossary	No LSE. General administrative text and additional information.		

Appendix 4: Housing allocations (Policies SA1, SA2 and SA3) and distances to European sites

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	Cannock Chase SAC	Cannock Extension Canal SAC	Fens Pools SAC	Midland Meres & Mosses - Phase 1 Ramsar	Midland Meres & Mosses - Phase 2 Ramsar	Mottey Meadows SAC	Pasturefields Salt Marsh SAC	West Midlands Mosses SAC
519	POLICY SA1: Land East of Bilbrook	Bilbrook	750	15.0	13.1	13.7	27.6	19.2	10.0	23.7	27.6
010, 420, 584	POLICY SA2: Land North of Penkridge	Penkridge	1,029	4.9	12.2	25.7	15.1	14.0	7.8	11.1	15.1
Tier 1 Settlements:											
213	Bilbrook House	Bilbrook	13	16.0	14.3	14.5	28.4	19.0	9.8	24.4	28.4
419 a&b	Land at Keepers Lane and Wergs Hall Rd	Codsall	317	16.6	14.7	13.9	29.1	19.1	10.1	25.2	29.1
224	Land adjacent to Station Road	Codsall	85	16.7	15.5	15.1	28.9	18.0	9.0	24.9	28.9
228	Former Adult Training Centre off Histons Hill	Codsall	29	16.4	15.1	14.8	28.7	18.7	9.5	24.8	28.7
523	Land east of Wolverhampton Road	Cheslyn Hay	49	7.7	4.7	18.1	21.4	22.5	14.2	18.1	21.4
119a	Land adjoining Saredon Road	Cheslyn Hay	60	6.9	4.8	18.8	20.7	21.9	13.8	17.3	20.7
141	154a Walsall Road	Great Wyrley	31	6.5	2.7	19.6	20.2	23.8	15.9	17.1	20.2
136	Land at Landywood Lane	Great Wyrley	155	7.5	3.4	18.3	21.3	23.6	15.4	18.1	21.3

South Staffordshire Local Plan HRA, Publication Version

Site ref	Description	Location	Approx. no. dwellings	Cannock Chase SAC	Cannock Extension Canal SAC	Fens Pools SAC	Midland Meres & Mosses - Phase 1 Ramsar	Midland Meres & Mosses - Phase 2 Ramsar	Mottey Meadows SAC	Pasturefields Salt Marsh SAC	West Midlands Mosses SAC
139	Pool View, Church Bridge	Great Wyrley	46	6.1	2.7	19.9	19.8	23.7	15.9	16.7	19.8
638	Loades PLC	Great Wyrley	29	8.1	3.0	17.9	21.8	24.3	16.1	18.7	21.8
704	Land off Norton Lane	Great Wyrley	31	6.2	2.4	20.0	19.9	24.0	16.3	16.8	19.9
536a	Land off Holly Lane	Great Wyrley	84	8.3	3.1	17.7	22.0	24.3	16.0	18.9	22.0
730	Fishers Farm	Great Wyrley	10	7.7	3.8	18.2	21.5	23.5	15.3	18.4	21.5
005	Land at Cherry Brook	Penkridge	88	4.9	11.3	24.9	15.8	15.3	8.7	11.8	15.8
006	Land at Boscomoor Lane	Penkridge	80	6.1	10.9	23.6	17.2	15.2	8.2	13.2	17.2
Tier 2 Settlements:											
617	Four Ashes Road	Brewood	63	11.0	12.9	20.0	22.4	14.9	6.0	18.4	22.4
016	Land at Pear Tree Farm	Huntington	39	2.0	7.9	24.6	15.0	19.4	12.7	11.4	15.0
274	Land south of White Hill	Kinver	120	33.7	27.2	8.8	38.5	36.0	28.1	43.3	47.1
239	Land west of Wrottesley Park Rd (south)	Perton	150	19.8	16.9	12.0	32.3	21.3	12.7	28.4	32.3
416	Land off Orton Lane	Wombourne	57	23.0	17.8	6.9	36.3	26.8	18.1	32.5	36.3
285, 562/415, 459	Pool House Road	Wombourne	223	25.0	19.7	6.7	36.1	27.9	19.5	34.5	38.2
Tier 3 Settlements:											
082	Land between A449 Stafford Rd & School Lane	Coven	48	10.4	10.8	18.1	22.9	17.5	8.6	19.1	22.9
397	Land adjacent to Brookhouse Lane	Featherstone	35	10.8	8.6	15.7	24.2	20.8	11.8	20.5	24.2
251	Hall End Farm	Pattingham	17	23.1	20.7	13.6	30.5	21.4	13.7	31.1	35.1

Site ref	Description	Location	Approx. no. dwellings	Cannock Chase SAC	Cannock Extension Canal SAC	Fens Pools SAC	Midland Meres & Mosses - Phase 1 Ramsar	Midland Meres & Mosses - Phase 2 Ramsar	Mottey Meadows SAC	Pasturefields Salt Marsh SAC	West Midlands Mosses SAC
313	Land off Himley Lane	Swindon	10	26.5	20.6	5.2	37.5	30.1	21.6	36.2	39.9
379	Land east of Ivetsey Road	Wheaton Aston	18	13.4	18.0	24.2	22.8	9.6	0.8	18.8	22.8
Other Sites Adjacent Neighbouring Towns and Cities:											
036c	Land at Weeping Cross (adjoining Stafford Borough)	South of Stafford	81	2.1	14.9	31.0	10.2	15.7	11.9	6.1	10.2