

# **Wiltshire Council**

# Wiltshire Local Plan Review Habitats Regulations Assessment Scoping Report

Final report
Prepared by LUC
January 2021



### **Wiltshire Council**

# Wiltshire Local Plan Review Habitats Regulations **Assessment Scoping Report**

**Project Number** 11332

Version	Status	Prepared	Checked	Approved	Date
1.	First draft to client	T. Hicks	G. Nightingale	D. Green	18.12.2020
2.	Second draft following client feedback	T. Hicks	D. Green	D. Green	11.01.2021
3.	Minor Amendment to second draft	G. Nightingale	G. Nightingale	G. Nightingale	12.01.2021

Bristol Edinburgh Glasgow London Manchester

landuse.co.uk

Land Use Consultants Ltd Registered in England Registered number 2549296 Registered office: 250 Waterloo Road London SE1 8RD

100% recycled paper

Landscape Design Strategic Planning & Assessment Development Planning Urban Design & Masterplanning Environmental Impact Assessment Landscape Planning & Assessment Landscape Management Ecology Historic Environment

GIS & Visualisation













### Contents

Wiltshire Local Plan Review Habitats Regulations Assessment January 2021

# **Contents**

Chapter 1		Appendix A
Introduction	2	Map of European Sites within 15km of Wiltshire County
Background to the Local Plan	2	Wittshire County
The requirement to undertake HRA of development plans	3	
Structure of this report	4	Appendix B Attributes of European sites within 15km of Wiltshire County
Chapter 2		Tokin of Wilding County
Approach to HRA	5	
••		Appendix C
Stages of HRA	5	Review of Other Plans and Policies
Relevant case law changes	7	
Screening methodology	8	Appendix D
Appropriate Assessment methodology	11	Map of Strategic Roads within Wiltshire County
Chapter 3		County
European sites in and around Wiltshire	12	
Chapter 4		
<b>Assessment Assumptions</b>	14	
Physical loss of habitat	14	
Physical loss of functionally linked habitat	15	
Non-physical disturbance	17	
Non-toxic contamination	17	
Air pollution	18	
Recreation and urban impacts	19	
Water quantity and quality	21	
Summary of screening assumptions	21	
Chapter 5		
•	<b>A-1</b>	

**A-3** 

**B-4** 

C-1

**D-1** 

# **Chapter 1**

## Introduction

- 1.1 LUC was commissioned by Wiltshire Council (WC) to carry out a Habitats Regulations Assessment (HRA) of its Local Plan Review. At this stage of the Wiltshire Local Plan Review, the HRA Scoping Report contains high level commentary on the HRA considerations for the Local Plan Review. As the Local Plan Review develops, further iterations of this report will be produced which, where required, will include additional assessment, including a Screening Assessment and Appropriate Assessment.
- **1.2** The purpose of this report is as follows:
- To identify which European sites have the potential to be affected by the Local Plan Review, including establishing the key information such as threats and vulnerabilities, current pressures and any species and habitat interdependencies; and
- To set out the scope of the subsequent HRA Screening Assessment and, if required, Appropriate Assessment.

### **Background to the Local Plan**

- 1.3 WC adopted its Core Strategy in January 2015, replacing the South Wiltshire Core Strategy as well as policies from the local plans of the former district councils. The updated Local Development Scheme (July 2020) sets out the timescales for preparing the Local Plan Review and specifies that the review will involve rolling forward the housing and employment requirements in the adopted Wiltshire Core Strategy to cover the period 2016 2036 and to maintain consistency with national policy. The Local Plan Review aims to review and refine the policies in the adopted Core Strategy, including the policies that were saved from the former District Council Local Plans and policies relating to town centres and recreation.
- **1.4** The Development Plan for Wiltshire comprises the Local Plan for Wiltshire comprising the following documents together with neighbourhood plans:
  - Wiltshire Core Strategy (January 2015);
- Saved policies from the former district local plans (as set out in Appendix D of the Wiltshire Core Strategy, January 2015);
- Chippenham Site Allocations Plan (May 2017);

- Wiltshire Housing Site Allocations Plan (February 2020);
   and
- Wiltshire and Swindon Minerals and Waste documents including:
  - Minerals Core Strategy (June 2009);
  - Waste Core Strategy (July 2009);
  - Minerals Development Control Policies (September 2009);
  - Waste Development Control Policies (September 2009);
  - Minerals Site Allocations (May 2013);
  - Waste Site Allocations (February 2013); and
  - Minerals Local Plan (November 2001).

# The requirement to undertake HRA of development plans

- 1.5 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007<sup>1</sup>; the currently applicable version is the Habitats Regulations 2017 (as amended)<sup>2</sup>. When preparing its Local Plan Review, WC is therefore required by law to carry out an HRA. WC can commission consultants to undertake HRA work on its behalf and this (the work documented in this report) is then reported to and considered by WC as the 'competent authority'. WC will consider this work and may only progress the Local Plan Review if it considers that the Plan will not adversely affect the integrity<sup>3</sup> of any European site. The requirement for authorities to comply with the Habitats Regulations when preparing a Local Plan is also noted in the Government's online Planning Practice Guidance (PPG).
- **1.6** HRA refers to the assessment of the potential effects of a development plan on one or more European sites, including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs):
  - SACs are designated under the Habitats Regulations as amended and target particular habitat types (specified in

- Annex 1 to the Habitats Directive) and species (specified in Annex II to the Habitats Directive). These annexes to the Habitats Directive list habitat types and species (excluding birds) considered to be most in need of conservation at a European level. Designation of SACs also has regard to the threats of degradation or destruction to which the sites are exposed and, before EU exit day, to the coherence of the Natura 2000 network of European sites. After EU exit day, regard is had to the importance of such sites for the coherence of the national site network.
- SPAs are areas classified<sup>4</sup> for rare and vulnerable birds or regularly occurring migratory species.
- **1.7** Potential SPAs (pSPAs)<sup>5</sup>, candidate SACs (cSACs)<sup>6</sup>, Sites of Community Importance (SCIs)<sup>7</sup> and Ramsar sites should also be included in the HRA.
  - Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).
- **1.8** For ease of reference during HRA, these designations can be collectively referred to as European sites<sup>8</sup> despite Ramsar designations being at the international level.
- 1.9 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or the whole development plan, would adversely affect the integrity of the European site in question either alone or in combination with other plans and projects. An unfavourable conclusion to HRA would pinpoint areas that require amendment or deletion of policies or sites and allow iterative development of the plan as a whole. The HRA would then be repeated after each deletion or amendment. This is judged in terms of the implications of the plan for the 'qualifying features' for which the European site was designated, i.e.:
- SACs Annex I habitat types and Annex II species<sup>9</sup>;

The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (2007) SI No. 2007/1843.
 The Conservation of Habitats and Species Regulations 2017 (2017) SI No.

The Conservation of Habitats and Species Regulations 2017 (2017) SI No. 2017/1012, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579).
 The integrity of a site is the coherence of its ecological structure and function,

<sup>&</sup>lt;sup>3</sup> The integrity of a site is 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 designated. (Source: UK Government <u>Planning Practice Guidance</u>)

<sup>&</sup>lt;sup>4</sup> Classified (a) before the day of the UK's exit from the EU (31 January 2020) in accordance with Article 4(1) or 4(2) of the European Union Wild Birds Directive for rare and vulnerable birds (as listed in Annex I of the Directive), and under Article 4(2) for regularly occurring migratory species not listed in Annex I, or (b) after exit day under the retained transposing regulations.

 <sup>&</sup>lt;sup>5</sup> Potential SPAs are sites that have been approved by the Minister for formal consultation but not yet proposed to the European Commission, as listed on the GOV.UK website.
 <sup>6</sup> Candidate SACs are sites that have been submitted to the European

Commission, but not yet formally adopted, as listed on the JNCC's <u>SAC list</u>.

7 SCIs are sites that had been adopted by the European Commission before the day of the UK's exit from the EU (31 January 2020) but not yet formally designated as SACs by the UK Government.

designated as SACs by the UK Government. § The term 'Natura 2000 sites' can also be used interchangeably with 'European sites' in the context of HRA, although the latter term is used throughout this report

<sup>&</sup>lt;sup>9</sup> Ås listed in the site's citation on the JNCC website (all features of European importance, both primary and non-primary, need to be considered).

# Chapter 1 Introduction

Wiltshire Local Plan Review Habitats Regulations Assessment January 2021

- SPAs Annex I birds and regularly occurring migratory species not listed in Annex I<sup>10</sup>;
- Ramsar sites the reasons for listing the site under the Convention<sup>11</sup>.
- **1.10** Significantly, HRA is based on the precautionary principle, meaning that where uncertainty or doubt remains, an adverse impact should be assumed.

### Structure of this report

- **1.11** This chapter has introduced the requirement to undertake HRA of the Local Plan Review. The remainder of the report is structured as follows:
  - Chapter 2 describes the approach to the HRA. It also describes recent case law, summarises the key issues that will need to be considered during the HRA process and describes the identification of European sites in and around WC that could be affected by the Local Plan Review.
  - Chapter 3 describes the European sites in and around WC and their key vulnerabilities.
  - Chapter 4 sets out the assumptions of the assessment and explores each impact pathway in turn.
- Chapter 5 describes the next steps that will be carried out in the HRA of the Local Plan Review.
- **1.12** The information in the main body of the report is supported by the following appendices:
- Appendix A presents a map showing the European sites in Wiltshire and within 15km of Wiltshire.
- Appendix B sets out detailed information about the European sites that are the focus of the HRA.
- Appendix C includes the review of other Local Authority Plans in relation to the potential for in-combination effects.
- Appendix D presents a map of strategic roads within Wiltshire County.

<sup>&</sup>lt;sup>10</sup> As identified in sections 3.1, 3.2 and 4.2 of the SPA's standard data form on the JNCC website; species for which the site assessment of population (abbreviated to 'Pop.' in table at section 3.1 and 3.2) is 'D' (non-significant population) are not qualifying features and are only relevant to the HRA if qualifying features are dependent on them. Information from SAC and Spa Standard Data Forms is also published by the JNCC in the 'Natura 2000 site

<sup>&</sup>lt;sup>11</sup> As set out in section 14 of the relevant 'Information Sheet on Ramsar Wetlands' available on the JNCC website.

# **Chapter 2**

# Approach to HRA

- 2.1 The HRA should be undertaken by the 'competent authority', in this case WC. LUC has been commissioned by WC to carry out HRA work on the Council's behalf, although this is to be reported to and considered by WC as the competent authority during the development of the Plan, before finally adopting the Local Plan Review. The HRA also typically requires close working with Natural England as the statutory nature conservation body<sup>12</sup> to obtain the necessary information, agree the process, outcomes and mitigation proposals. Where a plan or project requires appropriate assessment consultation with Natural England is a statutory requirement.
- **2.2** The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

### Stages of HRA

**2.3** The HRA of development plans is undertaken in stages (as described below) and should conclude whether or not a proposal would adversely affect the integrity of the European site in question.

### **Requirements of the Habitats Regulations**

- 2.4 In assessing the effects of a Plan in accordance with Regulation 105 of the Conservation of Habitats and Species Regulations 2017 (as amended), there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which would inform the 'Integrity Test'. The relevant sequence of questions is as follows:
  - Step 1: Under Reg. 105(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not, then the considerations proceed to Step 2.
  - Step 2: Under Reg. 105(1)(a) consider whether the plan is likely to have a significant effect on a European site, either alone or in combination with other plans or

<sup>&</sup>lt;sup>12</sup> Regulation 5 of The Conservation of Habitats and Species Regulations 2017 (SI 2017/1012), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579)

### Chapter 2 Approach to HRA

Wiltshire Local Plan Review Habitats Regulations Assessment January 2021

projects (the 'Significance Test'). If yes, proceed to Step 3

[Steps 1 and 2 are undertaken as part of Stage 1: HRA Screening in Table 2.1.]

Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the European Site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public.

[This step is undertaken during Stage 2: Appropriate Assessment shown in Table 2.1]

Step 4: In accordance with Reg. 105(4), but subject to Reg. 107, give effect to the land use plan only after having ascertained that the plan would not adversely affect the integrity of a European site. [This step follows Stage 2 where a finding of 'no adverse effect' is concluded. If it cannot be it proceeds to Step 5 as part of Stage 3 of the HRA process]

Step 5: Under Reg. 107, if Step 4 is unable to rule out adverse effects on the integrity of a European site and no alternative solutions exist then the competent authority may nevertheless agree to the plan or project if it must be carried out for 'imperative reasons of overriding public interest' (IROPI).

[This step is undertaken during Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation shown in Table 2.1]

### Typical stages of HRA

**2.5 Table 2.1** summarises the stages and associated tasks and outcomes typically involved in carrying out a full HRA, based on various guidance documents <sup>13,14,15</sup>.

Table 2.1: Stages of HRA

Stage	Task	Outcome
Stage 1: HRA Screening	Description of the development plan and confirmation that it is not directly connected with or necessary to the management of European sites.  Identification of potentially affected European sites and their conservation objectives <sup>16</sup> .  Review of other plans and projects.  Assessment of Likely Significant Effects of the development plan alone or in combination with other plans and projects, prior to consideration of avoidance or reduction ('mitigation') measures <sup>17</sup> .	Where effects are unlikely, prepare a 'finding of no significant effect report'.  Where effects judged likely, or lack of information to prove otherwise, proceed to Stag
Stage 2: Appropriate Assessment (where Stage 1 does not rule out likely significant effects)	Information gathering (development plan and European sites <sup>18</sup> ).  Impact prediction.  Evaluation of development plan impacts on conservation objectives of European sites.  Where impacts are considered to directly or indirectly affect qualifying features of European sites, identify how these effects will be avoided or reduced ('mitigation').	Appropriate Assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will be avoided or reduced, including the mechanisms and timescale for these mitigation measures.  If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.
Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation	Identify 'imperative reasons of overriding public interest' (IROPI).  Demonstrate no alternatives exist.  Identify potential compensatory measures.	This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous.

<sup>&</sup>lt;sup>13</sup> European Commission (2001) Assessment of plans and projects significantly affecting European Sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

<sup>14</sup> UK Government Planning Practice Guidance, available from https://www.gov.uk/guidance/appropriate-assessment

<sup>&</sup>lt;sup>15</sup> The HRA Handbook. David Tyldesley & Associates, a subscription based online quidance document:

https://www.dtapublications.co.uk/handbook/European

<sup>&</sup>lt;sup>16</sup> Conservation objectives are published by Natural England for SACs and

To In line with the CJEU judgment in Case C-323/17 People Over Wind v Coillte Teoranta, mitigation must only be taken into consideration at this stage and not during Stage 1: HRA Screening.

<sup>&</sup>lt;sup>18</sup> In addition to European site citations and conservation objectives, key information sources for understanding factors contributing to the integrity of European sites include (where available) conservation objectives supplementary advice and <u>Site Improvement Plans</u> prepared by Natural England.

2.6 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified only very occasionally and would involve engagement with the relevant Government department.

### Relevant case law changes

- **2.7** This HRA will be prepared in accordance with relevant case law findings, including most notably the 'People over Wind' and 'Holohan' rulings from the Court of Justice for the European Union (CJEU).
- 2.8 The People over Wind, Peter Sweetman v Coillte Teoranta (April 2018) judgment ruled that Article 6(3) of the Habitats Directive should be interpreted as meaning that mitigation measures should be assessed as part of an Appropriate Assessment and should not be taken into account at the screening stage. The precise wording of the ruling is as follows:
- "Article 6(3) ......must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site."
- 2.9 In light of the above, the HRA screening stage will not rely upon avoidance or mitigation measures to draw conclusions as to whether the Local Plan Review could result in 'likely significant effects' on European sites, with any such measures being considered at the Appropriate Assessment stage as relevant.
- **2.10** The HRA will also fully consider the *Holohan v An Bord Pleanala* (November 2018) judgement which stated that:

"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.

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

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

- **2.11** LUC will fully consider the potential for effects on species and habitats, including those not listed as qualifying features, to result in secondary effects upon the qualifying features of European sites, including the potential for complex interactions and dependencies. In addition, the potential for offsite impacts, such as through impacts to functionally linked habitat, and or species and habitats located beyond the boundaries of European site, but which may be important in supporting the ecological processes of the qualifying features, has also been fully considered in this HRA.
- **2.12** In addition to this, the HRA will take into consideration the 'Wealden' judgement and the 'Dutch Nitrogen Case' judgements from the Court of Justice for the European Union.
- 2.13 Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority (2017) ruled that it was not appropriate to scope out the need for a detailed assessment for an individual plan or project based on the annual average daily traffic (AADT) figures detailed in the Design Manual for Roads and Bridges or the critical loads used by DEFRA or Environment Agency without considering the in-combination impacts with other plans and projects.
- **2.14** In light of this judgement, the HRA will therefore consider traffic growth based on the effects of development provided for by the Local Plan Review in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.
- **2.15** The 2018 'Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu (Dutch Nitrogen)' judgement stated that:

"May the positive effects of the autonomous decrease in the nitrogen deposition ... be taken into account in the appropriate assessment..., it is important that the autonomous decrease in the nitrogen deposition be monitored and, if it transpires that

the decrease is less favourable than had been assumed in the appropriate assessment, that adjustments, if required, be made."

- **2.16** The Dutch Nitrogen judgement also states that according to previous case law:
- "...it is only when it is sufficiently certain that a measure will make an effective contribution to avoiding harm to the integrity of the site concerned, by guaranteeing beyond all reasonable doubt that the plan or project at issue will not adversely affect the integrity of that site, that such a measure may be taken into consideration in the 'appropriate assessment' within the meaning of Article 6(3) of the Habitats Directive".
- **2.17** The HRA of the Local Plan Review will therefore only consider the existence of conservation and/or preventative measures if the expected benefits of those measures are certain at the time of the assessment. The HRA will also ensure that if a threshold approach is applied it will consider the risk of significant effects being produced even if below the threshold values to ensure that there is no adverse effect on integrity of the European sites.

## Screening methodology

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

Table 2.2: Stages of HRA screening

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

Regulation	Stage required by Regulation
	either alone or in combination with other plans or projects
Reg. 67	8) Coordination where more than one competent authority is involved in screening the plans or projects

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

# Identification of European sites which may be affected by the Local Plan Review

- 2.20 To initiate the search of European sites that could potentially be affected by the Local Plan Review, it is established practice in HRAs to consider European sites within the local planning authority area covered by a Plan, and also within a buffer distance from the boundary of the Plan area.
- **2.21** A distance of 15km from the WC boundary was used as a starting point to identify European sites that could be affected by impacts relating to the Local Plan Review. The use of this distance is common practice in HRAs of English Local Plans. In addition to this, consideration was also given to European sites potentially connected to the plan area beyond this distance, for example through hydrological pathways or recreational visits by residents of Wiltshire. Water quantity and quality impacts to the River Avon SAC were considered on a catchment basis with particular regard to elevated levels of phosphate.

### Potential impacts of the Local Plan on European sites

- **2.22** In our experience of HRA of Local Plans, and based on previous statutory consultee comments on HRAs undertaken elsewhere, the type of development (and related activities) that are permitted by Local Plans have the potential to result in the following broad types of impacts that could affect European sites:
- Physical loss of or damage to habitats e.g. from development or activities within the European sites themselves or at functionally-linked sites;
- Non-physical disturbance e.g. noise, vibration or light from construction or development in close proximity to sensitive species;

- Non-toxic contamination e.g. from creation of dust which can smother terrestrial habitats, affect turbidity of aquatic habitats and contribute to nutrient enrichment;
- Recreation pressure e.g. dog walking, cycling, trampling, littering, fire, or predation by pets;
- Air pollution from changes in traffic volumes on roads close to sensitive habitats; and
- Changes in water quality or quantity e.g. changes in flow caused by abstraction/discharge, accidental pollution, or increase nutrient loading from sewage treatment.
- **2.23** Further consideration of the types of impact that could be relevant to the Local Plan Review and possible impact pathways to European sites is provided in **Chapter 4**.

### Assessment of 'likely significant effect'

- 2.24 As required under Regulation 105 of The Conservation of Habitats and Species Regulations 2017 (SI 2017/1012), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), an assessment will be undertaken of the 'likely significant effects' of the policy approaches set out within the draft Local Plan Review. The assessment will be undertaken to identify which policies would be likely to have a significant effect on European sites in Wiltshire (+15km). This assessment will need to be repeated with each iteration of the Local Plan Review.
- **2.25** A risk-based approach involving the application of the precautionary principle will be adopted in the assessment, such that a conclusion of 'no significant effect' will only be reached where it is considered very unlikely, based on current knowledge and the information available, that a proposal in the Local Plan Review would have a significant effect on the integrity of a European site.

### Interpretation of 'likely significant effect'

- **2.26** Relevant case law helps to interpret when effects should be considered as being likely to result in a significant effect, when carrying out HRA of a Plan.
- **2.27** In the Waddenzee case <sup>19</sup>, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:

- An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44).
- An effect should be considered 'significant', "if it undermines the conservation objectives" (para 48).
- Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).
- **2.28** An opinion delivered to the Court of Justice of the European Union<sup>20</sup> commented that:

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

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

### In-combination effects

- **2.30** Regulation 105 of the Habitats Regulations 2017 requires an Appropriate Assessment where "a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site". Therefore, where likely significant effects are identified for the Local Plan it is necessary to consider whether there may also be significant effects in combination with other plans or projects.
- 2.31 The first stage in identifying 'in-combination' effects involves identifying which other plans and projects in addition to the Local Plan Review may affect the European sites that will be the focus of this assessment. This exercise seeks to identify those components of nearby plans that could have an impact on the European sites within the WC boundary, e.g. areas or towns where additional housing or employment development is proposed near to the European sites (as there could be effects from the transport, water use, infrastructure

<sup>&</sup>lt;sup>19</sup> European Court of Justice in Case C-127/02 Landelijke Vereniging tot Behoud van de Waddenzee

 $<sup>^{\</sup>rm 20}$  Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

and recreation pressures associated with the new developments).

- 2.32 There are a large number of potentially relevant plans; therefore, the review has focused on planned spatial growth within authorities adjacent to WC (excluding parish and town councils). The findings of any associated HRA work for those plans have been reviewed where available. It is likely that other authorities' plans that are adjacent to the European sites included in this HRA may also need to be reviewed if the likelihood for in-combination effects is identified through the screening assessment, and these will be reviewed as part of the screening process.
- **2.33 Appendix C** presents the review of neighbouring plans, outlining the components of each plan that could have an impact on nearby European sites. This information will be updated as appropriate as the HRA for the Local Plan progresses. The following local authority plans have been considered:
  - Cotswold District Council;
  - Vale of White Horse District Council;
  - West Berkshire Council;
  - Swindon Borough Council;
  - Test Valley Borough Council;
  - New Forest District Council;
  - New Forest National Park Authority;
  - Dorset Council:
  - South Somerset District Council;
  - Mendip District Council;
  - Bath and North East Somerset Council;
  - South Gloucestershire Council; and
  - West of England Combined Authority.
- **2.34** In addition, **Appendix C** includes a summary of the transport and minerals and waste plans for the neighbouring counties.

### **Screening Assessment**

- **2.35** Each Local Plan policy (and option or site allocation, where relevant) will be considered, alone and in-combination with other policies, site allocations and/or plans from neighbouring authorities.
- **2.36** A risk-based approach involving the application of the precautionary principle will be adopted, such that a conclusion of 'no significant effect' will only been reached where it is considered unlikely, based on current knowledge and the

information available, that a Local Plan policy would have a significant effect on the integrity of a European site.

- 2.37 For some types of impacts, the potential for likely significant effects can been determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, where assumptions have been made, these are set out in **Chapter 4** Assessment Assumptions; these will be reviewed as the HRA progresses.
- **2.38** A screening matrix will be prepared to assess which draft policies (and options or site allocations) are likely to have a significant effect on European sites. The screening matrix will be appended to the HRA report and will be summarised in the main body of the report. The proposed structure of the screening matrix is shown in **Table 2.4** below.

Table 2.3: Proposed structure of the HRA screening matrix

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

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

Red	There are likely to be significant effects (will require Appropriate Assessment)
Amber	There may be significant effects, but this is currently uncertain (will require Appropriate Assessment).
Green	There are unlikely to be significant effects (will not require Appropriate Assessment).

**2.40** The Appropriate Assessment will then focus on those policies / options / site allocations that have been scoped in.

### **Appropriate Assessment methodology**

2.41 Following the screening stage, if likely significant effects on European sites are unable to be ruled out, the plan-making authority is required under Regulation 105 of the Habitats Regulations 2017 to make an 'Appropriate Assessment' of the implications of the plan for European sites, in view of their conservation objectives. European Commission Guidance states that the Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of European sites with respect to their conservation objectives and to their structure and function.

### Assessing the effects on site integrity

- **2.42** A site's integrity depends on it being able to sustain its 'qualifying features' (i.e. those Annex 1 habitats, Annex II species, and Annex 1 bird populations for which it has been designated) and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a site's conservation objectives is realised and where the site is capable of self-repair and renewal with a minimum of external management support.
- 2.43 A conclusion needs to be reached as to whether or not the Local Plan would adversely affect the integrity of a European site. As stated in the European Commission Guidance, assessing the effects on the site(s) integrity involves considering whether the predicted impacts of the Local Plan policies (either alone or in combination) have the potential to:
  - Cause delays to the achievement of conservation objectives for the site;
  - Interrupt progress towards the achievement of conservation objectives for the site;
- Disrupt those factors that help to maintain the favourable conditions of the site;
- Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site;
- Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem;
- Change the dynamics of relationships that define the structure or function of the site (e.g. relationships between soil and water, or animals and plants);
- Interfere with anticipated natural changes to the site;
- Reduce the extent of key habitats or the population of key species;

- Reduce the diversity of the site;
- Result in disturbance that could affect the population, density or balance between key species;
- Result in fragmentation; or
- Result in the loss of key features.
- **2.44** The conservation objectives for each European site (**Appendix B**) are generally to maintain the qualifying features in favourable condition. The Site Improvement Plans for each European site provide a high level overview of the issues (both current and predicted) affecting the condition of the European features on the site(s) and outline the priority measures required to improve the condition of the features. These have been drawn on to help to understand what is needed to maintain the integrity of the European sites.
- 2.45 For each European site where an uncertain or likely significant effect is identified in relation to the Local Plan, the potential impacts will be set out and judgements made (based on the information available) regarding whether the impact will have an adverse effect on the integrity of the site.

  Consideration will be given to the potential for mitigation measures to be implemented that could reduce the likelihood or severity of the potential impacts such that there would not be an adverse effect on the integrity of the site.

# **Chapter 3**

# **European sites in and around Wiltshire**

- **3.1** Geographical Information Systems (GIS) data have been used to map the locations and boundaries of European sites in and within 15km of the WC boundary (**Appendix A**), using publicly available data from Natural England. All European sites lying partially or wholly within 15km have been included, along with any further-distant European sites that could be significantly affected by development within Wiltshire. A distance of 15km is generally considered appropriate for identifying potential impact pathways, but European Sites located beyond this distance are included where they share functional ecological connectivity to impact sources associated with the Local Plan area (see **paragraph 2.11**), for example via river systems.
- **3.2** European sites identified for inclusion in the HRA are listed below in **Table 3.1** below. Detailed information about each site is provided in **Appendix B**.

Table 3.1: European sites in Wiltshire and within 15km of Wiltshire

European Site	Closest Distance / Location from Wiltshire County	
Special Areas of Conservation (SACs)		
Bath and Bradford on Avon Bats	Within Wiltshire	
Chilmark Quarries	Within Wiltshire	
Great Yews	Within Wiltshire	
Kennet and Lambourn Floodplain	Within Wiltshire	
North Meadow & Clattinger Farm	Within Wiltshire	
Pewsey Downs	Within Wiltshire	
Prescombe Down	Within Wiltshire	
River Avon	Within Wiltshire	
Salisbury Plain	Within Wiltshire	
The New Forest	Within Wiltshire	
Fontmell and Melbury Downs	Adjacent / south-west	
Mottisfont Bats	2.86km / north-east	

European Site	Closest Distance / Location from Wiltshire County
River Lambourn	3.41km / east
Kennet Valley Alderwoods	5.66km / north-east
Mells Valley	5.75km / west
Hackpen Hill	7.17km / north-east
Dorset Heaths	8.15km / south
Mendip Woodlands	8.46km / west
Solent Maritime	9.94km / south-east
Emer Bog	10.79km / east
Rodborough Common	10.98km / north-west
Cotswolds Beechwoods	14.24km / north-west
Special Protected Areas (SPAs	)
Porton Down	Within Wiltshire
Salisbury Plain	Within Wiltshire
New Forest	Adjacent / south
Avon Valley	7.99km / south
Solent and Southampton Water	9.12km / south-east
Solent and Dorset Coast	10.83km / south-east
Ramsar sites	
New Forest	Adjacent / south
Avon Valley	7.99km south
Dorset Heathlands	8.15km / south
1	

3.3 The attributes of these European sites which contribute to and define their integrity have been described within Appendix B. In doing so, reference was made to the Natura 2000 standard data forms published on the JNCC website, Natural England's Site Improvement Plans and Conservation Objectives Supplementary Advice. This analysis enables European site interest features to be identified, along with the features of each site which determine site integrity and the specific sensitivities of the site. This information will allow an analysis of how the potential impacts of the Local Plan may affect the integrity of each site.

# **Chapter 4**

# **Assessment Assumptions**

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

## **Physical loss of habitat**

- **4.4** Any development resulting from the Local Plan Review would take place within the County. Therefore, only European sites within the County's boundary could be affected through physical damage or loss of habitat from within the European site's boundaries. European sites which are within the County boundary and therefore have the potential to be affected by physical damage and/or loss from development include:
- Bath and Bradford on Avon Bats SAC;
- Chilmark Quarries SAC;
- Great Yews SAC;
- Kennet and Lambourn Floodplain SAC;
- North Meadow & Clattinger Farm SAC;
- Pewsey Downs SAC;
- Porton Down SPA;
- Prescombe Down SAC;
- River Avon SAC:
- Salisbury Plain SAC and SPA; and
- The New Forest SAC, SPA and Ramsar.

# Physical loss of functionally linked habitat

- **4.5** Habitat loss from development in areas outside of the European site boundaries may also result in likely significant effects where that habitat contributes towards maintaining the interest feature for which the European site is designated. This includes land which may provide offsite movement corridors or feeding and sheltering habitat for mobile species such as bats, birds and fish (usually referred to as 'functionally linked' habitat).
- **4.6** European sites which have been scoped out of the assessment as they are situated outside of the WC boundary and do not support qualifying features susceptible to offsite habitat loss include:
  - Cotswold Beechwoods SAC;
  - Emer Bog SAC;
  - Fontmell and Melbury Downs SAC;
- Hackpen Hill SAC;
- Kennet Valley Alderwoods SAC;
- Mendip Woodlands SAC;
- River Lambourn SAC; and
- Rodborough Common SAC.

### **Functionally Linked Habitat - Bats**

- **4.7** The following SACs are designated for supporting populations of bats:
  - Bath and Bradford on Avon Bats SAC (greater horseshoe bat Rhinolophus ferrumequinum, Bechstein's bat Myotis bechsteinii, and lesser horseshoe bat Rhinolophus hipposideros);
- Chilmark Quarries SAC (greater horseshoe bat, barbastelle bat Barbastella barbastellus, Bechstein's bat and, lesser horseshoe bat);
- Mottisfort SAC (barbastelle bat); and
- Mells Valley SAC (greater horseshoe bat).
- **4.8** Different bat species are considered to have different requirements of areas within which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost. Guidance from the Bat Conservation Trust<sup>21</sup> term this area 'Core Sustenance Zones' (CSZ). WC have also produced their own planning document<sup>22</sup> and termed this area 'Core Areas'.

These two terms are considered interchangeable for the purposes of this assessment, but the radii vary between the two documents as shown in **Table 4.1** below. In line with the precautionary principle, the larger of the two radii has been used in this assessment.

Table 4.1: Core areas for bats surrounding a roost

Species	Bat Conservation Trust Core Sustenance Zones (radius)	Wiltshire Bat SAC Planning Guidance Core Areas (radius)
Greater horseshoe bat	3km	4km
Lesser horseshoe bat	2km	2km
Bechstein's bat	3km	1.5km
Barbastelle	6km	6km*

<sup>\*</sup>except at Mottisfont Bats SAC, where local evidence justifies a requirement for a 7.5km radius<sup>23</sup>

- **4.9** Bath and Bradford on Avon Bats SAC has been scoped in for the potential loss of functionally linked habitat given it is within the WC boundary and the ZOI for this species (4km).
- **4.10** Chilmark Quarries SAC has been scoped in for the potential loss of functionally linked habitat given it is within the WC boundary and the ZOI for this species (4km).
- **4.11** A report from Natural England<sup>23</sup> concluded that a distance of 7.5km from the Mottisfont SAC should be used to identify plans that would be likely to have an impact upon habitats used by the Mottisfont Bat SAC barbastelles. Mottisfont Bats SAC has been scoped in for the potential loss of functionally linked habitat given its distance from the WC boundary (2.86km) and the ZOI for this species (7.5km)
- **4.12** Mells Valley SAC has been scoped out for loss of functionally linked habitat given its distance from the WC boundary (5.75km) and the ZOI for this species (4km).

### **Functionally Linked Habitat - Birds**

- **4.13** Natural England has advised that their recognised distance for the consideration of offsite functionally linked habitat is generally 2km, but for certain species, including most notably golden plover *Pluvialis apricaria* and lapwing *Vanellus vanellus*, a much greater distance of up to 15km may be appropriate.
- **4.14** Porton Down SPA is located within the WC boundary and is designated for breeding Stone curlew *Burhinus oedicnemus*. This species may rely upon land outside of the

<sup>&</sup>lt;sup>21</sup> https://www.bats.org.uk/our-work/landscapes-for-bats/core-sustenance-zones

https://cms.wiltshire.gov.uk/documents/s149190/BIO21BatSpecialAreasofConservationSACPlanningGuidanceforWiltshire.pdf

<sup>&</sup>lt;sup>23</sup> Jonathan Cox Associates (2010), Mottisfont Bats Special Area of Conservation (SAC) Protocol for Planning
Officers

SPA and therefore loss of offsite functionally linked habitat requires assessment at the screening stage.

- **4.15** Salisbury Plain SPA is located within the WC boundary and is designated for breeding Eurasian hobby *Falco subbuteo*, common quail *Coturnix coturnix*, stone-curlew and non-breeding hen harrier *Circus cyaneus*. These species may rely upon land outside of the SPA and therefore loss of offsite functionally linked habitat requires assessment at the screening stage.
- **4.16** New Forest SPA, which is designated for breeding Dartford warbler *Sylvia undata*, Eurasian hobby *Falco subbuteo*, European honey-buzzard *Pernis apivorus*, European nightjar *Caprimulgus europaeus*, woodlark *Lullula arborea*, wood warbler *Phylloscopus sibilatrix*, and wintering hen harrier *Circus cyaneus* has been scoped in for the potential of loss of functionally linked habitat given its distance from the WC boundary (Adjacent) and the ZOI for the qualifying species (2km).
- **4.17** European sites designated for birds which have been scoped out of the indirect effects of habitat loss given the ZOI of their qualifying bird species and their distance from the WC boundary include:
  - Avon Valley SPA and Ramsar ZOI, 2km. Distance to WC boundary, 7.99km;
- Solent and Southampton Water SPA and Ramsar ZOI,
   2km. Distance to WC boundary, 9.12km; and
- Solent and Dorset Coast SPA ZOI, 2km. Distance to WC boundary, 10.83km.

### Functionally Linked Habitat – Fish

- **4.18** The River Avon SAC is designated for supporting sea lamprey *Petromyzon marinus*, brook lamprey *Lampetra planeri*, Atlantic salmon *Salmo salar*, and bullhead *Cottus gobio*. The River Lambourn SAC is designated for supporting brook lamprey and bullhead.
- **4.19** Salmon and Sea lamprey are migratory and are therefore have the potential to be dependent upon watercourses located outside the boundaries of the SAC but with functional hydrological connectivity. The brook lamprey and bullhead are reliant on a mosaic of aquatic habitats, potentially including areas outside of the relevant SAC boundaries.
- **4.20** Given that the River Avon SAC is within the WC boundary and the River Lambourn SAC is within 4km of the WC boundary, both European sites have been scoped in for further assessment at the screening stage.

### Functionally Linked Habitat - Desmoulin's whorl snail

- **4.21** The River Avon SAC, Kennet and Lambourn Floodplain SAC and Solent Maritime SAC are designated for supporting Desmoulin's whorl snail *Vertigo moulinsiana*. Habitats outside of these SAC boundaries may contribute to maintaining the population of this species. However, given the sedentary nature of the species, it is considered that any functionally linked habitat, which contributes to maintaining the population of this species is likely to be within close proximity of each of the European site's boundaries.
- **4.22** The River Avon SAC and Kennet and Lambourn Floodplain SAC are located within the WC boundary and therefore have been scoped in for further consideration at the screening stage. The Solent Maritime SAC is located 9.94km from the WC boundary. Given this distance, the Solent Maritime SAC has been scoped out of further consideration at the screening stage.

### Functionally Linked Habitat - Other species

- **4.23** New Forest Ramsar is located adjacent to the WC boundary, qualifying species include southern damselfly *Coenagrion mercuriale* and stag beetle *Lucanus cervus*. Habitats located outside of the Ramsar may also contribute to maintaining the population of these species. The plan may result in the removal of functionally linked habitat. Therefore, the New Forest Ramsar has been scoped in for further consideration at the screening stage.
- 4.24 Dorset Heaths SAC and Ramsar located 8.15km from the WC boundary, qualifying species include southern damselfly and great crested newt Triturus cristatus for the SAC and southern damselfly for the Ramsar. Habitats located outside of this European site may also contribute to maintaining the population of these species. As great crested newt typically inhabit the land within 500m of their breeding ponds and are known to only travel up to 2km from their breeding ponds, it is reasoned that any great crested newt populations which form the meta-population associated within Dorset Heaths SAC would be within 2km of the Dorset Heaths SAC. Southern damselfly are known to only travel up to 1km during their lifetime and the Dorset Heaths SAC and Ramsar is located 8.25km from the WC boundary. Dorset Heaths SAC and Ramsar has been scoped out from further consideration at the screening stage.

Therefore, the following European sites have been scoped in for assessment at the screening stage in relation to the physical loss of habitat and/or functionally linked habitat:

- Bath and Bradford on Avon Bats SAC;
- Chilmark Quarries SAC;

### Assessment Assumptions

Wiltshire Local Plan Review Habitats Regulations Assessment January 2021

- Great Yews SAC;
- Kennet and Lambourn Floodplain SAC;
- Mottisfont Bats SAC:
- North Meadow & Clattinger Farm SAC;
- Pewsey Downs SAC;
- Porton Down SPA;
- Prescombe Down SAC;
- River Avon SAC
- River Lambourn SAC;
- Salisbury Plain SAC and SPA; and
- The New Forest SAC, SPA and Ramsar.

### Non-physical disturbance

- **4.25** Noise and vibration effects, e.g. during the construction of new housing or other development, are most likely to disturb bird species and are thus a key consideration with respect to European sites where birds are the qualifying features, although such effects may also impact upon some mammals and fish species. Artificial lighting at night (e.g. from street lamps, flood lighting and security lights) is most likely to affect bat populations and some nocturnal bird species, and therefore have an adverse effect on the integrity of European sites where bats or nocturnal birds are a qualifying feature.
- **4.26** It has been assumed (on a precautionary basis and based on our experience of previous HRAs and consultation with Natural England) that the effects of noise, vibration and light pollution are capable of causing an adverse effect if development takes place within 500 m of a European site (or functionally linked habitat) with qualifying features sensitive to these disturbances.
- **4.27** European sites which may be adversely affected by noise, vibration and light pollution as a result of the Local Plan Review include those within the County or those within 500m of the County, which support species susceptible to non-physical disturbance, including:
- Bath and Bradford on Avon Bats SAC;
- Chilmark Quarries SAC;
- Kennet and Lambourn Floodplain SAC;
- Prescombe Down SAC;
- River Avon SAC;
- Salisbury Plain SPA and SAC;
- The New Forest SAC, SPA and Ramsar; and
- Porton Down SPA;

**4.28** All other European sites are located over 500 m from the County boundary at the closest point and/or do not support species likely to be significantly affected as a result of noise, vibration and light pollution.

Therefore, the following European sites have been scoped in for assessment at the screening stage in relation to non-physical disturbance:

- Bath and Bradford on Avon Bats SAC;
- Chilmark Quarries SAC;
- Kennet and Lambourn Floodplain SAC;
- Prescombe Down SAC;
- River Avon SAC;
- Salisbury Plain SAC and SPA;
- The New Forest SAC, SPA and Ramsar; and
- Porton Down SPA.

### Non-toxic contamination

- **4.29** Non-toxic contamination can include the creation of dust which can smother habitats preventing natural processes, and may also lead to effects associated with increased sediment and dust which can potentially affect the turbidity of aquatic habitats, and can also contribute to nutrient enrichment which can lead to changes in the rate of vegetative succession and habitat composition.
- **4.30** The effects of non-toxic contamination are most likely to be significant if development takes place within 500 m of a European site with qualifying features sensitive to these disturbances, such as riparian and wetland habitats, or sites designated for habitats and plant species. This is the distance that, in our experience, provides a robust assessment of effects in plan-level HRA and meets with the agreement of Natural England.
- **4.31** Therefore, all European Sites within the WC boundary and within 500 m of the county boundary have been scoped into for potential effects.

Therefore, the following European sites have been scoped in for assessment at the screening stage in relation to non-toxic contamination:

- Bath and Bradford on Avon Bats SAC;
- Chilmark Quarries SAC;
- Fontmell and Melbury Downs SAC;
- Great Yews SAC;
- Kennet and Lambourn Floodplain SAC;

- North Meadow & Clattinger Farm SAC;
- Pewsey Downs SAC;
- Porton Down SPA;
- Prescombe Down SAC;
- River Avon SAC;
- Salisbury Plain SAC and SPA; and
- The New Forest SAC, SPA and Ramsar.

### Air pollution

- **4.32** Air pollution is most likely to affect European sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species may also be affected, either directly or indirectly, by any deterioration in habitat as a result of air pollution. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen (N) availability that can then affect plant health, productivity and species composition. All of the sites have plant and/or water habitats or species as their qualifying feature.
- **4.33** In terms of vehicle traffic, nitrogen oxides (NOx, i.e. NO and NO2) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NOx can cause eutrophication of soils and water. The HRA will refer to the UK Air Pollution Information System<sup>24</sup> to determine whether concentrations of NOx at the European sites are currently exceeding critical loads or not.
- **4.34** Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Document LA105: Air Quality<sup>25</sup> (which was produced to provide advice regarding the design, assessment and operation of trunk roads (including motorways)), it is assumed that air pollution from roads is unlikely to be significant beyond 200 m from the road itself. Where increases in traffic volumes are forecast, this 200 m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.
- **4.35** The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:

- Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
- Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10 km/hr or more; or
- Peak hour speed will change by 20 km/hr or more; or
- Road alignment will change by 5 m or more.
- **4.36** In line with the Wealden judgment<sup>26</sup>, Natural England now expects to see in-combination air pollution effects assessed. The implication of the judgment is that, where the road traffic effects of other plans or projects are known or can be reasonably estimated (including those of adopted plans or consented projects), then these should be included in road traffic modelling by the local authority whose local plan or project is being assessed. The screening criteria of 1,000 AADT should then be applied to the traffic flows of the plans in combination.
- **4.37** It has been assumed that only those roads forming part of the primary road network (motorways and 'A' roads) might be likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000 AADT etc.). As such, where a site is within 200m of only minor roads, no significant effect from traffic-related air pollution is considered to be the likely outcome.
- **4.38** Strategic roads within the WC boundary and a 15 km buffer include the motorways M3, M4, M5, M27, M32 and M271 and 70 'A' roads, which are highlighted in **Appendix D**. European Sites which are situated within 200 m of a strategic road include:
  - Avon Valley SPA and Ramsar (A31, A338);
  - Bath and Bradford on Avon Bats SAC (A4, A363, A3062);
- Fontmell and Melbury Downs SAC (A350);
- Kennet and Lambourn Floodplain SAC (A34, A338, A4);
- New Forest SPA and Ramsar (M27, A31, A336, A337, A35, A36);
- North Meadow and Clattinger SAC (A419);
- Porton Down SPA (A30, A343);
- River Avon SAC (A30, A3028, A3094, A31, A338, A350, A36, A360, A303, A343, A345);
- River Lambourn SAC (M4, A338, A34, A339, A4);

<sup>24</sup> http://www.apis.ac.uk/

<sup>&</sup>lt;sup>25</sup> https://www.standardsforhighways.co.uk/dmrb/search/10191621-07df-44a3-892e-c1d5c7a28d90

<sup>&</sup>lt;sup>26</sup> Wealden District Council v. (1) Secretary of State for Communities and Local Government; (2) Lewes District Council; (3) South Downs National Park Authority and Natural England

- Rodborough Common SAC (A46);
- Salisbury Plain SAC (A30, A303, A338, A342, A343, A360);
- Salisbury Plain SPA (A303, A338, A342, A360);
- Solent and Dorset Coast SPA (M271, A35, A46);
- Solent and Southampton SPA and Ramsar (M271, A35, A46);
- Solent Maritime SAC (M271, A35, A36); and
- The New Forest SAC (M27, A31, A336, A337, A35, A36).
- **4.39** Of these sites, the following European Sites were scoped out of further assessment based upon the information available, relevant experience and professional judgement:
  - Avon Valley SPA and Ramsar;
  - Bath and Bradford on Avon Bats SAC;
  - Kennet and Lambourn Floodplain SAC;
  - River Avon SAC; and
- River Lambourn SAC.
- **4.40** All of the other European sites are situated over 200m from strategic roads and were therefore scoped out.

# Therefore, the following European sites have been scoped in for assessment at the screening stage in relation to air pollution:

- Fontmell and Melbury Downs SAC;
- North Meadow and Clattinger SAC;
- Porton Down SPA;
- Rodborough Common SAC;
- Salisbury Plain SAC and SPA;
- Solent and Dorset Coast SPA;
- Solent and Southampton SPA and Ramsar;
- Solent Maritime SAC; and
- The New Forest SAC, SPA and Ramsar.

### Recreation and urban impacts

**4.41** Recreational activities and human presence can result in significant effects on European sites as a result of erosion and trampling, associated impacts such as fire and vandalism or disturbance to sensitive features, such as birds through both terrestrial and water-based forms of recreation.

- **4.42** The Local Plan Review will result in housing growth and associated population increase within the WC boundary. Where increases in population are likely to result in significant increases in recreation at a European site, either alone or incombination, the potential for likely significant effects will require assessment. At this stage, there is no definitive figure of how many homes the Local Plan Review will make provision for over the plan period.
- **4.43** European sites with qualifying bird species are likely to be particularly susceptible to recreational disturbances from walking, dog walking, angling, illegal use of off-road vehicles and motorbikes, wildfowling, and water sports. An increase in recreational pressure from development therefore has the potential to disturb bird populations of SPA and Ramsar sites as a result of both terrestrial and water-based recreation.
- **4.44** In addition, recreation can physically damage habitat as a result of trampling and also through erosion associated with boat wash and terrestrial activities such as use of vehicles.
- 4.45 Each European site will typically have a 'Zone of Influence' (ZOI) within which increases in population would be expected to result in likely significant effects. ZOIs are usually established following targeted visitor surveys and the findings are therefore typically specific to each European site (and often to specific areas within a European site). The findings are likely to be influenced by a number of complex and interacting factors and therefore it is not always appropriate to apply a generic or non-specific ZOI to a European Site. This is particularly the case in relation to coastal European sites, which have the potential to draw large number of visitors from areas much further afield.
- **4.46** In contrast to coastal European sites, the ZOI for non-coastal European sites are typically less variable, with visitors travelling from areas more local to the site. Although these sites are unique in their own right, they do not have the same draw as coastal sites and with recreational activities more easily managed and directed to alternative greenspace in the area. Using a precautionary approach and based on the findings of the Thames Basin Heath Delivery Framework, a ZOI of 7km was applied to all non-coastal European sites where alternative ZOI were not known. Given the sensitivities of the Thames Basin Heath SPA to recreational pressure, it was deemed appropriate to use the same ZOI in this assessment.
- **4.47** The following European Sites were scoped out of further assessment based upon the information available, relevant experience and professional judgement:
- Fontmell and Melbury Downs SAC;
- Great Yews SAC;
- Hackpen Hill SAC;

- Kennet and Lambourn Floodplain SAC;
- Kennet Valley Alderwoods SAC;
- Mendip Woodlands SAC;
- Pewsey Downs SAC;
- Prescombe Down SAC; and
- River Lambourn SAC.

Existing visitor survey work available for all other European sites within is summarised in Table 4.2: below.

Table 4.2: Zone of Influence (ZOI) derived from existing visitor survey work

European Site	ZOI
Bath and Bradford on Avon Bats SAC	2.66km <sup>27</sup>
(Green Lane Wood)	
Bath and Bradford on Avon Bats SAC	0.6km <sup>27</sup>
(Trowbridge - Core roosts)	
Bath and Bradford on Avon Bats SAC	3.36km <sup>27</sup>
(Trowbridge - Pickett and Clanger Woods)	
Bath and Bradford on Avon Bats SAC	3.2km <sup>28</sup>
(Other than Trowbridge)	
Chilmark Quarries SAC (Trowbridge - Core roosts)	0.6km <sup>27</sup>
Cotswolds Beechwoods SAC	20.5km <sup>29</sup>
Dorset Heathlands SAC and Ramsar	4.4km <sup>30</sup>
Emer Bog SAC	3.7km <sup>31</sup>
Mells Valley SAC	7.0km**
Mottisfont Bats SAC	7.5km <sup>32</sup>
North Meadow and Clattinger Farm SAC	15km
Porton Down SPA	6.4km*
River Avon SAC	7.0km**
Rodborough Common SAC	3.8km <sup>33</sup>
Salisbury Plain SAC and SPA	6.4km <sup>34</sup>

European Site	ZOI
Solent and Southampton Water SPA and Ramsar	5.6km <sup>35</sup>
Solent Maritime SAC	5.6km***
Avon Valley SPA and Ramsar	7.0km**
The New Forest SPA, SAC and Ramsar	20.0km <sup>36</sup>
Solent and Dorset Coast SPA	5.6km***

<sup>\*</sup>Assumed similar to Salisbury Plain SAC and SPA

4.48 A review of the European sites and their recreational ZOI determined that the following European sites do not have a recreational ZOI that extend into the WC boundary and can therefore be scoped out of further assessment:

- Avon Valley SPA and Ramsar;
- Dorset Heathlands SAC and Ramsar;
- Emer Bog SAC;
- Rodborough Common SAC;
- Solent and Dorset Coast SPA;
- Solent and Southampton Water SPA and Ramsar; and
- Solent Maritime SAC.

Therefore, the following European sites have been scoped in for assessment at the screening stage in relation to recreational pressure:

- Bath and Bradford on Avon Bats SAC;
- Chilmark Quarries SAC;
- Cotswolds Beechwoods SAC;
- Mells Valley SAC;
- Mottisfont Bats SAC;
- North Meadow and Clattinger Farm SAC;
- Porton Down SPA:
- River Avon SAC;
- Salisbury Plain SAC and SPA; and

<sup>\*\*</sup>Assumed 7.0km as detailed in paragraph 4.46

<sup>\*\*\*</sup>Assumed similar to Solent and Southampton Water SPA and Ramsar

<sup>&</sup>lt;sup>27</sup> Panter C., Lake S. & Liley D. (2018). Trowbridge Visitor Survey and Recreation Management Strategy

<sup>&</sup>lt;sup>28</sup> Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire. Issue 3.0. Wiltshire Council. 2015.

<sup>&</sup>lt;sup>29</sup> Panter, C & Calls, Z. (2019). Cotwold Beechwoods Visitor Survey 2019.

<sup>30</sup> Panter, C & Calls, Z. (2020). Dorset Heaths 2019 Visitor Survey

<sup>&</sup>lt;sup>31</sup> Habitats Regulations Assessment for Test Valley Revised Local Plan DPD. Unpublished visitor study by QA Research.

<sup>32</sup> Mottisfont Bats Special Area of Conservation (SAC) Protocol for Planning

Officers: Report to Natural England. Jonathan Cox Associates. 2010. <sup>33</sup> Panter, C & Calls, Z. (2019). Rodborough Common Visitor Survey. <sup>34</sup> Panter, C., & Liley, D. (2015). Salisbury Plain Visitor Survey 2015.

<sup>&</sup>lt;sup>35</sup> Solent Recreation Mitigation Strategy. BirdAware, 2019.

<sup>&</sup>lt;sup>36</sup> Sharpe, J., Lowen, J. & Liley, D. (2008). Changing patterns of visitor numbers within the New Forest National Park, with particular reference to the New Forest SPA

The New Forest SPA, SAC and Ramsar.

### Water quantity and quality

- **4.49** The following sites have qualifying features that have potential to be sensitive to changes in water quantity or quality:
  - Avon Valley SPA and Ramsar;
  - Dorset Heaths SAC and Ramsar;
  - Emer Bog SAC:
  - Fontmell and Melbury Downs SAC;
  - Great Yews SAC;
  - Kennet and Lambourn Floodplain SAC;
  - Kennet Valley Alderwoods SAC;
  - New Forest SAC, SPA and Ramsar;
- North Meadow & Clattinger Farm SAC;
- Pewsey Downs SAC;
- Porton Down SAC;
- Prescombe Down SAC;
- River Avon SAC;
- River Lambourn SAC;
- Salisbury Plain SAC and SPA;
- Solent and Southampton Water SPA and Ramsar; and
- Solent Maritime SAC.
- **4.50** All other European sites were scoped out as their qualifying features are not considered sensitive to changes in water quantity or quality.
- **4.51** European sites with the potential to be affected by changes in water quantity or quality are likely to be sites that lie within the WC boundary or those that are hydrologically connected to the WC boundary and therefore potentially effected by areas of development to be set out within the Local Plan Review.
- **4.52** Of the European Sites outside of the WC boundary, which are susceptible changes in water quantity and quality, the following were considered to be hydrological connected to the county:
  - Avon Valley SPA and Ramsar;

- Kennet Valley Alderwoods SAC;
- New Forest SPA, SAC and Ramsar;
- Solent and Southampton Water SPA and Ramsar; and
- Solent Maritime SAC.
- **4.53** Due to the lack of hydrological connectivity between the following European sites and the WC boundary, the following sites were scoped out of further assessment:
  - River Lambourn SAC;
- Dorset Heath SAC and Ramsar; and
- Emer Bog SAC.

Therefore, the following European sites have been scoped in for assessment at the screening stage in relation to changes in water quality or quantity:

- Avon Valley SPA and Ramsar;
- Fontmell and Melbury Downs SAC;
- Great Yews SAC:
- Kennet and Lambourn Floodplain SAC;
- Kennet Valley Alderwoods SAC;
- New Forest SAC, SPA and Ramsar;
- North Meadow & Clattinger Farm SAC;
- Pewsey Downs SAC;
- Porton Down SAC;
- Prescombe Down SAC;
- River Avon SAC;
- Salisbury Plain SAC and SPA;
- Solent and Southampton Water SPA and Ramsar; and
- Solent Maritime SAC.

### **Summary of screening assumptions**

### Summary of screening assumptions

**4.54 Table 4.3:** summarises, the outcome of the scoping assessment and which European Sites require further assessment at the screening stage in relation to each broad impact type.

Table 4.3: Summary of screening assumptions

European site	Physical damage/loss of habitat	Non-physical disturbance	Non-toxic contamination	Air pollution	Impacts of recreation	Water quantity and quality
Avon Valley Ramsar	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped In
Avon Valley SPA	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped In
Bath and Bradford on Avon Bats SAC	Scoped In*	Scoped In	Scoped In	Scoped Out	Scoped In	Scoped Out
Chilmark Quarries SAC	Scoped In*	Scoped In	Scoped In	Scoped Out	Scoped In	Scoped Out
Cotswolds Beechwoods SAC	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped In	Scoped Out
Dorset Heathlands Ramsar	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out
Dorset Heaths SAC	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out
Emer Bog SAC	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out
Fontmell and Melbury Downs SAC	Scoped Out	Scoped Out	Scoped In	Scoped In	Scoped Out	Scoped In
Great Yews SAC	Scoped In	Scoped Out	Scoped In	Scoped Out	Scoped Out	Scoped In
Hackpen Hill SAC	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out
Kennet and Lambourn Floodplain SAC	Scoped In*	Scoped In	Scoped In	Scoped Out	Scoped Out	Scoped In
Kennet Valley Alderwoods SAC	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped In
Mells Valley SAC	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped In	Scoped Out
Mendip Woodlands SAC	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out
Mottisfont Bats SAC	Scoped In <sup>^</sup>	Scoped Out	Scoped Out	Scoped Out	Scoped In	Scoped Out
North Meadow & Clattinger Farm SAC	Scoped In	Scoped Out	Scoped In	Scoped In	Scoped In	Scoped In
Pewsey Downs SAC	Scoped In	Scoped Out	Scoped In	Scoped Out	Scoped Out	Scoped In
Porton Down SPA	Scoped In*	Scoped In	Scoped In	Scoped In	Scoped In	Scoped In

# Chapter 4 Assessment Assumptions

Wiltshire Local Plan Review Habitats Regulations Assessment January 2021

European site	Physical damage/loss of habitat	Non-physical disturbance	Non-toxic contamination	Air pollution	Impacts of recreation	Water quantity and quality
Prescombe Down SAC	Scoped In	Scoped In	Scoped In	Scoped Out	Scoped Out	Scoped In
River Avon SAC	Scoped In*	Scoped In	Scoped In	Scoped Out	Scoped In	Scoped In
River Lambourn SAC	Scoped In^	Scoped Out	Scoped Out	Scoped Out	Scoped Out	Scoped Out
Rodborough Common SAC	Scoped Out	Scoped Out	Scoped Out	Scoped In	Scoped Out	Scoped Out
Salisbury Plain SAC	Scoped In	Scoped In	Scoped In	Scoped In	Scoped In	Scoped In
Salisbury Plain SPA	Scoped In*	Scoped In	Scoped In	Scoped In	Scoped In	Scoped In
Solent and Dorset Coast SPA	Scoped Out	Scoped Out	Scoped Out	Scoped In	Scoped Out	Scoped Out
Solent and Southampton Water SPA	Scoped Out	Scoped Out	Scoped Out	Scoped In	Scoped Out	Scoped In
Solent and Southampton Water Ramsar	Scoped Out	Scoped Out	Scoped Out	Scoped In	Scoped Out	Scoped In
Solent Maritime SAC	Scoped Out	Scoped Out	Scoped Out	Scoped In	Scoped Out	Scoped In
The New Forest Ramsar	Scoped In*	Scoped In	Scoped In	Scoped In	Scoped In	Scoped In
The New Forest SAC	Scoped In	Scoped In	Scoped In	Scoped In	Scoped In	Scoped In
The New Forest SPA	Scoped In*	Scoped In	Scoped In	Scoped In	Scoped In	Scoped In

<sup>\*</sup>Including Functionally linked habitat.

<sup>^</sup>Including functionally linked habitat only.

# **Chapter 5**

# **Consultation and Next Steps**

- **5.1** This Scoping Report has introduced the HRA process that will be undertaken in relation to the Local Plan Review. It has been produced to provide guidance for developing the Local Plan Review in the context of European sites and as an early reference point for stakeholders wishing to comment on the scope of the HRA.
- **5.2** This HRA Scoping Report is being published for public consultation starting 13th January 2021 until 9th March 2021. Whilst there is no formal requirement to do so at this stage, this document will be subject to consultation with Natural England to confirm that the proposed scope of the assessment is considered appropriate.
- **5.3** Consultees are requested to consider the following questions in particular:
  - Have we correctly identified the European sites that should be scoped-in to the HRA of the Local Plan Review (see Chapter 3 and Appendix A)?
  - Have we correctly identified the sensitivities of the scoped-in European sites to potential impacts from the Local Plan Review (see Chapter 4 and Appendix B)?
  - Are there other plans or major projects that we should take into account in the assessment of potential in-combination effects (Appendix C)?
  - Is the proposed approach to HRA of the Local Plan Review reasonable (see Chapters 2 and 4)?
- **5.4** Responses from consultees will be reviewed and any necessary amendments to the approach to and information in the HRA report will be made.
- **5.5** Following the methodology (**Chapter 2**), the HRA report will be progressed throughout the Local Plan Review process, with the HRA report relating to each iteration of the Local Plan Review being published during consultation periods. Specific consultation on subsequent HRA Reports will be undertaken with Natural England as the statutory consultation body for HRA as the Local Plan Review progresses.
- **5.6** After the consultation, the next stage of the HRA process will determine whether the Local Plan Review will result in any likely significant effects (LSE) to the European sites scoped into further assessment. Alongside information on the

# Chapter 5 Consultation and Next Steps

Wiltshire Local Plan Review Habitats Regulations Assessment January 2021

emerging Local Plan, the following key pieces of information will be reviewed within the LSE stage:

- Existing avoidance and mitigation strategies for European sites;
- Air pollution data from APIS in relation to European sites near to major roads; and
- Water resources management plans for Wiltshire and neighbouring authorities. European sites where LSE cannot be avoided will be required to proceed to Appropriate Assessment stage for the Adverse Effect on Integrity (AEoI) test.

# Appendix A

**Map of European Sites within 15km of Wiltshire County** 

# Appendix B

**Attributes of European sites** within 15km of Wiltshire County

### Bath and Bradford on Avon Bats SAC

### Site Description

The SAC as a whole supports 15% of the UK population of Greater Horseshoe bats *Rhinolophus ferrumequinum*, internationally-significant populations of Lesser Horseshoe *Rhinolophus hipposideros* and Bechstein's bats *Myotis bechsteinii*.

The SAC comprises four component sites: Brown's Folly, Box Mine, Winsley Mines, and Combe Down and Bathampton Down Mines. These are distributed over a wide geographical area to the south and east of Bath and have different known bat usages, which over the whole of the SAC include breeding, hibernation, swarming and dispersal. The sites are all abandoned limestone mines and some include areas of supporting habitat: broadleaved woodland and species rich calcareous grassland. The surrounding landscape provides feeding and commuting opportunities between the component SSSIs, other SAC sites and other undesignated roosts which is vital in supporting the bats throughout their life cycle. Features of significance within the wider landscape are watercourses, woodland, grazed pasture, hay meadows, hedgerows, linear trees and scrub.

### **Qualifying Features**

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

1	304	Greater horseshoe bat Rhinolophus ferrumequinum
1	323	Bechstein's bat Myotis bechsteinii

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

1303 Lesser horseshoe bat Rhinolophus hipposideros

### Special Area of Conservation objectives

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

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

### Site Improvement Plan<sup>37</sup>: pressures, threats and related development

- 1. Planning permission There is currently no formal way of assessing the cumulative impacts of "high disturbance" level surveys (e.g. mist netting, harp trapping, radiotracking) being carried out outside the SAC boundary which may have cumulative impacts on the features of the SAC. Similarly, there is no formal way of assessing cumulative impacts on the SAC from permissions granted by the different competent authorities.
- Change in land management Land ownership is fragmented and management has lapsed, particularly around the urban fringe of Bath
- Direct impact from third parties One-off acts of vandalism or impacts of recreational pursuits could have a devastating effect if done in close proximity to roosting bats.
- 4. **Feature location/extent/condition unknown** There is a lack of knowledge about the population of Bechstein's bat within the SAC and lack of data for their relationship to roosts, foraging and commuting within the wider landscape. This is a risk because it is difficult to determine the impacts of plans and projects on Bechstein's bat.
- 5. Offsite habitat availability/management There is a lack of knowledge as to usage of the wider landscape by the SAC species. Lack of knowledge compromises the ability to respond appropriately to threats such as development pressure and opportunities such as the use of agri-environment schemes in locations that will most greatly benefit bats.
- 6. **Public access/disturbance** There is continuous long-term disturbance by visitors, however the sites are managed in such a way that it does not present a significant pressure unless the volume and frequency of visitors were to increase. The threat to the sites come

<sup>&</sup>lt;sup>37</sup> Natural England - Site Improvement Plan: Bath and Bradford on Avon Bats (SIP011) http://publications.naturalengland.org.uk/publication/4564119772463104

### Bath and Bradford on Avon Bats SAC

from one-off events such as: fire juggling near to the maternity colony; use of aerosol spray paints underground; use of fuel of any type underground, and bonfires at the mine entrances.

- 7. Change to site condition Mine instability is particularly relevant at entrances where a collapse could make it unusable by bats. A collapse is likely to alter the entrance dimensions thereby affecting ventilation, temperature and humidity within the mines, and/or may cause bats to be killed or become entrapped. Due to mine instability it is also difficult to monitor bats effectively.
- 8. Inappropriate designation boundary Several undesignated sites support important populations of SAC bats. Some of these are under threat, and others are located in areas/landscapes where they could be offered greater protection and enhanced management of surrounding habitats if they were known to be special sites.

### **Chilmark Quarries SAC**

### **Site Description**

Chilmark Quarries SAC in Wiltshire comprises a series of disused mines, quarries and man-made follies which are used as hibernation roosts by an important assemblage of bat species, most notably Greater horseshoe *Rhinolophus ferrumequinum*, Lesser horseshoe *Rhinolophus hipposideros*, Bechstein's *Myotis bechsteinii* and Barbastelle *Barbastella barbastellus*. The surrounding woodland, grassland and open water habitats also provide a valuable roosting, breeding and feeding area for bats.

### **Qualifying Features**

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

1304	Greater horseshoe bat Rhinolophus ferrumequinum	
1308	Barbastelle Barbastella barbastellus	
1323	Bechstein's bat Myotis bechsteinii	
Annov	Appeal II appaign properties of gualifying facture, but not a primary reason for site colorion	

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

1303 Lesser horseshoe bat Rhinolophus hipposideros

### **Special Area of Conservation objectives**

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

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

### Site Improvement Plan<sup>38</sup>: pressures, threats and related development

- 1. **Public Access/Disturbance** Unprotected mine entrances on the site are vulnerable to unauthorised access which has the potential to cause direct/indirect harm to bats. Damage to/removal of bat grilles on entrances to follies at Fonthill Grottoes and resultant unauthorised access has potential for direct/indirect harm to bats.
- 2. **Natural changes to site conditions** Some of the mine structures are very unstable and subject to occasional rock falls. These could directly injure or trap bats, or indirectly affect them by blocking access or changing the conditions inside the mine.

<sup>&</sup>lt;sup>38</sup> Natural England - Site Improvement Plan: Chilmark Quarries (SIP044) http://publications.naturalengland.org.uk/publication/5962539112333312

### **Chilmark Quarries SAC**

- 3. Offsite habitat availability/management Lack of knowledge regarding usage of the wider landscape by SAC species. Lack of knowledge compromises the ability to respond appropriately to threats (such as development pressure) and opportunities (such as the use of agri-environment schemes in locations that will most benefit bats).
- 4. Planning Permission There is difficulty in determining the cumulative impacts of development, including operations carried out under a European Protected Species licence. There is currently no formal way of assessing the cumulative impacts of "high disturbance" level surveys (e.g. mist netting, radiotracking) being carried out inside or outside the SAC boundary which may have cumulative impacts on the target species.
- 5. Air Pollution Impact of atmospheric nitrogen deposition Nitrogen deposition exceeds site relevant critical loads.

### **Great Yews SAC**

### Site Description

Great Yews SAC is situated on gently sloping ground on the upper Chalk south of Salisbury, Wiltshire and comprises an extensive area of almost pure yew woodland with around 300 old trees, including many large and impressive individuals. The site has a long history as yew woodland and demonstrates the full structural and functional range expected of yew stands.

### **Qualifying Features**

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

91J0 Taxus baccata woods of the British Isles

### Special Area of Conservation objectives

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

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

### Site Improvement Plan<sup>39</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. **Deer -** Deer browsing is limiting the natural regeneration of yew via seedlings and layering. Protection of selected layering shoots/seedlings by fencing has been agreed.
- 2. **Natural changes to site conditions** Some of the mine structures are very unstable and subject to occasional rock falls. These could directly injure or trap bats, or indirectly affect them by blocking access or changing the conditions inside the mine.
- 3. Air Pollution risk of atmospheric nitrogen deposition Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site.

### Kennet and Lambourn Floodplain SAC

### Site Description

The River Lambourn is an example of a classic chalk stream with a seasonally dry winterbourne section. It is relatively unmodified and has near-natural flow characteristics. The river supports a characteristic range of aquatic plant communities of the *Ranunculion fluitantis* and *Callitricho-Batrachion* types. As well as being classified as SAC for its river type, the Lambourn is also of importance in supporting self-sustaining populations of Bullhead. An additional qualifying feature present is Brook lamprey.

<sup>&</sup>lt;sup>39</sup> Natural England - Site Improvement Plan: Great Yews (SIP094) http://publications.naturalengland.org.uk/publication/6012398850801664

### Kennet and Lambourn Floodplain SAC

The Kennet and Lambourn Floodplain SAC consists of a cluster of sites in the Kennet and Lambourn river valleys. These areas represent locations where the terrestrial snail *Vertigo moulinsiana* is particularly abundant.

### **Qualifying Features**

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

1016

Desmoulin's whorl snail Vertigo moulinsiana

### Special Area of Conservation objectives

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

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

### Site Improvement Plan<sup>40</sup>: pressures, threats and related development

- 1. **Siltation** An issue in several stretches of the river, mostly related to past modification of river morphology and flow rates. The river morphology is currently unfavourable, but being addressed by a river restoration plan. Sediment arising from highway runoff as well as from farmland continues to be of concern and there is a diffuse water pollution plan in place to address this.
- 2. Water Pollution Both sediment and nutrient input are of concern. Diffuse pollution has the potential to affect aquatic habitats and species as well as habitat quality in areas of riverside habitat supporting Vertigo moulinsiana. Diffuse pollution is arising from highway runoff as well as from farmland. Pollution also results from overflowing sewers (a result of high groundwater levels infiltrating sewers) with ongoing/recurring incidents at numerous locations on the River Lambourn.
- 3. Invasive species Signal crayfish have been abundant in most stretches of the river for almost 20 years and they are thought to be having significant adverse impacts on native species through predation (of fish fry and invertebrates), competition for breeding sites and cover (with bullhead and lamprey), and destruction of river banks. Azolla is also a recurring problem in parts, It forms floating mats where flow is impeded resulting in impoverishment of species diversity.
- 4. **Hydrological changes** An increase in unseasonably high groundwater levels, prolonged periods of high rainfall, and prolonged periods of drought are all likely to be exerting stress and adverse impacts on the river and associated flora and fauna. There is concern that *Vertigo moulinsiana* populations have undergone significant decline, which may be related to increased prevalence of prolonged periods of drought and prolonged summer flooding.
- 5. **Inland flood defence works** There is currently increased pressure from domestic property owners to reduce flood risk. This highlights the need for a revised flood defence strategy for the river which takes changes in rainfall patterns into account and considers action at a catchment level.
- 6. Inappropriate cutting/mowing As a result of increased fear of flood risk there is pressure to increase removal of in-channel vegetation over. This has the potential to significantly change the character of the ecology of the river. Additionally, there is risk associated with the fact that a single individual undertakes weed cutting management over a large proportion of the river.
- 7. **Change in land management** Part of the complex (Boxford Water Meadow) has suffered from management neglect and loss of riparian structure. Although infrastructure is now in place to facilitate restoration of grazing the land-owner is dependent upon third parties for grazing.
- 8. **Inappropriate water levels** Water supply to parts of the complex is vulnerable to changes in control structures by third parties (Speen Moor, Rack Marsh). Greater control of these structures is desirable.
- 9. **Hydrological changes** Parts of the floodplains are becoming less suitable for *Vertigo moulinsiana*. The reason for this is not clear and needs investigation.

<sup>&</sup>lt;sup>40</sup> Natural England - Site Improvement Plan: River Lambourn and Kennet-Lambourn Floodplain (SIP112) http://publications.naturalengland.org.uk/publication/4738329056641024

### Kennet and Lambourn Floodplain SAC

10. Water Pollution - It is currently unclear whether molluscicides derived from farmland in river water are affecting *Vertigo moulinsiana* populations in the catchment. It is possible that this is contributing to local declines or losses of populations and needs investigation. Advice on molluscicide use is delivered via CSF but unclear whether this is effective.

### North Meadow & Clattinger Farm SAC

#### Site Description

North Meadow & Clattinger Farm Meadows SAC consists of a series of traditionally managed unimproved grasslands within the floodplain of the Upper Thames which continue to be managed as pasture and as hay-meadow.

It contains a rich variety of species-rich grassland types including the rare MG4 community for which the SAC is designated as well as a number of notable plant species. These grasslands represent rare and scattered remnants of a much more widespread unimproved grassland habitat before agricultural intensification and extensive gravel quarrying locally were responsible for widespread losses of this habitat and its subsequent fragmentation.

### **Qualifying Features**

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

6510

Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)

### Special Area of Conservation objectives

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

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

### Site Improvement Plan<sup>41</sup>: pressures, threats and related development

- 1. Inappropriate water levels An effective WLMP needs to be in place in order to protect the integrity of the site. There have been several unseasonal floods over the last six years which are beginning to cause changes and losses in the vegetation communities on the site.
- 2. Water Pollution Both sediment and nutrient input are of concern. A diffuse pollution plan is in place and catchment sensitive farming initiative covers the catchment. Diffuse pollution has the potential to affect aquatic habitats and species as well as habitat quality in areas of riverside habitat supporting *Vertigo moulinsiana*. Diffuse pollution is arising from highway runoff as well as from farmland. Pollution also results from overflowing sewers (a result of high groundwater levels infiltrating sewers) with ongoing/recurring incidents at numerous locations on the River Lambourn.
- 3. Habitat fragmentation The two component SSSIs are located 8km apart. Inclusion and restoration of a number of intervening sites locally would increase the habitat, thereby making it more resilient to fluctuating water levels in the face of climate change. The NNR team at North Meadow has, over a number of years, been working to achieve this aim. Also, one option is that additional land should be included within the North Meadow SSSI for this purpose. This would help buffer the site, possibly provide space for adaptation in anticipation of the effects of climate change, and better manage visitor impacts. Clattinger forms part of a more extensive site which provides good opportunities for on-site management.
- 4. Commons management Fencing is required to keep livestock from straying off site. North Meadow NNR is common land and it is the responsibility of neighbouring landowners to erect fences. There are a number of problems involved in achieving this.
- 5. **Public Access/Disturbance** There is increasing visitor pressure especially during the flowering time of Snake's-head Fritillary leading to localised damage on sites in the SAC.

<sup>&</sup>lt;sup>41</sup> Natural England - Site Improvement Plan: North Meadow & Clattinger Farm (SIP152) <a href="http://publications.naturalengland.org.uk/publication/4565167836758016">http://publications.naturalengland.org.uk/publication/4565167836758016</a>

### North Meadow & Clattinger Farm SAC

6. Water Pollution - The SAC's hay meadow vegetation communities are sensitive to elevated nutrient levels. With increasing flooding there is an increased risk of flood water carrying diffuse pollution onto the site and causing soil enrichment with negative consequences for the species richness of the meadows.

### **Pewsey Downs SAC**

#### Site Description

Pewsey Downs SAC lies on the southern edge of the Marlborough Downs and consists of species-rich chalk grassland rich in orchids such as Burnt-tip orchid *Neotinea ustulata*, Frog orchid *Coeloglossum viride*, and Autumn's lady's tresses *Spiranthes spiralis*.

Pewsey Downs is also designated for its significant population of early gentian *Gentianella anglica*, an endemic species which is confined to chalk grasslands in southern England. Other important species include: Devil's-bit scabious *Succisa pratensis* (the preferred food plant of the Marsh fritillary butterfly, a Site of Special Scientific Interest (SSSI) feature) as well as round-headed rampion *Phyteuma orbiculare*; saw-wort *Serratula tinctoria*, chalk milkwort *Polygala calcarea* and bastard toadflax *Thesium humifusum*.

### **Qualifying Features**

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

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites)

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

1654 Early gentian Gentianella anglica

### **Special Area of Conservation objectives**

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

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

### Site Improvement Plan<sup>42</sup>: pressures, threats and related development

- 1. **Habitat fragmentation** The creation and restoration of additional species-rich chalk grassland adjacent to the site is required to help sustain viable grazing management and increase the resilience of the SAC calcareous grassland habitat to climate change.
- Inappropriate grazing Farmers wish to use sheep grazing to control ragwort. In the past this has led to overgrazing in winter/ spring.
   Sheep grazing in spring would threaten early gentian and would be detrimental to the semi-natural dry grassland orchid site.
- 3. Air Pollution: Impact of atmospheric nitrogen deposition Nitrogen deposition exceeds site-relevant critical loads. Increased nitrogen deposition could cause the increasing dominance of tall, coarse grasses (such as upright brome or Tor-grass) and a decrease in overall botanical diversity. Consequently, it would impact upon the sward structure required by associated butterfly and gentian species.

<sup>&</sup>lt;sup>42</sup> Natural England - Site Improvement Plan: Pewsey Downs (SIP172) http://publications.naturalengland.org.uk/publication/5126262490136576

### Prescombe Down SAC

### **Site Description**

Prescombe Down SAC is a botanically rich downland site comprising a deep forking coombe system situated on the upper chalk in south Wiltshire. It has a characteristic species-rich chalk grassland flora, with good numbers of Early gentian *Gentianella anglica* being found in warm, sheltered locations. The site supports a rich butterfly community including scarce species such as Marsh fritillary *Euphydryas aurini*. Scattered scrub with a variety of species and structure adds to the value of the site.

### **Qualifying Features**

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

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites)

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

1654 Early gentian Gentianella anglica

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

1065 Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia

### Special Area of Conservation objectives

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

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

### Site Improvement Plan<sup>43</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. Changes in species distributions It is not known if Marsh fritillary is still present on the site or was ever breeding there. Past records have been sporadic with numbers variable and the most recent confirmed record is from 1996. In recent years an NNR volunteer warden has visited and informally provided records of butterflies seen (not including Marsh fritillary) but there has been no formal survey. Currently the habitat is not ideal for Marsh fritillary.
- Air Pollution: risk of atmospheric nitrogen deposition Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site.

### **River Avon SAC**

### Site Description

The River Avon SAC is one of the richest chalk rivers in Europe. It is important for its fish population, invertebrate, which include populations of Desmoulins Whorl Snail and its in-river plant community habitat as well as bankside habitats.

The Avon Valley SPA is a wide river valley comprising mostly unimproved wet grassland and has importance for wintering wildfowl with Bewick's Swan and Gadwall as the notified features. The population of Bewick's Swan in the Avon Valley have decreased in line with a national trend of decrease, which is felt to be due to decreased breeding success. At the moment the SPA does not meet the threshold for them

<sup>&</sup>lt;sup>43</sup> Natural England - Site Improvement Plan: Prescombe Down (SIP180) http://publications.naturalengland.org.uk/publication/5787487116984320

River A	River Avon SAC	
Qualifyi	Qualifying Features	
Annex I	Annex I habitats that are a primary reason for selection of this site	
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	
Annex II species that are a primary reason for selection of this site		
1016	Desmoulin's whorl snail Vertigo moulinsiana	
1095	Sea lamprey Petromyzon marinus	
1096	Brook lamprey Lampetra planeri	
1106	Atlantic salmon Salmo salar	
1163	Bullhead Cottus gobio	

#### Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>44</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. Physical modification The Strategic Framework for the Restoration of the River Avon (Halcrow and GeoData 2009) found 59% of the length of the River Avon, 36% Nadder, 33% Wylye, 23% Till, 6% Dockens and 2% Bourne to be partially, significantly or severely modified. Physical habitat modifications have caused simplification of the biotope mosaics (substrate types, variations in flow, channel width and depth, in-channel and side-channel sedimentation features, bank profiles, erosion features, in-channel and bankside vegetation cover and woody debris) and impact both on the SAC chalk stream habitat feature itself and also the levels of populations of the SAC species it supports.
- 2. Siltation Excessive fine sediment supply can lead to the smothering of coarse substrates and the loss of flora and fauna dependent on them. Siltation reduces the air spaces within gravels and reduces water flow through the substrate leading to poor quality of the water in the gravels. This effects the establishment of *Ranunculus* plants, and egg and larval survival in salmon, lampreys and bullhead. Sources of silt include run-off from agricultural land, roads, sewage and fish farm discharges.
- 3. Water Pollution Elevated levels of phosphate (P) lead to dominance by algae and a loss of characteristic plant species. Within Blashford Lakes high P levels could switch the system from a macrophyte dominated system to an algal dominated one resulting in a poorer feeding conditions for gadwall. Organic pollution reducing dissolved oxygen levels effects biota. Water quality can also affect the habitat quality necessary to support Desmoulin's whorl snail and the SPA species. Diffuse pollution from agriculture, small point discharges and sewage treatment work (STW) discharges are contributing to elevated levels of nutrients and reduced dissolved oxygen levels in parts of the SAC.
- 4. Water abstraction Water abstraction causes lower than natural river flows that affects a range of habitat factors including current velocity, water depth, wetted area, substrate quality, dissolved oxygen levels and water temperature. The maintenance of both flushing flows and base flows, based on natural hydrological processes, is vital to the sustaining the SAC chalk stream habitat as a whole and to fish species at low flows in particular.

<sup>&</sup>lt;sup>44</sup> Natural England - Site Improvement Plan: Avon River and Valley (SIP185) <a href="http://publications.naturalengland.org.uk/publication/6133502894407680">http://publications.naturalengland.org.uk/publication/6133502894407680</a>

#### **River Avon SAC**

- 5. Changes in species distributions Salmon are declining and the population level is below the critical conservation level. The reason for the decline is not fully understood and may relate to external factors and climate change however in-channel habitat, flows, siltation and temperature may also be significant contributing factors (refer to the EA River Avon Salmon and Sea Trout Site Action Plan). In addition, Bewick's Swans are choosing to winter elsewhere even though the habitat in the SPA remains good for them. Desmoulin's whorl snail habitat is fragmented throughout the catchment and of varying quality. The main issue affecting the habitat being site dryness or scrub cover and where hydrologically feasible this is being addressed through agri-environment and Conservation Enhancement Schemes.
- 6. Invasive species Invasive plants cause progressive deterioration of bankside habitats by impoverishing the botanical diversity and causing winter instability due to lack of year round plant cover. This can increase the risk of erosion and siltation and thereby affect fish spawning habitat and gravel habitat supporting characteristic submerged plant communities. The principle plant species of concern are Orange Balsam, Japanese Knotweed, Giant Hogweed, Creeping Water Primrose, Skunk Cabbage, Water Fern (azolla) and Himalayan Balsam. Invasive animal species such as Signal crayfish are known to impact on riverine species such as Salmon, but in the Avon their population size, distribution and potential impact is not quantitively known.
- 7. Public Access/Disturbance Dog walkers disturbing wildfowl in areas outside public rights of way is a concern.
- 8. **Hydrological changes** Desmoulin's whorl snail is an annual species and requires localities that are stable hydrologically. Changes in the hydrology that may affect the species include flooding or drying out due to low ground water levels which may be linked to either changing climate conditions or over-abstraction.
- 9. Inappropriate weed control Insensitive weed cutting may impact on the chalk stream habitat and the fish species it supports. Weed cutting appears to favour a dominance by *Ranunculus* species and this can lead to a loss in other plant species diversity and abundance. As well as the potential for direct damage to fish species it may also result in a loss of food source, shelter and wildlife associated with the river plants in particular for invertebrates, and their eggs, fish and fish fry. It may also cause the lowering of water levels on the adjacent floodplain effecting wetland habitats and the fauna they support.
- 10. Change in land management Areas of wet grassland may become wetter due to higher river levels in summer. This may increase the difficulty of managing some areas of the floodplain by grazing and cutting in some years potentially impacting on the grazing quality for Bewick swans.
- 11. Habitat fragmentation SAC/SPA boundaries may not adequately cover the extent of all Annex 1 and Annex 2 features and/or their supporting habitats. Several of the headwaters and the tributaries that are not included within the boundary of the SAC (or underpinning SSSI) are integral to and important to the natural functioning of the whole river system and also support the habitats and species for which the site is selected and/or notified. The headwaters are also particularly sensitive to abstraction pressures.

# Salisbury Plain SAC

# Site Description

Salisbury Plain SAC, which includes Porton Down and Parsonage Down, represents the largest surviving semi-natural dry grassland area within north-west Europe. It hosts the priority habitat type 'orchid-rich sites' and supports extensive areas of CG3 *Bromus erectus* grassland, which is the most widespread and abundant calcareous grassland found in the UK. Other grassland types, like the rare CG7 *Festuca ovina - Hieracium Pilosella-Thymus praecox* grassland, are present. In addition, the site features the best remaining example in the UK of lowland Juniper scrub on chalk and a cluster of large Marsh fritillary *Euphydryas aurinia*, sub-populations where the species breeds on dry calcareous grassland.

Porton Down SPA and Salisbury Plain SPA support important breeding populations of Stone-curlew *Burhinus oedicnemu*s, Quail *Coturnix*, Hobby *Falco subbuteo*, and over-wintering Hen harrier *Circus cyaneus*.

$\cap$	lificina	Features

,		
Annex I habitats that are a primary reason for selection of this site		
5130	Juniperus communis formations on heaths or calcareous grasslands	
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	
Annex II species that are a primary reason for selection of this site		
1065	Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia	

#### Salisbury Plain SAC

#### Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>45</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. Changes in species distributions On Porton Down, the juniper population is judged to be in Unfavourable Condition due to a decline in the population level. A new cohort of seedlings is developing at various locations across the site, some of which will be protected by rabbit enclosure. *Phytophthora austrocedri* has caused dieback and mortality of juniper at a National Nature Reserve in the north Pennines; therefore, any plan to import juniper plant material onto the SAC, should consider the bio-security risk.
- 2. Air Pollution: risk of atmospheric nitrogen deposition Nitrogen deposition exceeds the critical load for juniper Juniperus communis subsp. communis. There is a risk that this could contribute towards coarse grass dominance, decline in lichens, changes in plant biochemistry and an increased sensitivity to abiotic stress. Nitrogen deposition also exceeds the critical load for the Marsh fritillary population.

#### The New Forest SAC

#### **Site Description**

The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year.

The New Forest SAC and SPA supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers.

These habitats support an exceptional variety of flora and fauna including internationally important populations of breeding and overwintering birds and other notable species such as southern damselfly, stag beetle and great crested newt.

The New Forest is one of the most important sites for wildlife in the UK and recognised as being of exceptional importance for nature conservation throughout the European Union. Over 90% of the SAC comprises the unenclosed land of the Crown Lands and adjacent commons, the remainder is managed by private owners and occupiers. Of fundamental importance to sustaining the exceptional quality on the open forest is the persistence of commoning, the commoners stock roam freely maintaining the structural diversity and richness of the habitats complemented by annual heathland cutting and burning programmes.

#### **Qualifying Features**

Annex I habitats that are a primary reason for selection of this site	
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea
4010	Northern Atlantic wet heaths with <i>Erica tetralix</i>
4030	European dry heaths
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)

<sup>&</sup>lt;sup>45</sup> Natural England - Site Improvement Plan: Salisbury Plain (SIP209) http://publications.naturalengland.org.uk/publication/5384236060114944

The New Forest SAC		
7150	Depressions on peat substrates of the Rhynchosporion	
9120	Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer ( <i>Quercion robori-petraeae or Ilici-Fagenion</i> )	
9130	Asperulo-Fagetum beech forests	
9190	Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains	
91D0	Bog woodland *Priority feature	
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) *Priority feature	
Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site		
7140	Transition mires and quaking bogs	
7230	Alkaline fens	
Annex II species that are a primary reason for selection of this site		
1044	Southern damselfly Coenagrion mercuriale	
1083	Stag beetle Lucanus cervus	
Annex II species present as a qualifying feature, but not a primary reason for site selection		
1166	Great crested newt Triturus cristatus	

#### **Special Area of Conservation objectives**

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

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

# Site Improvement Plan<sup>46</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. **Drainage** A legacy of 150 years of drainage of mires, wet heathlands, wet grasslands and streams to improve grazing has led to a loss of peat, reduction of habitat condition, bracken and scrub encroachment.
- 2. Inappropriate scrub control Lack of management and grazing, and inappropriate drainage has led to the loss of open habitats through encroachment of scrub and secondary woodland. Restoration becomes more costly and difficult to achieve the more established the scrub and secondary woodland becomes.
- 3. **Fish stocking** Hatchet Pond, whilst not actively stocked, is managed as a coarse fishery including carp and bream. The common practice of ground baiting, which is popular with carp fisherman, can introduce nutrients and there may also be deliberate extra feeding to encourage growth of specimen sized fish. In addition, *benthivorous* fish contribute nutrient through their feeding habits. This has contributed to high turbidity and algal biomass putting the submerged flora at risk.
- 4. Deer High levels of browsing prevent regeneration and cause a decline in the shrub and field layer of woodlands.

<sup>&</sup>lt;sup>46</sup> Natural England - Site Improvement Plan: New Forest (SIP147) http://publications.naturalengland.org.uk/publication/5174614971908096

#### The New Forest SAC

- 5. Air Pollution: impact of atmospheric nitrogen deposition Air pollution impacts on vegetation diversity. Aerial deposits of nitrogen may exceed the threshold limits above which the quality and character of vegetation begins to be altered and adversely impacted. Public Access/Disturbance The New Forest attracts high numbers of visitors annually and there is an assumption that disturbance affects the breeding success of SPA birds and SAC habitats through erosion, compaction and damage to vegetation and water bodies. The pressures are not fully understood but a recent study concluded that nightjar, woodlark and Dartford warbler densities are notably low. Hatchet pond attracts high numbers of visitors, walkers along the shoreline have eroded the banks and introduced sediment into the water, this together with feeding of birds and fishing activities has polluted the water and put the habitat at risk. Many campsites are located in sensitive areas and have impoverished vegetation due to trampling and infrastructure. Sites in or adjacent to pasture woodland in particular are likely to progressively decline due to the impact on tree regeneration, levels of dead wood, lichens and ground flora
- 6. Change in land management Restoration of conifer plantation to heathland and grassland habitats is taking place throughout the New Forest on private land, on the adjacent commons and on the Crown Lands where the Verderers Enclosures are being returned to open forest. Following initial felling there is often extensive regeneration of conifer which requires management. Lack of funds for followup management could lead to a failure of the restoration.
- 7. Changes in species distributions The New Forest is one of four major sites for the Southern damselfly Coenagrion mercuriale with populations estimated to be in the hundreds or thousands of individuals. No surveys have been undertaken to assess populations at known sites within the New Forest or to identify new populations and as such there is no evidence as to whether the population is increasing, decreasing or stable. Many of the stream and mire habitats preferred by the species have been altered in the past in an attempt at drainage. Without knowledge of the population trends it is difficult to assess whether the drainage is impacting on the population and to inform potential restoration work.
- 8. Water Pollution Many villages have properties that are not on mains sewerage and have domestic treatment units which discharge into ditches and streams that are either within or flow into the SAC. The ditches and streams have seasonal flow and this in combination with a number of properties all discharging into the same channel could lead to an increase in nutrient levels impacting on the habitats they flow through, reducing species richness and diversity.
- 9. Forestry and woodland management Lack of management of woodlands in private ownership has led to loss of characteristic ground flora and shrubs and threat from non-natives such as scots pine, turkey oak and rhododendron. Artificial drainage can impact on wetter habitats leading to loss of sphagnum and bryophytes.
- 10. Inappropriate ditch management Ditches alongside tracks, roads, private property and for forestry practices can impact on wet habitats which causes a loss or conversion of habitat. Drainage into streams and bogs can carry silt adding nutrients and negatively impacting on species relying on the low nutrient status of the habitats.
- 11. Invasive species A wide range of non-native invasive species such as Crassula helmslii, parrots feather, pitcher plant, rhododendron, turkey oak and Himalayan balsam can be found within the Natura 2000 habitats of the New Forest. Many non-native species invade and out compete native species. Crassula helmsii in particular spreads quickly and can form dense mats of vegetation particularly in ungrazed areas. Turkey Oak is an aggressive coloniser on sandy, acid soils such as the New Forest and in some locations large numbers have displaced dry heathland and grassland and need to be removed.
- 12. **Vehicles** Much of the SAC is unfenced with open access and numerous roads crisscrossing the site. Although the area is well served by car parks, parking on the verges is common, this is a particular problem in villages with parking on verges outside properties, village greens and Manorial wastes. This leads to a loss of vegetation, compaction of the soil and pollution.
- 13. Inappropriate cutting/mowing Loss of traditional hay cutting, grazing and scrub management in privately owned meadows and heathlands leading to a loss or conversion of habitat.
- 14. **Direct impact from 3rd party** Private property owners modify verges which are SAC habitats outside of their ownership. Issues include: creating new drives; re-turfing; planting hedges; encroachment by moving boundaries, and storage of material and equipment.

# Fontmell and Melbury Downs SAC

# Site Description

Fontmell and Melbury Downs SAC is a large site, comprising of the edge of the north-east Dorset chalk escarpment. It supports a variety of scrub communities and dry calcareous grasslands.

The variety of slope, soil and aspect provide habitats for a range of notable plant species such as Early gentian, Bastard toadflax and species of Orchids including Frog orchid, Fragrant orchid and Lesser butterfly orchid. Mosaics of grassland and scrub and a herb-rich sward

#### Fontmell and Melbury Downs SAC

provide the ideal conditions for rare and declining butterflies including; Duke of Burgundy, Silver Spotted Skipper, Adonis Blue and Marsh Fritillary.

#### **Qualifying Features**

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

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (\* important orchid sites)

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

1654 Early gentian Gentianella anglica

#### Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>47</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. Air Pollution: impact of atmospheric nitrogen deposition Nitrogen deposition exceeds site-relevant critical loads which require further investigation. Whilst the north facing slopes were identified as being herb-rich at notification, the balance between herbs and vigorous grasses (such as upright brome and false oat grass) in some areas appear to be shifting.
- 2. Inappropriate scrub control Areas are progressing towards secondary woodland rather than being managed effectively as scrub.
- 3. **Agriculture: agricultural operations** Field parcels adjacent to the site with anable operations are subject to nutrient enrichment from fertilisers and spray-drift of herbicides, therefore leading to species-poor areas dominated by nettles and loss of priority habitat.
- 4. Change in land management The high incidence of bovine tuberculosis (bTB) in grazing stock may lead to movement restrictions which could limit the ability of graziers to graze at suitable times of the year. Winter livestock housing is required to offset the consequences of bTB and make the site more resilient to bTB through increasing the flexibility and resilience of grazing management.

#### **Mottisfont Bats SAC**

#### **Site Description**

The Mottisfont woodland, which is near Romsey in Hampshire, supports an important population of the rare Barbastelle bat *Barbastella barbastellus*. Mottisfont contains a mix of woodland types including hazel *Corylus avellana* coppice with standards, broadleaved plantation and coniferous plantation which the bats use for breeding, roosting, commuting and feeding.

#### **Qualifying Features**

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

1308 Barbastelle Barbastella barbastellus

Special Area of Conservation objectives

<sup>&</sup>lt;sup>47</sup> Natural England - Site Improvement Plan: Fontmell & Melbury Downs (SIP089) http://publications.naturalengland.org.uk/publication/4927257646727168

#### **Mottisfont Bats SAC**

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

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

# Site Improvement Plan<sup>48</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. Feature location/ extent/ condition unknown Barbastelle bats use a number of sites for roosts through the breeding season. The last full survey which involved radio-tracking to identify the distribution of bats around the site was carried out in 2002. The current annual Bat Conservation Trust survey contract provides basic presence information on an annual basis in two thirds of the designated site through bat detector surveys. Annual knowledge and detailed knowledge of the presence and distribution of the bats over the remaining one third of the site are both needed.
- 2. Forestry and woodland management There are existing felling licences and England Woodland Grant Scheme agreements which do not take account of the designation and are not managing the habitat with the Barbastelle bat population in the woodland in mind.
- 3. Offsite habitat availability/ management The SAC does not include areas which we think are important for the bats, therefore those areas do not have effective management secured.

#### **River Lambourn SAC**

#### **Site Description**

The River Lambourn is an example of a classic chalk stream with a seasonally dry winterbourne section. It is relatively unmodified and has near-natural flow characteristics. The river supports a characteristic range of aquatic plant communities of the *Ranunculion fluitantis* and *Callitricho-Batrachion* types. As well as being classified as SAC for its river type, the Lambourn is also of importance in supporting self-sustaining populations of Bullhead. An additional qualifying feature present is Brook lamprey.

The Kennet and Lambourn Floodplain SAC consists of a cluster of sites in the Kennet and Lambourn river valleys. These areas represent locations where the terrestrial snail *Vertigo moulinsiana* is particularly abundant.

#### **Qualifying Features**

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

3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation

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

1163 Bullhead Cottus gobio

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

1096 Brook lamprey Lampetra planeri

#### Special Area of Conservation objectives

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

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

<sup>&</sup>lt;sup>48</sup> Natural England - Site Improvement Plan: Mottisfont Bats (SIP144) <a href="http://publications.naturalengland.org.uk/publication/4592740763435008">http://publications.naturalengland.org.uk/publication/4592740763435008</a>

#### River Lambourn SAC

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

#### Site Improvement Plan<sup>49</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. **Siltation** Siltation is an issue in several stretches of the river, mostly related to past modification of river morphology and flow rates. The river morphology is currently unfavourable sediment arising from highway runoff as well as from farmland continues to be of concern and there is a diffuse water pollution plan in place to address this.
- 2. Water Pollution Both sediment and nutrient input are of concern. Diffuse pollution affects aquatic habitats and species as well as habitat quality in areas of riverside habitat supporting Vertigo moulinsiana. Diffuse pollution is arising from highway runoff as well as from farmland. Pollution also results from overflowing sewers (a result of high groundwater levels infiltrating sewers) with ongoing/recurring incidents at numerous locations on the River Lambourn.
- 3. **Invasive species** Signal crayfish have been abundant in most stretches of the river for almost 20 years and they are thought to be having significant adverse impacts on native species through predation (of fish fry and invertebrates), competition for breeding sites and cover (with bullhead and lamprey), and destruction of river banks. *Azolla* is also a recurring problem in parts. It forms floating mats where flow is impeded resulting in impoverishment of species diversity.
- 4. Hydrological changes An increase in unseasonably high groundwater levels, prolonged periods of high rainfall, and prolonged periods of drought are all likely to be exerting stress and adverse impacts on the river and associated flora and fauna. There is concern that Vertigo moulinsiana populations have undergone significant decline, which may be related to increased prevalence of prolonged periods of drought and prolonged summer flooding.
- 5. Inland flood defence works There is currently increased pressure from domestic property owners to reduce flood risk. This highlights the need for a revised flood defence strategy for the river which takes changes in rainfall patterns into account and considers action at a catchment level.
- 6. Inappropriate cutting/mowing As a result of increased fear of flood risk there is pressure to increase removal of in-channel vegetation over and above that which would traditionally be cut for fisheries management. This has the potential to significantly change the character of the ecology of the river.
- 7. Change in land management Part of the complex (Boxford Water Meadow) has suffered from management neglect and loss of riparian structure. Although infrastructure is now in place to facilitate restoration of grazing the land-owner is dependent upon third parties for grazing.
- 8. **Inappropriate water levels** Water supply to parts of the complex is vulnerable to changes in control structures by third parties (Speen Moor. Rack Marsh).
- 9. **Hydrological changes** Parts of the floodplains are becoming less suitable for *Vertigo moulinsiana*. The reason for this is not clear and needs investigation.

# **Kennet Valley Alderwoods SAC**

#### **Site Description**

The site comprises Alluvial forests with alder Alnus glutinosa and ash Fraxinus excelsior.

These, the two largest fragments of alder-ash woodland on the Kennet floodplain, lie on alluvium overlain by a shallow layer of moderately calcareous peat. The wettest areas are dominated by alder *Alnus glutinosa* over tall herbs, sedges and reeds, but dryer patches include a base-rich woodland flora with much dog's mercury *Mercurialis perennis* and also herb-Paris *Paris quadrifolia*. The occurrence of the latter is unusual, as it is more typically associated with ancient woodland, whereas the evidence suggests that these stands have largely developed over the past century.

#### **Qualifying Features**

<sup>&</sup>lt;sup>49</sup> Natural England - Site Improvement Plan: River Lambourn and Kennet-Lambourn Floodplain (SIP112) http://publications.naturalengland.org.uk/publication/4738329056641024

# Kennet Valley Alderwoods SAC

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

91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) \*Priority feature

#### Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>50</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. **Inappropriate water levels** The wet woodlands have various river channels and carriers flowing through them. Some failed structures and breached channels have caused changes in flows through the site in recent years.
- 2. **Game management: other -** There is a threat to the site from inappropriate game management practices. Management is needed to ensure that any planting, feeding or other game/duck shooting management is not impacting the woodland feature.

#### **Mells Valley SAC**

#### Site Description

The Mells Valley SAC lies at the eastern end of the Mendip Hills in the County of Somerset. The site has three component sites: The Old Ironstone Works Mells, St. Dunstan's Well Catchment and Vallis Vale. The primary interest of the site is the maternity roost of Greater Horseshoe Bats *Rhinolophus ferrumequinum* originally located in the Old Ironstone Works Mells site. Subsidiary interests are caves not open to the public located on the other two sites and an area of limestone grassland on the St Dunstan's Well Catchment site. The caves are used as a hibernacula by some of the bats from the maternity roost.

# **Qualifying Features**

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

Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (\*important orchid sites)

Caves not open to the public

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

1304 Greater horseshoe bat Rhinolophus ferrumequinum

# Special Area of Conservation objectives

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

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

<sup>&</sup>lt;sup>50</sup> Natural England - Site Improvement Plan: Kennet Valley Alderwoods (SIP113) http://publications.naturalengland.org.uk/publication/5578853737037824

#### **Mells Valley SAC**

#### Site Improvement Plan<sup>51</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. **Public Access/Disturbance** The Old Ironstone Works Mills are regularly accessed by the public and disturbance of the hibernaculum is a real threat. Access to the hibernaculum is relatively easy to achieve.
- 2. **Wildfire/arson** Fires on the Old Ironstone Works site are a potential threat to hibernating bats in a derelict flume structure (a brick lined tunnel). This is a particular threat beneath the access point to the hibernaculum.
- 3. **Direct impact from third party** There is a significant problem with trespass vandalism and associated disturbance. There is a risk that bats occupying a cave on the site will be disturbed by unauthorised access.
- 4. **Undergrazing** The very small area of limestone grassland that exists on the St. Dunstans Well Catchment (<.5ha) is ungrazed and could remain so.
- 5. Inappropriate designation boundary The bats used to occupy an old building on the site as a maternity roost at the time of notification. This building was burnt out in 1988 and the bat colony moved off the SAC. Planning permission was subsequently refused for the rebuilding of the roost building; therefore the maternity roost has relocated to alternative habitat outside of the SAC.
- 6. Air Pollution: impact of atmospheric nitrogen deposition Nitrogen deposition exceeds site relevant critical loads.

#### Hackpen Hill SAC

#### **Site Description**

Hackpen Hill SAC is an extensive area of unimproved chalk grassland in the North Wessex Downs, and is considered to be one of the most important areas in the UK for the rare early gentian.

The site has a variety of aspect and gradients, with the grassland dominated by red fescue and upright brome. The herb flora includes a significant population of early gentian, as well as autumn gentian, fragrant orchid, frog orchid, horseshoe vetch, common rock-rose and dwarf thistle.

#### **Qualifying Features**

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

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites)

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

1654 Early gentian Gentianella anglica

#### Special Area of Conservation objectives

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

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

# Site Improvement Plan<sup>52</sup>: pressures, threats and related development

There are no issues affecting the site.

Natural England - Site Improvement Plan: Mells Valley (SIP135)
 <a href="http://publications.naturalengland.org.uk/publication/4665580590202880">http://publications.naturalengland.org.uk/publication/5938642669273088</a>
 <a href="http://publications.naturalengland.org.uk/publication/5938642669273088">http://publications.naturalengland.org.uk/publication/5938642669273088</a>

#### **Dorset Heaths SAC**

#### Site Description

The Dorset heathlands is an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history.

#### **Qualifying Features**

Annex I habitats that are a primary reason for selection of this site			
4010	Northern Atlantic wet heaths with <i>Erica tetralix</i>		
4030	European dry heaths		
7150	Depressions on peat substrates of the Rhynchosporion		
Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site			
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)		
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae *Priority feature		
7230	Alkaline fens		
9190	Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains		
Annex II species that are a primary reason for selection of this site			
1044	Southern damselfly Coenagrion mercuriale		
Annex II species present as a qualifying feature, but not a primary reason for site selection			
1166	Great crested newt Triturus cristatus		

# Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>53</sup>: pressures, threats and related development

The main current threats to the site include:

- Inappropriate scrub control Invasion of heath by trees and scrub results, in the long term, loss of heathland vegetation. The process
  is at different stages on different sites but scrub control is necessary on the majority of these sites.
- 2. Public Access/Disturbance Disturbance of breeding SPA birds, mostly by dogs, can affect their breeding success, with implications for population level effects e.g. nightjar and woodlark. Other effects include predation by domestic cats and urban foxes, habitat change from nutrients in dog faeces, and dumping of garden rubbish. On a number of sites the illicit use of heaths for motorcycle scrambling is resulting in disturbance and erosion.

<sup>&</sup>lt;sup>53</sup> Natural England - Site Improvement Plan: Dorset Heaths (SIP062) <a href="http://publications.naturalengland.org.uk/publication/5181909839642624">http://publications.naturalengland.org.uk/publication/5181909839642624</a>

#### **Dorset Heaths SAC**

- 3. **Undergrazing** Generally grazing has now been successfully introduced on most of the larger heathland sites but there remain some ungrazed areas which would benefit from the introduction of an extensive grazing regime.
- 4. Forestry and woodland management Several of the heathlands have conifer plantations on former heathland or mature conifers (or sometimes birch) that have invaded heathland. Favourable condition requires removal of these plantations for heathland restoration or, at least, management to increase the heath component within the woodland.
- 5. **Drainage** Drainage is generally the result of ditches made within the site to endeavour to drain wet heath or mire. These drains invariably result in adverse changes to wet heath and mire communities in the vicinity.
- 6. Water Pollution It comprises of pollution from adjacent agricultural land (run-off causing nutrient enrichment); leaching from adjacent landfill sites (3 sites); pollution from foul drainage (septic tanks, sewage discharge); urban run-off. Poor water quality from the sources listed can also impede the ability to restore the sites' natural hydrology. Silt/sand run-off from adjacent sand/gravel workings and now capped landfill have smothered part of a mire system at Upton Heath.
- 7. Invasive species Various invasive species are present including rhododendron and gaultheria, and these have the potential to impact negatively on the site's features. A population of carp has recently become established in Little Sea lake (previously there were no fish) and has virtually eliminated what was previously an abundant and diverse assemblage of macrophytes. It is also affected by Australian swamp stonecrop and Canadian pondweed. Invasion of bracken on unmanaged sites is a concern although ongoing bracken management is required on most sites.
- 8. **Habitat fragmentation** Dorset's lowland heathland is a fragmented remnant of a once extensive landscape. This curtails the genetic and physical interchange of a number of species and leads to edge effects on smaller sites. Moreover, species populations that are dependent on the wider habitat network of heath and forest beyond the designated site boundaries are vulnerable to changes within that wider network.
- Conflicting conservation objectives Heathland management aimed at maintaining open heathland does not cater for a number of
  rare species that require more specific management measures.
- **10. Wildfire/arson** Fire predominantly affects the urban heaths (about a third of the heathland area in and around Poole and Bournemouth) which are subject to arson. The result is that some heaths are burned too frequently and in spring and summer.
- 11. Air Pollution: impact of atmospheric nitrogen deposition Air pollution impacts on the site's vegetation diversity. As with most lowland heathlands and mires in England nitrogen deposition is close to, and in some cases exceeds critical loads.
- 12. Deer High deer numbers have affected heathland and mire on Arne Heath, Holton Heath and Stokeford Heath.

## **Mendip Woodlands SAC**

#### Site Description

The Mendip Woodlands SAC comprises four individual woods all located on the southern slope of the Mendip Hills in the county of Somerset. Three of the woods, Cheddar Wood, Ebbor Gorge and Rodney Stoke lie in the west of Mendip while Asham Wood lies in the east. Asham Wood and Ebbor Gorge are both associated with limestone gorges while Cheddar Wood and Rodney Stoke lie on the steep southern slope of the hills. Only one of the woods, Asham, has permanent streams running through it. All four woods are dominated by ash while both Cheddar Wood and Rodney Stoke have a high population of small-leaved lime. Notable species present include Purple gromwell Lithospermum purpurocaeruleum, Lily of the valley Convallaria majalis and Wild daffodil Narcissus pseudonarcissus. All the woodlands were managed by coppicing and are gradually reverting to high forest.

#### **Qualifying Features**

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

9180

Tilio-Acerion forests of slopes, screes and ravines \*Priority feature

## Special Area of Conservation objectives

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

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

# **Mendip Woodlands SAC**

#### Site Improvement Plan<sup>54</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. **Vehicles: illicit** Asham Wood has a history of trespass by off road vehicles. This has resulted in serious damage to parts of the ride network and also to the woodland proper.
- Deer Deer are having an adverse impact on almost all of the component woodlands through unsustainable grazing pressure, making silvicultural management difficult unless regrowth from coppicing or regeneration is protected.
- 3. **Disease** All of the Mendip woodlands component sites are dominated by ash and are seriously threatened by the spread of *Chalara fraxinea* disease from eastern England. Some stands in these woodlands are as much as 80% ash.
- 4. Air Pollution: impact of atmospheric nitrogen deposition Nitrogen deposition exceeds site relevant critical loads. Impacts of exceedance could be manifested in changes in ground vegetation.

#### **Solent Maritime SAC**

#### **Site Description**

The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass Zostera spp. and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation.

All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass Spartina maritima. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and overwintering waders and waterfowl as well as important breeding gull and tern populations.

# Qualifying Features

Annex I habitats that are a primary reason for selection of this site		
1130	Estuaries	
1320	Spartina swards (Spartinion maritimae)	
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	
Annex I	habitats present as a qualifying feature, but not a primary reason for selection of this site	
1110	Sandbanks which are slightly covered by sea water all the time	
1140	Mudflats and sandflats not covered by seawater at low tide	
1150	Coastal lagoons *Priority feature	
1210	Annual vegetation of drift lines	
1220	Perennial vegetation of stony banks	
1310	Salicornia and other annuals colonizing mud and sand	
2120	"Shifting dunes along the shoreline with Ammophila arenaria (""white dunes"")"	
Annex II species present as a qualifying feature, but not a primary reason for site selection		
1016	Desmoulin's whorl snail <i>Vertigo moulinsiana</i>	

<sup>&</sup>lt;sup>54</sup> Natural England - Site Improvement Plan: Mendip Woodlands (SIP137) http://publications.naturalengland.org.uk/publication/6568821745778688

#### **Solent Maritime SAC**

#### Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>55</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. **Public Access/Disturbance** Activities such as walking; dog walking; bird watching; boating; kayaking; kite surfing; hang gliding; paramotors; jet skis; wildfowling; model helicopters/aircraft; boat mooring, and Hovercraft all disturb the birds. Recreational activities can also affect annual vegetation of drift lines (H1210) and the vegetation of stony banks (H1220).
- 2. Coastal squeeze Habitats are being lost as they are squeezed between rising sea levels and hard coastal defences that are maintained. There is loss of the SAC habitats such as saltmarsh, loss of habitat for feeding, roosting and breeding birds. In some areas rising sea levels will result in coastal grasslands being lost to more saline grasslands, thus losing habitat for some breeding waders of the waterbird assemblage.
- 3. **Fisheries: Commercial marine and estuarine** Dredges (incl. hydraulic), benthic trawls and seines and shore-based activities are categorised as 'Red' for these interest features (and specifically the sub-features: Intertidal muddy sand communities; Subtidal eelgrass Zostera marina beds). Commercial fishing activities categorised as 'amber or green'. Towed gear, hand gathering of shellfish, bait digging and aquaculture are the main fishery activities in this site.
- 4. Water Pollution eutrophication and toxicity -Sources include both point source discharges (including flood alleviation / storm discharges) and diffuse water pollution from agriculture / road runoff, as well as historic contamination of marine sediments, primarily from copper and Tributyltin (TBT). There is a threat of spillage from Oil Transportation and Transfer and by the usage by Ships & Pilotage.
- 5. Changes in species distributions Many waders and wildfowl are decreasing in the Solent probably as they move north and east under national trends. Some fish, such as Sand eels, may be moving their breeding grounds resulting in less food availability for breeding terns. Invertebrate populations in the intertidal muds are changing and this may disadvantage some wintering wader species. Desmoulin's Whorl Snail has decreased dramatically. Areas of salt-marsh are eroding and decreasing resulting in decreasing breeding gulls and terns as their habitat decreases and decreasing plant species of salt-marshes.
- 6. **Climate change** Climate change has impacts upon coastal species, in that gull and tern colonies are more frequently washed out with rising sea levels when storm surges cause flooding to habitats.
- 7. Change to site conditions There is an increasing loss of salt-marsh in much of the Solent for reasons unknown.
- 8. Invasive species The highest risk pathways through which marine INNS are introduced and then spread have been identified as: commercial shipping (through release of ballast water, and biofouling on hulls); recreational boating (through biofouling on hulls); aquaculture (through contamination of imported or moved stock or escaped stock in the case of the pacific oyster), and natural dispersal.
- 9. **Direct land take from development** Private sea defences are causing disruption to the natural processes of allowing erosion to move sediments around the SAC.
- 10. **Biological Resource Use** Gull egg collecting occurs in some places, and wildfowling occurs in several places. These activities are likely to be disturbing to breeding and wintering birds even though they are licenced/consented at the moment.
- 11. Change in land management Changes to land management are likely to occur in areas where tidal flaps/sluices are altered and this results in changes to water levels or salinity of that land. Some sluices are failing, which may also result in changes to water levels or salinity of land. Some ditches and drains are neglected and this can cause difficulties in land management, resulting in changes.

<sup>&</sup>lt;sup>55</sup> Natural England - Site Improvement Plan: Solent (SIP043) http://publications.naturalengland.org.uk/publication/4692013588938752

#### **Solent Maritime SAC**

- 12. Inappropriate pest control Predator control is decreasing, resulting in increased predation by foxes etc. and this is the likely cause of decrease in successful breeding of gulls and terns.
- 13. Air Pollution: impact of atmospheric nitrogen deposition Nitrogen deposition exceeds site relevant critical loads.
- 14. **Hydrological changes** Titchfield Haven has a high level of water abstraction licences if all were used then water levels would be too low in the SAC/SPA . Percolation of sea water through sea walls is causing saline intrusion into non-saline grassland habitats and changing them.
- 15. **Direct impact from 3rd party** Off-roading is causing damage to some areas of grassland. Private sea defences are causing disruption to the natural movement processes of natural materials along the coast. Military helicopters cause disturbance to wintering birds. House boats are unlicensed and have the potential to cause damage to intertidal habitats. Fly grazing is causing issues affecting large areas of Chichester Harbour.
- 16. Extraction: non-living resources Shingle extraction for aggregates may have an adverse impact upon intertidal fauna and flora, and may affect the movement of coastal sediments that would in turn have an impact upon intertidal habitats.
- 17. Other SAC/SPA boundaries may not cover the extent of all Annex 1 and Annex 2 features and/or supporting habitats.

#### **Emer Bog SAC**

#### Site Description

The site comprises an extensive valley bog which has been described as unparalled in lowland England as an example of a young oligotrophic / mesotrophic basin mire, together with associated damp acidic grassland, heathland and developing woodland over Bracklesham Beds in the Hampshire Basin.

The bog grades downstream into mature alder carr and upstream into heathland. To the south and west of Emer Bog, the site includes remnants of former common land, now acidic grassland.

The invertebrate fauna of the bog and heath is of considerable interest and very large numbers of moths have been recorded.

# **Qualifying Features**

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

7140 Transitio

Transition mires and quaking bogs

# Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>56</sup>: pressures, threats and related development

The main current threats to the site include:

- Public Access/Disturbance The adoption of the site for informal recreation compounds the difficulties in managing the site, particularly through grazing.
- 2. **Hydrological changes** There has been a reduction in the area of Sphagnum-rich vegetation and it is thought that this is due to substantial nutrient enrichment encouraging the growth of *Typha*.
- 3. Air Pollution: impact of atmospheric nitrogen deposition Nitrogen deposition exceeds site relevant critical loads. With respect to transition mire excess nitrogen may negatively alter the vegetation community by detrimentally affecting bryophytes and increasing the abundance of sedges and vascular plants.

<sup>&</sup>lt;sup>56</sup> Natural England - Site Improvement Plan: Emer Bog (SIP074) http://publications.naturalengland.org.uk/publication/6367668705689600

#### Rodborough Common SAC

#### Site Description

Rodborough Common is the most extensive area of semi-natural dry grasslands surviving in the Cotswolds of central southern England, and represents CG5 *Bromus erectus – Brachypodium pinnatum* grassland, which is more or less confined to the Cotswolds.

The site contains a wide range of structural types, ranging from short turf through to scrub margins, although short-turf vegetation is mainly confined to areas of shallower soils.

#### **Qualifying Features**

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

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites)

#### Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>57</sup>: pressures, threats and related development

The main current threats to the site include:

- Undergrazing Undergrazing is an issue due to the reliance on the rights of commoners to turn out cattle. The number of stock have
  dropped over the years to the point that additional cattle now need to be electric fenced on to the most species-rich areas on the slopes.
  It is the lower slopes that are the most species-rich and are suffering from a lack of grazing.
- 2. Public Access/Disturbance The common is very close to Stroud and recreational use has greatly increased over the past few decades. This has created many new paths and parking areas which cause soil compaction to the detriment of the surrounding sward. Dog faeces is a particular issue which also damages the sward . New and proposed housing continues to add to the problem.
- 3. Air Pollution: risk of atmospheric nitrogen deposition Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site.

# **Cotswold Beechwoods SAC**

#### Site Description

The Cotswold Beechwoods represent the most westerly extensive blocks of Asperulo-Fagetum beech forests in the UK.

The woods are floristically richer than the Chilterns, and rare plants include red helleborine *Cephalanthera rubra*, stinking hellebore *Helleborus foetidus*, narrow-lipped helleborine *Epipactis leptochila* and wood barley *Hordelymus europaeus*. There is a rich mollusc fauna. The woods are structurally varied, including blocks of high forest and some areas of remnant beech coppice.

#### **Qualifying Features**

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

9130 Asperulo-Fagetum beech forests

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

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites)

<sup>&</sup>lt;sup>57</sup> Natural England - Site Improvement Plan: Rodborough Common (SIP202) http://publications.naturalengland.org.uk/publication/5525408413908992

#### Cotswold Beechwoods SAC

#### Special Area of Conservation objectives

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

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

#### Site Improvement Plan<sup>58</sup>: pressures, threats and related development

The main current threats to the site include:

- 1. Invasive species The dumping of garden waste and the consequent spread of invasive plants is an on-going threat. The spread of the non-native sycamore provides a challenge and has made particular use of canopy gaps created by storm damage. Although sycamore is considered an acceptable component of woodlands, including beechwoods, on the continent, in the Cotswolds it tends to dominate understorey and canopy to the detriment of other (native) tree species.
- Deer Deer browsing of regenerating trees (and possibly ground flora) remains a major threat to favourable condition throughout the beechwoods.
- 3. **Invasive species** Grey squirrel numbers have increased sharply over the past decade or so and now cause significant damage to tree species, in particular beech. In places, this can lead to pole stage beech being systematically ring barked and killed.
- 4. Disease Although not known to be present in the Cotswolds as yet, Chalara (ash disease) is a major future threat to the beechwoods.
- 5. Public Access/Disturbance . A particular increase has been the use of mountain bikes and horse-riding which use the woods far beyond the limited network of bridleways. This has created numerous additional trackways and so increasing the erosion of the ground flora and potentially opportunities for water erosion. Although the routes away from bridleways are not usually permitted, much of the SAC woodland is NNR or has public access by foot. Additionally, dog walking has increased within the SAC especially at Coopers Hill where car parking is available. This has become a particular issue where professional dog walkers release large numbers of dogs (up to 12) to run uncontrolled through the woods. This causes disturbance to wildlife as well as local nutrification through dog faeces.
- Changes in species distributions There is a risk that global warming will increase the risk of drought to beech trees (which are shallow rooted).
- 7. **Air Pollution:** impact of atmospheric nitrogen deposition Nitrogen deposition exceeds site relevant critical loads. High atmospheric nitrogen levels could affect the SAC features through: changes in ground vegetation and mycorrhiza; nutrient imbalance; changes to soil fauna; increase in tall grasses; decline in diversity; increased mineralization; N leaching; or surface acidification.

# Porton Down SPA

# **Site Description**

Porton Down is located north-east of Salisbury, in Wiltshire. It lies within the Salisbury Plain and West Wiltshire Downs National Character Area (NCA), on a gently undulating plateau of Upper Chalk with shallow dry valleys.

The soils are mostly Rendzinas with chalk grassland, and acid Brown Earths and intergrades between the two, with localised acidophilous scrub and grassland communities on Roche Court Down, Easton Down and Battery Hill.

The designated site is important for chalk grassland and heath, with scrub, ancient and plantation woodland, a large juniper population, lichens, rare flowering plants, butterflies and other invertebrates, and breeding birds, including stone-curlew.

# **Qualifying Features**

A133 Burhinus oedicnemus; Stone-curlew (Breeding)

#### **Special Protected Area Objectives**

<sup>&</sup>lt;sup>58</sup> Natural England - Site Improvement Plan: Cotswold Beechwoods (SIP048) http://publications.naturalengland.org.uk/publication/6276086220455936

#### **Porton Down SPA**

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

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

#### Site Improvement Plan<sup>45</sup>: pressures, threats and related development

Salisbury Plain Site Improvement Plan covers Porton Down SPA, Salisbury Plain SAC and Salisbury Plain SPA. See Salisbury Plain SAC for further information.

#### Salisbury Plain SPA

#### **Site Description**

Salisbury Plain SPA is located in central Wiltshire, within the Salisbury Plain and West Wiltshire Downs National Character Area, in southern England.

Salisbury Plain is an extensive and open rolling chalk plateau cut by the Hampshire Avon and tributaries. The soils are generally alkaline and free-draining, apart from places with overlying clay-with flints and long-term rainwater leaching and lessivage, which are more acidic.

The main broad habitat type is chalk grassland, with some plantation and ancient woodland being present. Juniper scrub is significant at the eastern end of Salisbury Plain. Salisbury Plain is part of a wider military training area ('SPTA').

Of particular note is the breeding population of stone-curiew dependent upon the extensive areas of open grassland. Sizeable populations of raptors also overwinter, feeding on small birds and mammals

#### **Qualifying Features**

A082	Circus cyaneus; Hen harrier (Non-breeding)
A099	Falco subbuteo; Eurasian hobby (Breeding)
A113	Coturnix coturnix; Common quail (Breeding)
A133	Burhinus oedicnemus; Stone-curlew (Breeding)

#### **Special Protected Area Objectives**

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

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

#### Site Improvement Plan<sup>45</sup>: pressures, threats and related development

Salisbury Plain Site Improvement Plan covers Salisbury Plain SAC, Porton Down SPA and Salisbury Plain SPA. See Salisbury Plain SAC for further information.

#### **New Forest SPA**

#### **Site Description**

The New Forest SPA falls within the New Forest National Character Area (NCA Profile 131) and the New Forest National Park. It comprises the largest area of 'unsown' vegetation in lowland England and includes the representation on a large scale of habitats formerly common but now fragmented and rare in lowland western Europe. The intimate mosaic of habitats owes much to the local geology and traditional commoning grazing system, a situation which is uncommon in lowland England.

The New Forest sits in the centre of a dip in the surrounding chalk known as the Hampshire Basin and comprises a series of eroded terraces of soft sedimentary clays and sands capped with flint gravel, brick earth and other superficial deposits. The Soils are mainly acid, poor in nutrients, susceptible to leaching and only slowly permeable with locally enriched areas. This great variation in its soils is reflected in the New Forest's distinctive vegetation.

The habitats include lowland heath, valley and seepage step mire, or fen, ancient pasture woodland, including riparian and bog woodland and a range of acid to neutral grasslands. Nowhere else do these habitats occur in combination and on so large a scale.

The site supports an exceptionally rich bird fauna including internationally important breeding populations and wintering populations of bird species associated with these habitats.

# **Qualifying Features**

A072	Pernis apivorus; European honey-buzzard (Breeding)
A082	Circus cyaneus; Hen harrier (Non-breeding)
A099	Falco subbuteo; Eurasian hobby (Breeding)
A224	Caprimulgus europaeus; European nightjar (Breeding)
A246	Lullula arborea; Woodlark (Breeding)
A302	Sylvia undata; Dartford warbler (Breeding)
A314	Phylloscopus sibilatrix; Wood warbler (Breeding)

#### **Special Protected Area Objectives**

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

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

# Site Improvement Plan<sup>46</sup>: pressures, threats and related development

New Forest Site Improvement Plan covers both the New Forest SPA and The New Forest SAC. See The New Forest SAC for further information.

# **Avon Valley SPA**

#### **Site Description**

The Avon Valley – Bickton to Christchurch Special Protection Area lies along the border of Hampshire and Dorset, between the new Forest and the heath and woodland areas north of Bournemouth. It encompasses the lower reaches of the River Avon and its floodplain between Bickton and Christchurch. The Avon Valley SPA sits within the New Forest National Character Area (NCA). The NCA encompasses the New Forest National Park, which accounts for 75% of the NCA, as well as the lower Hampshire Avon Valley in the west and the urbanised waterside from Totton to Fawley in the east, with major oil-energy and port-related industry along Southampton Water. The majority of the area is a plateau of Palaeogenic deposits overlain by Quaternary gravels in river terraces, averaging around 80-100 m above sea level. The Avon Valley is distinctly different, with a wide, flat valley bottom of mostly derelict water meadows and pasture and arable land around a braided river, linked with the Forest through grazing tradition. The Avon Valley sits on the western edge of the New Forest NCA, and is

#### Avon Valley SPA

bordered by the Dorset Heaths NCA to the west. The majority of the catchment for the River Avon lies to the north in northern Hampshire and Wiltshire, including the Salisbury Plain and West Wiltshire Downs NCA.

The valley is predominantly on alluvial soils, but there are deposits of sand which give rise to a more sand dune or heath-like flora in places. Much of the valley is open grassland fields with ditches on their boundaries. There are small woodland and fen areas and the SPA includes a series of old gravel pits that are now flooded and add to the sites importance. The site qualifies for 2 species of over wintering wildfowl Bewick's Swan and Gadwall The site also supports a nationally important assemblage of breeding wetland birds and is especially important for breeding waders associated with lowland wet grassland. The floodplain grassland and the gravel pits provide feeding and roosting areas for nationally or internationally important populations of five species of wintering wildfowl.

## **Qualifying Features**

A307	Cygnus columbianus bewickii; Bewick's swan (Non-breeding)
A051	Anas strepera; Gadwall (Non-breeding)

#### **Special Protected Area Objectives**

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

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

#### Site Improvement Plan<sup>4446</sup>: pressures, threats and related development

Avon River and Valley Improvement Plan covers both the Avon Valley SPA and The River Avon SAC. See The River Avon SAC for further information.

#### Solent and Southampton Water SPA

#### **Site Description**

The Solent and Southampton Water SPA site comprises a series of estuaries and adjacent coastal habitats important for breeding gulls and terns and wintering waterfowl.

#### **Qualifying Features**

A046a	Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)
A052	Anas crecca; Eurasian teal (Non-breeding)
A137	Charadrius hiaticula; Ringed plover (Non-breeding)
A156	Limosa limosa islandica; Black-tailed godwit (Non-breeding)
A176	Larus melanocephalus; Mediterranean gull (Breeding)
A191	Sterna sandvicensis; Sandwich tern (Breeding)
A192	Sterna dougallii; Roseate tern (Breeding)
A193	Sterna hirundo; Common tern (Breeding)
A195	Sterna albifrons; Little tern (Breeding)
-	Waterbird assemblage

#### Solent and Southampton Water SPA

#### **Special Protected Area Objectives**

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

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

# Site Improvement Plan<sup>5546</sup>: pressures, threats and related development

Solent Improvement Plan covers both the Solent and Southampton Water SPA and Solent Maritime SAC. See Solent Maritime SAC for further information.

#### **Solent and Dorset Coast SPA**

## **Site Description**

The site comprises the drowned estuary of the rivers Stour and Avon and the peninsula of Hengistbury Head. The varied habitats include saltmarsh, wet meadows, drier grassland, heath, sand dune, woodland and scrub and the site is of great ornithological interest.

#### **Qualifying Features**

A191	Sterna sandvicensis; Sandwich tern (Breeding)
A193	Sterna hirundo; Common tern (Breeding)
A195	Sterna albifrons; Little tern (Breeding)

# **Special Protected Area Objectives**

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

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

# Site Improvement Plan<sup>46</sup>: pressures, threats and related development

None identified to date. Site only designated in 2020.

#### **New Forest Ramsar**

# Site Description

The New Forest is an area of semi-natural vegetation including valley mires, fens and wet heath within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. The habitats present are of high ecological quality and diversity with undisturbed transition zones.

The suite of mires is regarded as the *locus classicus* of this type of mire in Britain. Other wetland habitats include numerous ponds of varying size and water chemistry including several ephemeral ponds and a network of small streams mainly acidic in character which have no lowland equivalent in the UK. The plant communities in the numerous valleys and seepage step mires show considerable variation, being

#### **New Forest Ramsar**

affected especially by the nutrient content of groundwater. In the most nutrient-poor zones, *Sphagnum* bog-mosses, cross-leaved heath, bog asphodel, common cottongrass and similar species predominate. In more enriched conditions the communities are more fen-like.

#### Ramsar Criteria

- Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain.
- The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plant are found on the site, as are at least 65 British Red Data Book species of invertebrate.
- The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of seminatural habitats is essential to the genetic and ecological diversity of southern England.

Ramsar Information Sheet (RIS)<sup>59</sup>: Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

- Commercial-scale forest exploitation
- Drainage/land-claim
- Introduction/invasion of non-native plant species
- Recreational/tourism disturbance

#### **Avon Valley Ramsar**

#### Site Description

The site encompasses the lower reaches of the River Avon and its floodplain between Bickton and Christchurch. The River Avon displays wide fluctuations in water level and parts of the valley are regularly flooded in winter. The Avon valley has a greater range of habitats and a more diverse flora and fauna than any other chalk river in Britain. The valley includes one of the largest expanses of unimproved floodplain grassland in Britain, including extensive areas managed as hay meadow.

# Ramsar Criteria

- The site shows a greater range of habitats than any other chalk river in Britain, including fen, mire, lowland wet grassland and small areas of woodland.
- 2 The site supports a diverse assemblage of wetland flora and fauna including several nationally-rare species.
- 6 Species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation):

Species with peak counts in winter: Gadwall, *Anas strepera strepera*, NW Europe

Species/populations identified subsequent to designation for possible future consideration under criterion 6:

Species with peak counts in winter: Northern pintail, *Anas acuta*, NW Europe

Black-tailed godwit, Limosa limosa islandica, Iceland/W Europe

Ramsar Information Sheet (RIS)<sup>60</sup>: Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

- Disturbance to vegetation through cutting / clearing
- Vegetation succession Major issue arising from decline in traditional pastoral agriculture and lack of maintenance of ditch network.

<sup>60</sup> Ramsar Information Sheet (RIS): Avon Valley (926) https://jncc.gov.uk/jncc-assets/RIS/UK11005.pdf

<sup>&</sup>lt;sup>59</sup> Ramsar Information Sheet (RIS): The New Forest (622) https://jncc.gov.uk/jncc-assets/RIS/UK11047.pdf

#### **Avon Valley Ramsar**

- Drainage/land-claim for agriculture Management of water levels driven partly by agriculture but also urban flood risk management continues to have adverse effect on habitats.
- Sedimentation/siltation High levels of silt in river continue to degrade its interest, especially aquatic species but also contribute to silting-up ditches and deterioration of grasslands after flood events.
- Introduction/invasion of non-native plant species *Crassula helmsii* is increasing problem in Blashford Lakes following restoration of gravel pits, not controlled adequately through planning consents and technically difficult to control following withdrawal of herbicide approval.
- Pollution domestic sewage
- Pollution agricultural fertilisers
- Recreational/tourism disturbance Site is subject to wildfowling and game shooting, and associated activities (e.g. shooting hides, game cover management, pheasant release pens, etc); full extent/intensity unknown but known to be considerable. Likewise fishing and related activities (e.g. fish stocking, vehicular and pedestrian access, fencing of river banks, vegetation management etc.). Access by people and dogs both on and off public rights of way is also a significant cause of disturbance in some areas.
- Reservoir/barrage/dam impact: flow regime

#### **Dorset Heathlands Ramsar**

#### Site Description

Extensive and fragmented, these heathland areas are centred around the estuary of Poole Harbour and are adjacent to the urban conurbation of Bournemouth and Poole. The heathland contains numerous examples of wet heath and acid valley mire, habitats that are restricted to the Atlantic fringe of Europe. These heath wetlands are among the best of their type in lowland Britain. There are also transitions to coastal wetland and fen habitat types. The wetland flora and fauna includes a large assemblage of nationally rare and scarce species, especially invertebrates.

# Ramsar Criteria

Contains particularly good examples of (i) northern Atlantic wet heaths with cross-leaved heath *Erica tetralix* and (ii) acid mire with *Rhynchosporion*.

Contains largest example in Britain of southern Atlantic wet heaths with Dorset heath *Erica ciliaris* and cross-leaved heath *Erica tetralix*.

Supports 1 nationally rare and 13 nationally scarce wetland plant species, and at least 28 nationally rare wetland invertebrate species

Has a high species richness and high ecological diversity of wetland habitat types and transitions, and lies in one of the most biologically-rich wetland areas of lowland Britain, being continuous with three other Ramsar sites: Poole Harbour, Avon Valley and The New Forest.

Ramsar Information Sheet (RIS)<sup>61</sup>: Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

- Acid rain Modelling by the relevant air quality authority indicates that the average or minimum deposition from airborne SOx and NOx exceed the maximum critical load for acidity on at least part of the site.
- Pollution unspecified

# Solent and Southampton Water Ramsar

# **Site Description**

The area covered extends from Hurst Spit to Gilkicker Point along the south coast of Hampshire and along the north coast of the Isle of Wight. The site comprises of estuaries and adjacent coastal habitats including intertidal flats, saline lagoons, shingle beaches, saltmarsh,

<sup>&</sup>lt;sup>61</sup> Ramsar Information Sheet (RIS): Dorset Heathlands (964) https://incc.gov.uk/jncc-assets/RIS/UK11021.pdf

# Solent and Southampton Water Ramsar

reedbeds, damp woodland, and grazing marsh. The diversity of habitats support internationally important numbers of wintering waterfowl, important breeding gull and tern populations and an important assemblage of rare invertebrates and plants.

importe	and breeding guil and term populations and an important assemblage	or rare invertebrates and plants.
Ramsar Criteria		
1	The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.	
2	The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site.	
5	Assemblages of international importance:	
	Species with peak counts in winter:	51343 waterfowl (5 year peak mean 1998/99-2002/2003)
6 Species/populations occurring at levels of international importance. Qualifying Species/populations (		ce. Qualifying Species/populations (as identified at designation):
	Species with peak counts in spring/autumn:	Ringed plover, Charadrius hiaticula, Europe/Northwest Africa
	Species with peak counts in winter:	Dark-bellied brent goose, Branta bernicla bernicla
		Eurasian teal, Anas crecca, NW Europe
		Black-tailed godwit, Limosa limosa islandica, Iceland/W Europe
Damas	er Information Shoot (PIS)62. Eactors (nast present or notantial)	adversally offertion the cite's earle rical above to visually disc.

Ramsar Information Sheet (RIS)<sup>62</sup>: Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Erosion

 $<sup>^{62}</sup>$  Ramsar Information Sheet (RIS): Solent and Southampton Water (965)  $\underline{\text{https://incc.gov.uk/jncc-assets/RIS/UK11063.pdf}}$ 

# Appendix C

**Review of Other Plans and Policies** 

# **District and County Level Plans / Strategies**

Cotswold District Local Plan 2011-2031 (adopted August 2018) <sup>63</sup>		
Plan Owner/ Competent Authority:	Cotswold District Council	
Related work HRA/AA:	Cotswold District Local Plan 2011-2031: Submission Draft Regulation 19 - Focussed Changes. Habitats Regulations Assessment Report <sup>64</sup>	
	The Cotswolds lie to the north of the Wiltshire County. Of the European Designations relevant to this assessment none are located within the Cotswold's district, however North Meadow and Clattinger Farm SAC, lies adjacent to the south.	
	Cotswold District Council formally adopted the Cotswold District Local Plan on 3 August 2018, to be completed between 2011 and 2031. The plan is not currently under review. Therefore, the most up to date information about the scale and location of developments proposed in the Cotswold's district are set out in the Cotswold District Local Plan and is summarised below.	
Notes on Plan documents:	Housing and Employment Land	
	Policy DS1: Sufficient land will be allocated, which together with commitments and dwellings completed since 2011, will deliver at least 8,400 dwellings and at least 24 hectares for B class employment use over the Plan period 2011-2031. Land will be allocated within the following Principal Settlements: Cirencester, Andoversford, Blockley, Bourton-on-the-Water, Chipping Campden, Down Ampney, Fairford, Kemble, Lechlade, Mickleton, Moreton-in-Marsh, Northleach, South Cerney, Stowon-the- wold, Tetbury, Upper Rissington, and Willersey.	

# **HRA Findings**

The HRA screening conclusions for the Cotswold District Local Plan (April 2017) were that a number of the policies including the development strategies for the towns and villages may result in likely significant effects on European sites. However, following the Appropriate Assessment stage the HRA Report concluded that adverse effects on the integrity of any of the European sites were able to be ruled out in relation to physical loss of or damage to habitat, air pollution and increased recreation pressure. The potential for in-combination effects with other authorities' development plans has also been considered and no likely significant in-combination effects have been identified that will result in adverse effect on the integrity of European sites. Therefore, in-combination likely significant effects from the Wiltshire Local Plan Review and the Cotswold District Local Plan are not expected.

Plan Owner/ Competent Authority:	Vale of White Horse District Council
Related work HRA/AA:	Vale of White Horse LPP2 Habitats Regulations Assessment incorporating Appropriate Assessment (June 2018) <sup>66</sup>
Notes on Plan documents:	The Vale of White Horse lies to the north-east of the Wiltshire County. Of the European Designations relevant to this assessment Hackpen Hill SAC is located within the Vale of White Horse's district.  Vale of White Horse District Council formally adopted the Local Plan 2031 Part 2: Detailed Policies and Additional Sites in October 2019. Part 2 sets out strategic policies and locations for strategic housing for the agreed quantum of Oxford's unmet housing need to be addressed within the Vale of White Horse District. The LPP1 Submission version allocates 20,560 new dwellings to be delivered over the lifetime of the Local Plan (to 2031), with 12,495 to be delivered through strategic allocations and a further 1,000 to be determined, potentially through the LPP2. The LPP2 allocates sites to deliver the remaining needs for the district and also to meet the agreed apportionment of un-met housing need fo

<sup>63</sup> https://www.cotswold.gov.uk/media/k2kivg3b/cotswold-district-local-plan-2011-2031-adopted-3-august-2018-web-version.pdf

https://cotswold-district-council.s1.umbraco.io/media/fcolqyq3/5501-habitats-regulations-assessment-report-apr-2017.pdf

https://data.whitehorsedc.gov.uk/java/support/dynamic\_serve.jsp?ID=1019020230&CODE=334F7060DA83381A398C9805A9630BCA

<sup>65</sup> https://www.whitehorsedc.gov.uk/vale-of-white-horse-district-council/planning-and-development/local-plan-and-planning-policies/local-plan-2031/

Review of Other Plans and Policies

Wiltshire Local Plan Review Habitats Regulations Assessment January 2021

#### Vale of White Horse Local Plan 2031 Part 2: Detailed Policies and Additional Sites (adopted October 2019)<sup>65</sup>

The HRA concluded that, given the incorporation of recommendations and subject to development of strategic air quality studies relating to Oxford Meadows SAC, the LPP2 will not lead to an adverse effect on the integrity of European sites either alone, or in combination with other plans and projects.

West Berkshire Core Strategy 2006-2026 (adopted July 2012) <sup>67</sup>		
Housing Site Allocations DPD (Adopted May 2017) <sup>68</sup>		
West Berkshire Local Plan Review to 2036 (Emerging)		
Plan Owner/ Competent Authority:	West Berkshire Council	
	West Berkshire Council (2010) Habitat Regulations Assessment of West Berkshire Core Strategy <sup>69</sup>	
Related work HRA/AA:	West Berkshire Council (2016) West Berkshire Local Plan Housing Site Allocations Development Plan Document Submission Habitat Regulations Assessment Screening Report <sup>70</sup>	
	The current development plan consists of a number of documents, including the Core Strategy, which sets out an overall strategy for development until 2026. The Council is currently working on a new Local Plan which will run until 2036. Regulation 18 consultation for the emerging Local Plan was carried out from November to December 2018. This consultation did not present new policies or site allocations, but rather a review of the current strategy and a roadmap for how it needs to be updated.	
	Housing Provision	
Notes on Plan documents:	The Core Strategy makes provision for at least 10,500 new homes over the plan period. The Housing Site Allocations DPD allocates homes that are not already provided for via completions or commitments.	
	Employment Provision	
	The Core Strategy includes a policy to manage employment development but does not allocate new employment sites as evidence showed a sufficient supply of employment land exists to meet needs until the end of the plan period.	

#### **HRA Findings**

# **HRA Core Strategy Findings:**

The screening exercise concluded that there was the possibility of likely significant effects in relation to Kennet and Lambourn Floodplain SAC (water quality and quantity and urban edge effects, including increased costs of site management), River Lambourn SAC (water quality and quantity and increased costs of site management) and Kennet Valley Alderwoods SAC (recreational disturbance and water quantity).

The HRA concluded that no adverse effects on integrity would arise, either due to further consideration of the potential issues or because policies within the Core Strategy are expected to provide sufficient mitigation.

#### **HRA Housing Site Allocations DPD Findings:**

The analysis in the report confirms that the potential effects of the housing site allocations and other policies in the Housing Site Allocations DPD will not give rise to further issues, principally on the basis of the Core Strategy which ensures that appropriate measures are in place to mitigate against/avoid potential significant effects on European sites.

Swindon Borough Local Plan 2026 <sup>71</sup> (adopted 2015)	
Plan Owner/Competent Authority:	Swindon Borough Council
Related work HRA/AA:	Swindon Borough Core Strategy Habitats Regulations Assessment Screening Report (2008)

<sup>67</sup> https://info.westberks.gov.uk/CHttpHandler.ashx?id=36374&p=0

<sup>68</sup> https://info.westberks.gov.uk/CHttpHandler.ashx?id=43955&p=0

https://citizen.westberks.gov.uk/media/36470/West-Berkshire-Habitat-Regulations-Assessment-Core-Strategy-

<sup>/</sup>pdf/West Berkshire Habitat Regulations Assessment (Core Strategy).pdf?m=637007820906330000

<sup>70</sup> http://info.westberks.gov.uk/CHttpHandler.ashx?id=40250&p=0

<sup>71</sup> https://www.swindon.gov.uk/downloads/file/3988/swindon borough local plan 2026

Swindon Borough Local Plan 2026 <sup>71</sup> (adopted 2015)		
	There is a review of the current Local Plan for the Borough of Swindon for the period to 2036.	
	Housing Provision	
	22,000 dwellings between 2011 and 2026, phased as follows: 1,150 average per annum between 2011 and 2016; and, 1,625 average per annum between 2016 and 2026.	
Notes on Plan documents:	The draft Local Plan review makes provision for at least 20,450 homes to be built in the Borough up to 2036.	
	Employment Provision	
	119.5 hectares of employment land (B-use class), 77.5 hectares of additional employment land; and, 42 hectares with extant permission and existing allocations.	

#### **HRA Findings**

The HRA considered five European sites, all of which lie within 15km of the Authority's plan area boundaries. Of the five European sites considered two were screened out of the detailed assessment based on an analysis of the likely impacts of the plan and the known sensitivities of the sites. The findings of the screening process suggested the potential for significant effects at three European Sites: North Meadow and Clattinger Farm SAC; Kennet and Lambourn Floodplain SAC and the River Lambourn SAC. These effects were considered to arise primarily as a result of effects from the plan acting 'in-combination' with other plans and programmes being developed and implemented simultaneously in the area. An Appropriate Assessment was undertaken for the three European site in relation to identified impact areas (water resources & water quality and atmospheric pollution).

The Appropriate Assessment concluded that impacts predicted to arise from the implementation of the plan when considered in-combination with the potential impacts from other surrounding plans and projects, would not significantly affect the integrity of the SACs assessed. This assessment was informed by an analysis of key conditions supporting the site's integrity, existing environmental trend data, the assessed impacts of surrounding plans & projects and the effectiveness of known management and regulatory regimes. The assessment also took into account the nature and range of policies included in the Core Strategy Submission Draft, that reflect the recommendations arising from the HRA and that will act to avoid and mitigate identified impacts arising from the implementation of development.

Swindon Borough Council's Local Plan Review 2036 (emerging) <sup>72</sup>		
Plan Owner/Competent Authority:	Swindon Borough Council	
Related work HRA/AA:	Habitats Regulations Assessment for the Swindon Local Plan Proposed Submission Draft <sup>72</sup>	
	Swindon Borough Council are carrying out a review of the current Local Plan for the Borough of Swindon for the period to 2036. Swindon Borough Council has published the Regulation 19 Proposed Submission Draft Version of the Local Plan for public representations.	
Notes on Plan documents:	The draft Local Plan review sets out where 20,450 homes could be built in the Borough up to 2036. In order to reach the required housing target and, following the consultation earlier this year, a number of urban housing sites have been added to the draft Local Plan. In addition, a number of sites have been identified for future housing growth outside the Swindon urban area.	
	It also includes draft development management policies. These will guide the decisions made on planning applications submitted to the council.	

# **HRA Findings**

The findings of the HRA screening determined that air pollution, recreation, water quantity and water quality, via Strategic Allocations, Local Site Allocations and Policy DM 12: Housing on Retail Parks and Policy DM 15: Employment Land, could result in LSE on the following European Sites:

- North Meadow and Clattinger Farm SAC (air pollution, recreation, water quantity and water quality)
- Kennet and Lambourn floodplain SAC (water quantity and water quality)
- River Lambourn SAC (water quantity and water quality)

The findings of the Appropriate Assessment concluded that:

Mitigation could be implemented which would enable the conclusion that the Swindon Local Plan would not have adverse effects
on the integrity of North Meadow and Clattinger Farm SAC in relation to air pollution, either alone or in-combination with other plans

<sup>72</sup> https://swindon-consult.objective.co.uk/portal/lpr/lps/local\_plan\_submission?tab=files

## Swindon Borough Council's Local Plan Review 2036 (emerging)<sup>72</sup>

and projects. However, in line with the precautionary principle, in the absence of up to date AADT calculations and air quality modelling (if required), AEoI cannot be ruled out at this stage.

- The deliverability of the recreational mitigation measures will need to be determined prior to the outcome of the Appropriate Assessment being determined, therefore it cannot currently be concluded that that the Swindon Local Plan would not have adverse effects on the integrity of European sites in relation to increased recreation pressure.
- Provided the mitigation embedded within policy DM 24 Water Supply are implemented then, the Swindon Local Plan would not have adverse effects on the integrity of European sites in relation to changes in water quantity and water quality.

Key recommendations and next steps included collecting road traffic AADT data in proximity to North Meadow and Clattinger Farm SAC and strengthening the policy wording in relation to recreation to include specific commitment for residential developments within 7km of the SAC.

Test Valley Borough Revised Local Plan (Adopted Local Plan 2011-2029) <sup>73</sup>		
Plan Owner/Competent Authority:	Test Valley Borough Council	
Related work HRA/AA:	Test Valley Borough Council (2013) Habitats Regulations Assessment for Test Valley Revised Local Plan DPD 2011-2019. Regulation 19 – Pre Submission.	
	Note that TVBC is in the process of preparing a new Local Plan, but this is in an early stage of development (a refined issues and options consultation is taking place between June and August 2020), therefore no policies have been developed for this yet.	
	Housing Provision	
Notes on Plan documents:	The plan makes provision for a minimum of 10,584 homes over the plan period, including 6,444 homes at Andover.	
	Employment Provision	
	The plan allocates just over 20ha employment land, although a number of policies permit employment development in suitable circumstances.	

# **HRA Findings**

## HRA Pre-Submission Findings<sup>73</sup>:

Overall, 41 out of 51 policies were assessed as being not likely to have significant effects alone or in-combination on any International site as they do not give rise to effects that could affect such a site. Detailed assessment of the effects of these policies found that, generally, the effects of the plan would not undermine the conservation objectives of any sites of International nature conservation importance. Where this was not the case, the plan policy wording was updated to state that proposals would not be supported where they could not demonstrate no adverse effects on the relevant European sites (Mottisfont Bats SAC).

With regards to water quality, treated wastewater from some areas may ultimately drain into the Solent. However, the Plan explicitly requires that development does not cause deterioration of water bodies with respect to declines in water quality.

As such, the HRA concluded that the Revised Local Plan DPD will not adversely affect any European sites.

# HRA Addendum Findings<sup>73</sup>:

This addendum updated the HRA to account for the Schedule of Proposed Minor Changes and comments from Natural England. This work did not result in a change to the overall conclusions of the Pre-Submission HRA.

<sup>73</sup> https://www.testvalley.gov.uk/planning-and-building/planningpolicy/local-development-framework/dpd

New Forest District Local Plan Part 1: Planning Strategy (Adopted 2020) <sup>74</sup> New Forest District Local Plan Part 2: Sites and Development Management (Adopted 2014) <sup>75</sup>		
Plan Owner/Competent Authority:	New Forest District Council	
Related work HRA/AA:	LUC (2018) Habitats Regulations Assessment of New Forest District Local Plan Part 1	
	The Local Plan Part 2 was adopted before Part 1 as it follows on from the previous Core Strategy (2009). As the new Part 1 is the most up to date document in terms of quantum of development to be delivered, the information below considers just the new Part 1 Local Plan.	
	Housing Provision:	
Notes on Plan documents:	The Part 1 Local Plan provides for at least 10,420 new homes over the plan period 2016-2036.	
	Employment Provision:	
	The Part 1 Local Plan provides for 126,000 sqm of employment floorspace over the plan period, including 40,000 sqm already completed or with planning permission.	

#### **HRA Findings**

The Part 1 Local Plan HRA identified potential for likely significant effects as a result of direct loss of or damage to European sites and supporting habitat, urban edge effects, changes in air quality, traffic collision, recreation pressure, changes in water quality and in water quantity. However, the appropriate assessment stage found that these effects would not result in adverse effects on integrity of the site either in themselves, or as a result of existing mitigation measures or mitigation included in the Local Plan policies.

New Forest National Park Local Plan 2016 – 2036 (Adopted 2019) <sup>76</sup>		
Plan Owner/Competent Authority:	New Forest District Council	
	LUC (2018) Habitat Regulations Assessment of New Forest National Park Local Plan 2016 – 2036 <sup>77</sup>	
Related work HRA/AA:	LUC (2018) Habitats Regulations Assessment of New Forest National Park Local Plan 2016-2036, Addendum to review implications of CJEU judgment in Case C-323/17 People Over Wind and Sweetman v. Coillte Teoranta for the HRA at Submission Draft stage <sup>78</sup>	
	LUC (2019) Habitat Regulations Assessment of New Forest National Park Local Plan 2016 – 2036 Addendum <sup>79</sup>	
	Housing Provision:	
	The Local Plan provides for 800 new homes over the plan period 2016-2036.	
Notes on Plan documents:	Employment Provision:	
	The Local Plan permits small-scale business development and redevelopment of existing sites but does not allocate any sites for employment use.	

#### **HRA Findings**

The January 2018 HRA found that likely significant effects could arise in relation to direct loss of or damage to European sites or supporting habitat, urban edge effects, air pollution, traffic collision, recreation pressure and changes in water quality and quantity. However, it relied on mitigation within the Local Plan to screen the majority of these effects out of appropriate assessment, except loss or damage to offsite supporting habitat and traffic collision. The July 2018 addendum required urban edge effects, recreation pressure and changes to water quality and quantity to be screened into appropriate assessment. However, the overall conclusions were the same, in that no adverse effects on integrity are expected in relation to any European site, either because impact pathways do not exist or because sufficient mitigation is in place either through existing management measures or policies within the local plan itself.

<sup>74</sup> https://www.newforest.gov.uk/media/705/Local-Plan-Document-2016-2036/pdf/Local Plan 2016-2036 Part One FINAL.pdf?m=637329191351130000

<sup>&</sup>lt;sup>75</sup> https://www.newforest.gov.uk/article/1463/Local-Plan-Part-2-Sites-and-Development-Management

https://www.newforestnpa.gov.uk/app/uploads/2019/04/1-New-Forest-NPA-draft-Local-Plan-Proposed-Modifications-Consolidated-text-April-2019.pdf

https://www.newforestnpa.gov.uk/app/uploads/2018/01/HRA of New Forest NPA Local Plan Reg 19.pdf

<sup>78</sup> https://www.newforestnpa.gov.uk/app/uploads/2018/07/Review-of-HRA-of-New-Forest-NPA-Local-Plan-re-People-Over-Wind.pdf

https://www.newforestnpa.gov.uk/app/uploads/2019/04/4-HRA-Addendum-of-Proposed-Main-Modifications.pdf

# New Forest National Park Local Plan 2016 - 2036 (Adopted 2019)<sup>76</sup>

The HRA Addendum assessed the main modifications to draft and they have no implications for the HRA conclusions at the draft stage, as modified by subsequent HRA addendum reports, or they serve to strengthen mitigation of potential effects on European Sites. Therefore, the local plan will not have an adverse effect on the integrity of any European site, either alone or in-combination with other plans or projects.

Dorset Council Local Plan (Emerging)		
Plan Owner/Competent Authority:	Dorset Council	
Related work HRA/AA:	N/A	
	A new local plan for Dorset is being prepared to incorporate and amalgamate the below plans	
	Existing local plans are:	
	■ Christchurch and East Dorset Local Plan Part 1: Core Strategy (2014) <sup>80</sup>	
	Housing Provision:	
	About 8,490 new homes will be provided in the plan area between the years 2013 and 2028. This will comprise about 5,000 homes within the existing urban areas and a further 3,465 provided as new neighbourhoods at Christchurch, Burton, Corfe Mullen, Wimborne/Colehill, Ferndown/West Parley and Verwood. The Councils aim for a total of 35% of the new homes to be affordable.	
	Employment provision:	
	Employment land supply located in Christchurch and East Dorset will contribute in part to meeting the wider strategic requirement across the Bournemouth and Poole Strategically Significant City and Town as identified in the 2012 Bournemouth, Dorset and Poole Workspace Study. 80 hectares of land will be identified to meet the requirements of existing and new businesses. An appropriate mix of premises will be encouraged on employment sites within the portfolio to meet these business needs. Live/work units will be supported for business activity that is acceptable in environmental terms (noise, discharges or emissions to land, air or water) and that will not affect the health, safety or amenities of nearby land.	
Notes as Plan decuments	■ North Dorset Local Plan Part 1 (2016) <sup>81</sup>	
Notes on Plan documents:	Housing Provision:	
	At least 5,700 net additional homes will be provided in North Dorset between 2011 and 2031 to deliver an average annual rate of about 285 dwellings per annum. The vast majority of housing growth will be concentrated at the District's four main towns of Blandford (Forum and St. Mary), Gillingham, Shaftesbury and Sturminster Newton	
	Employment provision:	
	49.6 hectares were identified as being available across the District, which is more than adequate to meet the overall need for employment land.	
	■ Purbeck Local Plan Part 1 (2012) <sup>82</sup>	
	Housing Provision:	
	2,520 dwellings across the District for the period 2006-2027 (120 dwellings per annum), around 310 affordable dwellings could come forward from these sites.	
	Employment provision:	
	The 2012 Dorset Workspace Strategy has identified a figure of 15,435 jobs to be created over the period 2006-2026 for the Poole TTWA. Purbeck forms part of the Poole TTWA. The Borough of Poole itself is committed to providing a total of 13,700 jobs. In terms of supply, the Workspace Strategy recommends that Dorset Green Technology Park should have 5 hectares of land made available for local uses and a further 15 hectares for inward investment opportunities. For the	

<sup>80</sup> https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/christchurch/local-development-framework/local-plan-part-1/pdfs/local-plan-part-1/christchurch-and-east-dorset-adopted-core-strategy.pdf

<sup>1/</sup>christchurch-and-east-dorset-adopted-core-strategy.pdf

81 https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/north-dorset/the-north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/north-dorset-local-plan/pdfs/pdfs-north-dorset-local-plan/pdfs/pdfs

<sup>82</sup> https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/purbeck/adopted-local-plan-purbeck/pdfs/alp/purbeck-local-plan-part-1-planning-purbecks-future.pdf

#### **Dorset Council Local Plan (Emerging)**

period 2011-2031, a requirement for 260 hectares of employment land has been identified for Bournemouth, Dorset and Poole, compared with an existing supply of 277 hectares.

Swanage Local Plan (2017)83

#### **Housing Provision:**

Approximately 200 homes will be provided in settlement extensions on the edge of Swanage. The allocation of land at Northbrook Road East, for approximately 90 dwellings, of which a minimum of 50% will be Affordable; land at Northbrook Road West, for approximately 90 dwellings, of which a minimum of 50% will be Affordable; and land at Prospect Farm, , for approximately 20 dwellings, of which a minimum of 50% will be Affordable.

#### **Employment provision:**

The employment sites at Prospect Business Park and Victoria Avenue Industrial Estate are safeguarded for employment uses in line with policy E (Employment) of PLP1.

West Dorset, Weymouth and Portland Local Plan (2015)84

#### **Housing Provision:**

Affordable housing. Where open market housing is proposed affordable housing will be sought, unless the proposal is for replacement or subdivision of an existing home. The level of affordable housing required reflects the viability of development land in the local area, and will be: 1. 25% in Portland; 2. 35% in Weymouth and West Dorset. In most cases, where one or more affordable homes are being provided, these should be provided on the open market site. Financial contributions towards the provision of affordable housing will be required for any shortfall that cannot be delivered on the site.

#### **Employment provision:**

Employment development will generally be supported: 1. within or on the edge of a settlement; 2. through the intensification or extension of existing premises; 3. as part of a farm diversification scheme; 4. through the re-use or replacement of an existing building; or 5. in a rural location where this is essential for that type of business. Proposals for live-work developments will be supported in locations considered suitable for open market residential development

# **HRA Findings**

N/A

South Somerset Local Plan 2006-2028 (adopted March 2015) <sup>85</sup>	
Plan Owner/Competent Authority:	South Somerset District Council
Related work HRA/AA:	Habitats Regulations Assessment Addendum Report 2014 <sup>86</sup>
Notes on Plan documents:	Housing Provision:  Provision of a high quality, sustainable, balanced housing market, with a mix of housing types, tenures and prices with the flexibility to meet the needs of the changing population198. Key issues include the provision of sustainably sited and constructed affordable housing and meeting the needs of the ageing population.
	Employment provision:  At least 11,250 new jobs and 149.51 hectares of employment land within the district to 2028 (of which 52.97 hectares will be additional provision to existing employment land supply. Supply consists of

<sup>83</sup> https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/purbeck/swanage-local-plan/pdfs/slp/adopted-swanage-local-plan.pdf

<sup>84</sup> https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/west-dorset-and-weymouth-portland/adopted-local-plan/pdfs/alp/west-dorset-weymouthportland-local-plan-2015.pdf

https://www.southsomerset.gov.uk/media/1250/j-plan pol-web-site-2018-1-local-plan-local-plan-2006-2028-south somerset local plan 2006-2028\_adoption\_version\_march\_2015.pdf

86 https://modgov.southsomerset.gov.uk/documents/s2357/Local%20Plan%20Appendix%20C.pdf

#### South Somerset Local Plan 2006-2028 (adopted March 2015)85

saved allocations, land with planning permission, land previously with permission, now lapsed and land under construction).

#### **HRA Findings**

The HRA Report published in June 2012 found that this Policy has the potential for likely significant effects on European sites as a result of the location and overall quantum of proposed housing growth. The HRA concluded that there is appropriate mitigation available through Local Plan policies and available at the project level to ensure that there will be no adverse effects on the integrity of European sites.

HRA Addendum: A screening of the key changes concluded that the Local Plan, as modified by the Council, will not have significant effects either alone or in-combination on European sites, given the mitigation proposed in the HRA Report (June 2012) and through Local Plan Policies.

Mendip District Local Plan Part 1: Strategy & Policies 2006-2029 (Adopted Dec 2014) <sup>87</sup>	
Plan Owner/Competent Authority:	Mendip District Council
Related work HRA/AA:	Pre Submission Local Plan Part II 2006 – 2029 Habitat Regulations Assessment (2018) <sup>88</sup>
	Housing Provision:
	Following the Review of Housing Requirements (2013), and to make provision for around 15 years supply from the likely date of adoption, this Local Plan is making provision for at least 9,635 dwellings in the period 2006-2029 and a development rate of 420 dwellings per annum from 2011-2029.
Notes on Plan documents:	Employment provision:
	The availability of traditional employment land on industrial estates, trading estates and other sites varies from town to town. All have well established estates which are hives of diverse activity and there is a reasonable amount of turnover, offering space of varying prices and configurations Commerce Park at Frome, Morlands at Glastonbury and Cathedral Park at Wells represent new high quality serviced land available to accommodate new and growing businesses. Similar land at Street Business Park is expected to come online in the next few years. Other land, where the principle for employment use has been established, exists at Dulcote Quarry near Wells and the Bath and West Showground site
	The Council have committed to review and update the adopted Mendip Local Plan Part 1. The Council have committed to review and update the adopted Mendip Local Plan Part 1. The new plan will also incorporate the Local Plan Part II when adopted. Evidence gathering has started and work on the timescale and stages. No major consultation is likely before Spring 2021 with submission of a revised plan in 2020 and 2023.

#### **HRA Findings**

It is the conclusion of Mendip District Council that Local Plan 2 is unlikely to have a significant effect on features of European and Ramsar designated sites provided that the policy stated as mitigation are applied and additional wording regrading recreational effects on calcareous grassland in the St Dunstan's Catchment component of the Mells Valley SAC is added to Policy SS1a.

Bath and North East Somerset Co	Bath and North East Somerset Council's Placemaking Plan (adopted Jul 2017) <sup>89</sup>	
Plan Owner/Competent Authority:	Bath and North East Somerset Council	
Related work HRA/AA:	Summary of the Habitat Regulations Assessment process for the Bath & North East Somerset Council Placemaking Plan (Local Plan Part 2) November 2014 to June 2017 <sup>90</sup>	
Notes on Plan documents:	Housing Provision: The Council intends to meet in full the total assessed need of about 13,000 dwellings.	

<sup>87</sup> https://www.mendip.gov.uk/media/9073/Adopted-Local-Plan-2014/pdf/Adopted Local Plan 2014 erratum note.pdf?m=637381104416130000

<sup>88</sup> https://www.mendip.gov.uk/media/20586/SD14a-Hab-Regs-Assessment-Oct18-v3d/pdf/SD14a Hab Regs Assessment Oct18 v3d.pdf?m=636844590349870000

https://beta.bathnes.gov.uk/policy-and-documents-library/placemaking-plan

https://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/Placemaking-Plan/pmp hra july 2017.pdf

# Bath and North East Somerset Council's Placemaking Plan (adopted Jul 2017)<sup>89</sup> Employment provisions: Economic growth aspirations plan proposes the delivery of around 10,300 new jobs.

#### **HRA Findings**

The HRA process has been iterative, precautionary and robust, and has involved regular consultation and liaison with Natural England. Plan amendments and modifications were made as appropriate to avoid likely significant effects to European Sites within or adjacent to the District.

Using a precautionary approach and taking into account all mitigation measures proposed it is concluded that no significant effects are likely to occur.

South Gloucestershire New Local Plan: Core Strategy 2006-2027 (adopted Dec 2013) <sup>91</sup>	
Plan Owner/Competent Authority:	South Gloucestershire Council
Related work HRA/AA:	South Gloucestershire Core Strategy Habitats Regulations Assessment March 2011 – Final Draft <sup>92</sup>
	Housing Provision:
	Between 2006 and 2027 provision will be made for 28,355 new dwellings, 5,810 of which have already been completed, this means providing up to 22,545 dwellings, between 2013 and 2027. The Council will seek to achieve an annualised rate of housing delivery over the 14-year plan period 2013 – 2027. This equates to 1,610 dwellings per annum.
	Employment provision:
Notes on Plan documents:	Limited allocation of new employment land will be made in association with housing development in the new neighbourhood north of Yate. An area of employment land will be retained to the east and west of the A38 to accommodate a range of business, industrial and warehousing uses that will support and enhance the existing cluster of aerospace excellence, and other employment sectors. The council will maintain a supply of economic development land in accordance with the Strategy for Development – 1267Ha.
	South Gloucestershire Council are developing a new Local Plan for South Gloucestershire. The Local Plan 2020 is expected to be adopted in 2023. The HRA report for the new local plan is yet to be published.

# **HRA Findings**

In conclusion, it is considered that, on the basis of the series of amendments to the wording of the policies (and supporting text) in the Proposed Changes, as set out above, the South Gloucestershire Core Strategy will not have a significant effect or compromise the conservation objectives of the Severn Estuary N2K site through an increase in recreational pressure, either on their own or in combination with other plans.

<sup>91</sup> https://beta.southglos.gov.uk/wp-content/uploads/South-Gloucestershire-Core-Strategy-2006-2027.pdf

<sup>92</sup> https://www.southglos.gov.uk/documents/pte110067.pdf

# **Major Infrastructure Projects**

Projects listed as Nationally Significant Infrastructure Projects (NSIPs) by The Planning Inspectorate<sup>93</sup>:

A417 Missing Link	
Plan Owner/ Competent Authority:	Highways England
Related work HRA/AA:	None available for this project at this stage.
	The proposed scheme would provide a dual carriageway to improve the current "Missing Link" section of single carriageway of the A417 between Cowley roundabout and Crickley Hill.
Notes on Plan documents:	Current Status
	The application is expected to be submitted to the Planning Inspectorate Spring/Summer 2021.
HRA Findings	
None available for this project at this stage.	

A303 Stonehenge	
Plan Owner/ Competent Authority:	Highways England
Related work HRA/AA:	Habitats Regulations Assessment For An Application Under The Planning Act 2008, A303 Amesbury to Berwick Down ('A303 Stonehenge') <sup>94</sup>
Notes on Plan documents:	The potential A303 Amesbury to Berwick Down scheme proposes to construct a new section of dual carriageway to address problems associated with the single carriageway section of the A303 between Amesbury's Countess roundabout and the dual carriageway section to the west of Winterbourne Stoke.
	Current Status
	Consented, November 2020

# **HRA Findings**

"The Secretary of State concludes that the Development would not result in any adverse effects on integrity of any of the qualifying features for which the River Avon SAC, Salisbury Plain SAC, and Salisbury Plain SPA are designated, either alone or in combination with other plans and projects."

 <sup>93 &</sup>lt;a href="https://infrastructure.planninginspectorate.gov.uk/projects/">https://infrastructure.planninginspectorate.gov.uk/projects/south-west/a303-stonehenge/</a>

# **Transport and Minerals and Waste Plans**

Viltshire Local Transport Plan <sup>95</sup>	
Plan Owner/ Competent Authority:	Wiltshire Council
Related work HRA/AA:	Wiltshire Local Transport Plan 2011 – 2026 Habitat Regulations Assessment Screening, October 2010 <sup>96</sup>
Notes on Plan documents:	The Wiltshire LTP sets out the council's objectives, plans and indicators for transport in Wiltshire. The third Wiltshire Local Transport Plan (LTP3) covers the period from March 2011 to March 2026.

#### **HRA Findings**

The overall conclusion of the HRA is that there no significant effects on European sites, as long as recommended avoidance and mitigation measures are including in the LPT3 plan/daughter documents.

The HRA for the local transport plan of Wiltshire originally could not rule out the following significant effects:

Water quality: the HRA was unable to rule out significant affects to water quality of the River Avon SAC as a result of sedimentation from roads and bridleways. However, the implementation of a robust construction method statement for all works of any nature on roads adjacent to the SAC would remove any significant adverse effects on the features of the SAC.

Wiltshire Minerals Core Strategy 97	hire Minerals Core Strategy <sup>97</sup>	
Plan Owner/ Competent Authority:	Wiltshire Council	
Related work HRA/AA:	Wiltshire & Swindon Aggregate Minerals Site Allocations DPD Pre-Submission Habitats Regulations Assessment Screening Report, January 201297 <sup>97</sup>	
Notes on Plan documents:	The Minerals Core Strategy (adopted June 2009) sets out the spatial vision, key objectives and overall principles for development covering minerals provision up to 2026.	

#### **HRA Findings**

The HRA identified three proposed extraction sites to lie in close proximity to European sites that may have potential significant effects. A detailed assessment concluded that these sites would not have a significant effect alone or in combination with other plans on the European designated sites. Appropriate site level mitigation should be considered in regards to mineral extraction sites.

It is recommended that individual extraction sites should undergo project level HRA.

Wiltshire Waste Core Strategy <sup>97</sup>	
Plan Owner/ Competent Authority:	Wiltshire Council
Related work HRA/AA:	Habitats Regulations Assessment of the Wiltshire and Swindon Minerals and Waste Development Framework, December 2011 <sup>97</sup> 97
Notes on Plan documents:	The Waste Core Strategy (adopted July 2009) sets out the spatial vision, key objectives and overall principles for development covering the provision of sustainable waste management facilities up to 2026.

<sup>95</sup> http://pages.wiltshire.gov.uk/ltp3-strategy.pdf

http://pages.wiltshire.gov.uk/ltp3-habitats-regulation-assessment.pdf

https://pages.wiltshire.gov.uk/mineralsandwastepolicy.html

Appendix C
Review of Other Plans and Policies

Wiltshire Local Plan Review Habitats Regulations Assessment January 2021

# Wiltshire Waste Core Strategy97

#### **HRA Findings**

The HRA identified two of the 35 proposed sites were situated within a distance to the River Avon SAC and other European sites to have an adverse effect.

The implementation of robust site management plan and restricting the operation of facilities to daylight hours, were identified for waste development at the sites are considered to prevent significant adverse impacts. To address concerns about water pollution from Natural England, it is recommended that surface water management strategy that specifically considers the integration of surface water drainage systems is accompanied by any proposals for the two sites.

# Appendix D

**Map of Strategic Roads within Wiltshire County**