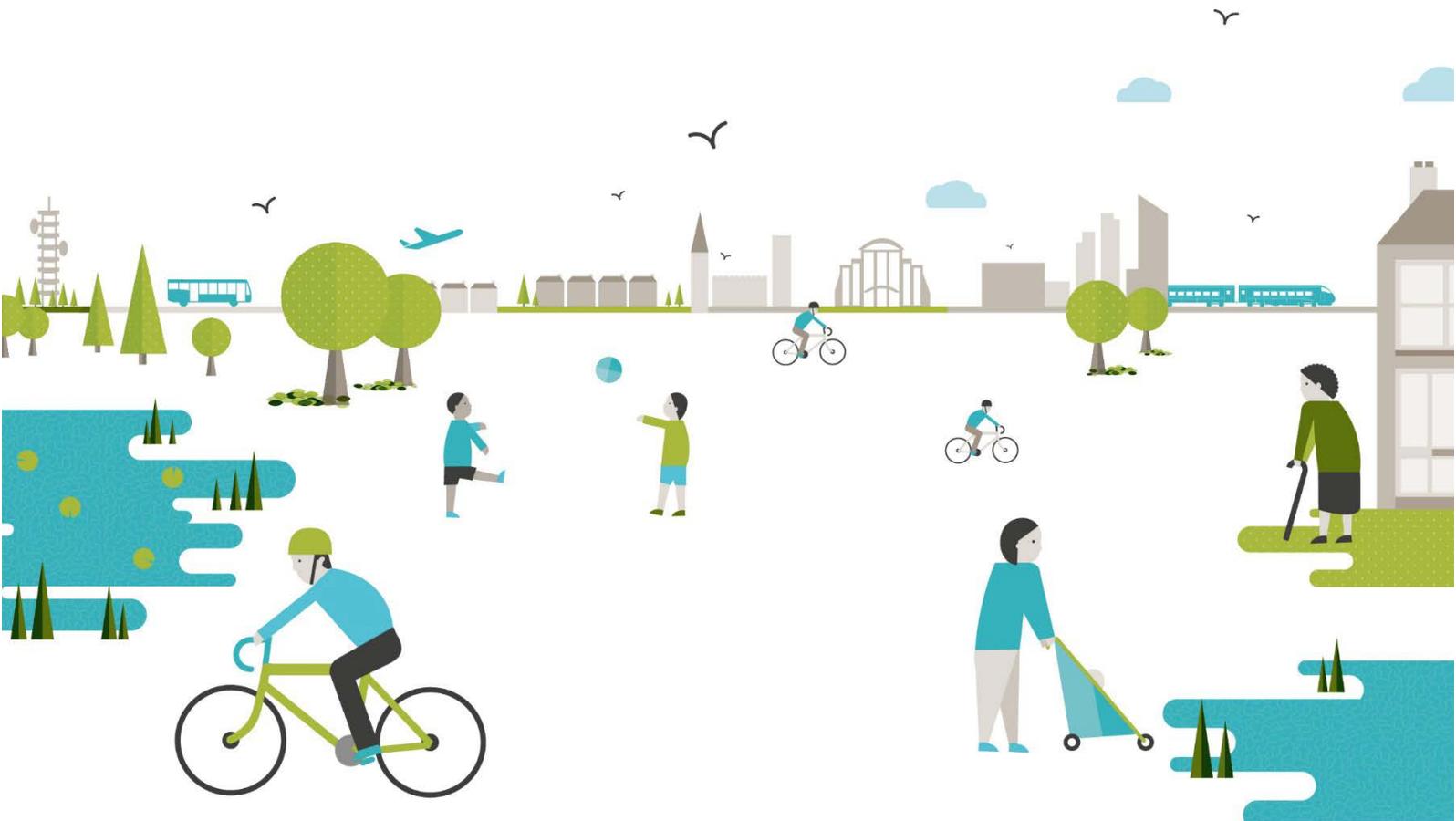


Joint Spatial Plan

Habitat Regulations Assessment (HRA)

Initial scoping paper

November 2015



Habitat Regulations Assessment (HRA): West of England Joint Spatial Plan (JSP) Initial Scoping Paper

1). Introduction

1.1 This paper has been produced by the four unitary authorities which make up the West of England sub-region. Its purpose is to begin the process for undertaking a Habitat Regulations Assessment for the Joint Spatial Plan and has been informed by early engagement with Natural England (NE) in its role as the competent authority.

The West of England

1.2 The West of England (WoE) covers the four unitary authorities (UAs) of Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire. The West of England is a generally prosperous area with an excellent quality of life and a growing national and international profile.

1.3 The outstanding environment of the sub-region makes a substantial contribution to quality of life and is a key driver for why people want to live, work and visit the area. The high quality environment makes a significant contribution to the economic success of the West of England area.

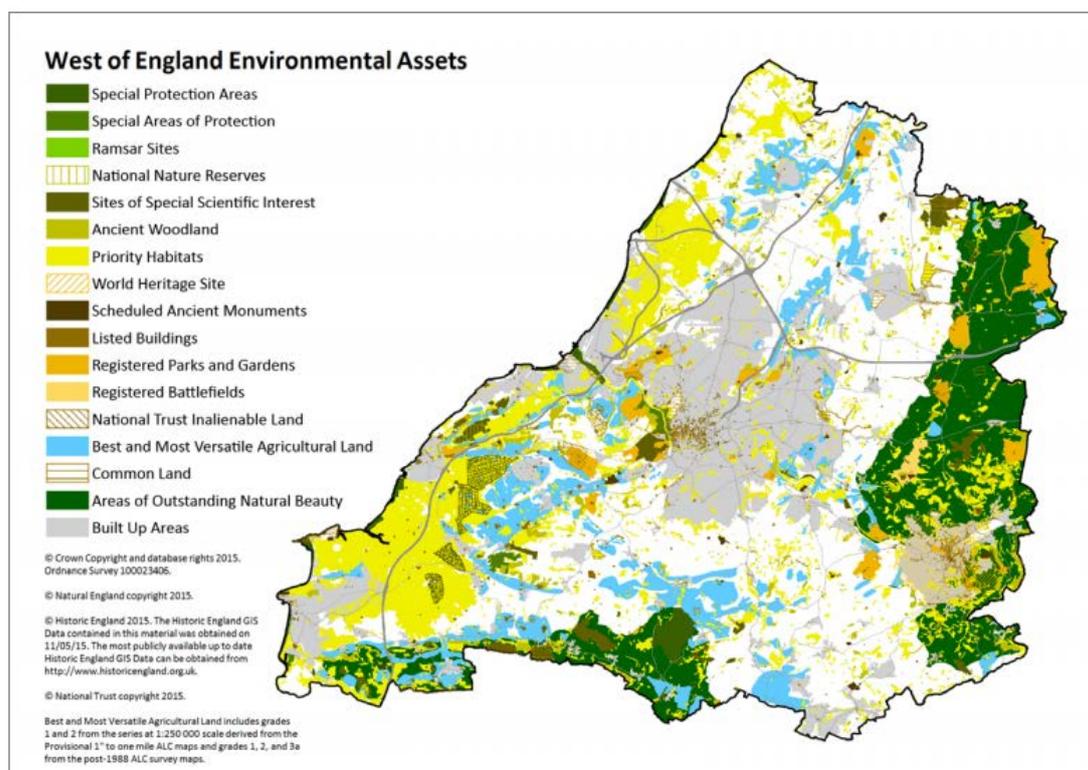


Figure 1

Joint Spatial Plan

1.4 The UAs have agreed in accord with a Memorandum of Understanding (MoU) signed in 2014 to prepare a Joint Spatial Plan (JSP). This is intended to be a Development Plan Document to guide the review and roll-forward of the Local Plans for the Unitary Authorities' administrative areas for the period 2016 to 2036. The main purpose of the JSP and supporting evidence base is to identify the housing land requirements for the Wider Bristol HMA and employment land requirements for the FEMA i.e. the actual number of new homes and amount of employment land that will need to be provided. The JSP will set out the spatial distribution strategy that identifies the best locations for where this new growth should be, across the West of England, to meet the needs of the Wider Bristol HMA. This is based on the findings of the Wider Bristol Strategic Housing Market Assessment (SHMA) which was published in June 2015. This sets out the Objectively Assessed Need (or OAN) for at least 85,000 new homes over the period 2016 to 2036, of which 34% or 29,100 need to be affordable. The OAN forms the basis upon which the new local plan, housing requirements will be established.

1.5 The Housing Market Area (HMA) is the geographical area covered by the three UAs of Bristol, North Somerset and South Gloucestershire. This does not include Bath & North East Somerset (BANES) as Bath has its own Housing market Area. However as BANES has a strong relationship to the south east and east of the Wider Bristol HMA, under the Duty to Co-operate the four unitary Authorities have agreed to work together to prepare the JSP as there may be a need to accommodate some of the needs of the wider Bristol HMA in BANES.

Relationship with UA Local Plans

1.6 The JSP purpose is therefore to produce a distributional spatial strategy for the WBHMA based on the SHMA figure of 85,000 dwellings for the period 2016 to 2036. The 85,000 dwelling figure will then translate into a housing requirement. The housing requirement is determined by:

- An assessment of the environmental and policy constraints in the WoE
- An assessment as to whether the full OAN can be accommodated within the WoE
- An assessment as to whether the identified need for affordable housing can be delivered

1.7 The outcome of this process will determine the housing requirement for the three UAs of Bristol, North Somerset and South Gloucestershire, which might be the same as, more than, or less than the OAN.

1.8 The JSP will also identify the employment land and strategic infrastructure, including transport, required to deliver the development needs identified.

1.9 The means of meeting these figures will be by the identification of broad strategic locations which will then be translated into allocations in Local Plan replacements to the Unitary Authorities existing Core Strategies. There will be a Key Diagram illustrating the JSP's policies, which will include the broad areas for strategic growth and the general extent of the Green Belt.

1.10 Site specific allocations and policy designations will be determined through each Unitary Authority's Local Plan which will need to be in conformity with the JSP.

2). Need for Assessment

2.1 European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (known as the 'Habitats Directive') and implemented in Britain by the Habitat Regulations 2010 provides legal protection for a range of habitats and species identified as being of European importance.

2.2 Article 2 of the Directive requires the maintenance or restoration of these habitats and species, in a favourable condition, and is achieved through the establishment and maintenance of protected areas referred to as Natura 2000 sites. These are comprised of Special Areas of Conservation (SAC) designated under European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('the Habitats Directive 1992'), implemented in Britain by the Conservation (Natural Habitats & c) Regulations 2010 ('the Habitat Regulations'); and Special Protection Areas (SPA) designated under EC Directive 79/409 on the Conservation of Wild Birds ('the Birds Directive') and Ramsar site under the Ramsar Convention on the Conservation of Wetlands of Importance.

2.3 Sites designated as wetlands of international importance under the Ramsar Convention are subject to the same provisions as Natura 2000 sites.

2.4 Article 6(3) of the Directive requires any 'plan or project' likely to have a significant effect on a Natura 2000 site be subject to 'appropriate assessment'. This means an assessment of the impacts of the plan/project on the site. As 'plans', the Regulations require local authorities to carry out an 'appropriate assessment' ('Habitat Regulations Assessment' or HRA) of local development documents before being adopted with the purpose being to assess the impacts of a 'land-use plan' against the conservation objectives of Natura 2000 Sites.

2.5 The phrase 'land-use plan' has been deemed by the European Court to include Development Plan Documents. Accordingly, as a land-use plan, the Joint Spatial Plan (JSP) must be subject to Assessment under Regulation 61 of the Habitat Regulations 2010.

3). Preparing the Joint Spatial Plan

3.1 The Joint Spatial Plan (JSP) has a clearly defined role which is to set out how the much needed new homes and employment land will be sustainably accommodated and what infrastructure is required to support this. Based on the JSP, more detailed land use policies will be set out in the local plans for the four Unitary Authorities (UAs).

3.2 The JSP will be prepared through a number of stages – these (and the timetable associated with them) are set out in Table 1 below, including reference to the relevant stages in the Town and Country Planning (Local Planning) Regulations 2012. The Plan is currently at the first stage: the 'Issues and Options' stage.

When	Stage	Time	Stage of HRA
November 2015 to January 2016	Issues and Options (Reg 18)	12 week consultation	Initial scoping exercise
September 2016	Draft Plan (Reg 18)	6 week consultation	Screening
July 2017	Proposed Submission Plan (Reg 19/20)	6 week consultation	Full HRA
Autumn/ Winter 2017	Examination in Public (EiP)	TBC	N/A

Table 1

3.3 The Issues and Options stage is all about hearing the views of all interested parties and our communities at an early stage in plan preparation. No decisions have been made at this stage.

3.4 With this in mind, the purpose of this paper is to begin, and set out the process for undertaking, a full Habitat Regulations Assessment in support of the Joint Spatial Plan, and to ensure the approach to the HRA process and the information on European sites to be considered is appropriate. The full HRA Report for the Joint Spatial Plan will be published alongside the Proposed Submission version of the Plan in 2017.

3.5 Once the JSP is adopted, it will be for the four UAs (in consultation with Natural England) to decide what additional work is necessary to ensure that their Local Plans meet the requirements of the Conservation of Habitats and Species Regulations 2010.

4). The HRA Process

4.1 In line with guidance published by DCLG ('guidance on Planning for the Protection of European Sites: Appropriate Assessment') the JSP will be subject to a three stage process. This process has been adopted to assess the majority of the four UAs individual Local Plan documents.

4.2 All three stages of the process are referred cumulatively as Habitat Regulations Assessment (HRA), to clearly distinguish the whole process from the step within it referred to as the Appropriate Assessment. Diagram X below sets out these three main stages. This report focuses on the first stage, initial screening of the Joint Spatial Plan.

Habitat Regulation Assessment – Stage	Purpose
1. Initial Screening	Determining whether the plan 'either alone or in combination with other plans or projects' is likely to have a significant impact on a European site
2. Appropriate Assessment	Determining whether, in view of the site's conservation objectives, the plan 'either alone or in combination with other plans or projects' would have an adverse impact (or risk of this) on the integrity of the site. If not, the plan can proceed.
3. Mitigation and Alternatives	Where the plan is assessed as having an adverse impact, or uncertain impact (or risk of this) on the integrity of a site, there should be an examination of mitigation measures and alternative solutions. If it is not possible to identify mitigation and alternatives it will be necessary to establish the ' <i>imperative reasons of overriding public interest</i> ' (IROPI). This is not considered a standard part of the process and will only be carried out in exceptional circumstances.

Table 2 – HRA process guide

Stage 1 - Initial screening of Natura 2000 sites

4.3 The proposed approach is to undertake an in-house identification (screening) of the Natura 2000 sites to be considered, based on the HRAs undertaken for other comparable Local Plan documents in the

West of England, e.g. Joint Waste Core Strategy and the Bristol City and South Gloucestershire Core Strategies.

4.4 The results of this preliminary screening exercise will be a list of Natura 2000 sites within the West of England and up to 15km from the boundary, as shown in Figure 2 (below). The radius of 15km was chosen following engagement with Natural England. It also accords with the HRA screening processes carried out on the Local Plan documents (listed above). This creates an initial list of 14 sites which will then be considered as part of the screening process. These sites are:

- Avon Gorge Woodlands Special Areas of Conservation (SAC);
- Bath & Bradford-on-Avon Bats Special Areas of Conservation (SAC);
- Chew Valley Special Protection Areas (SPA);
- Mells Valley Special Areas of Conservation (SAC);
- Mendip Limestone Grasslands Special Areas of Conservation (SAC);
- Mendip Woodlands Special Areas of Conservation (SAC);
- North Somerset and Mendip Bats Special Areas of Conservation (SAC);
- Rodborough Common Special Areas of Conservation (SAC);
- River Usk / Afon Wysg Special Areas of Conservation (SAC);
- River Wye / Afon Gwy Special Areas of Conservation (SAC);
- Severn Estuary Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar site;
- Somerset Levels and Moors Special Protection Areas (SPA) and Ramsar;
- Wye Valley & Forest of Dean Bat Sites Special Areas of Conservation (SAC); and
- Wye Valley Woodlands Special Areas of Conservation (SAC).

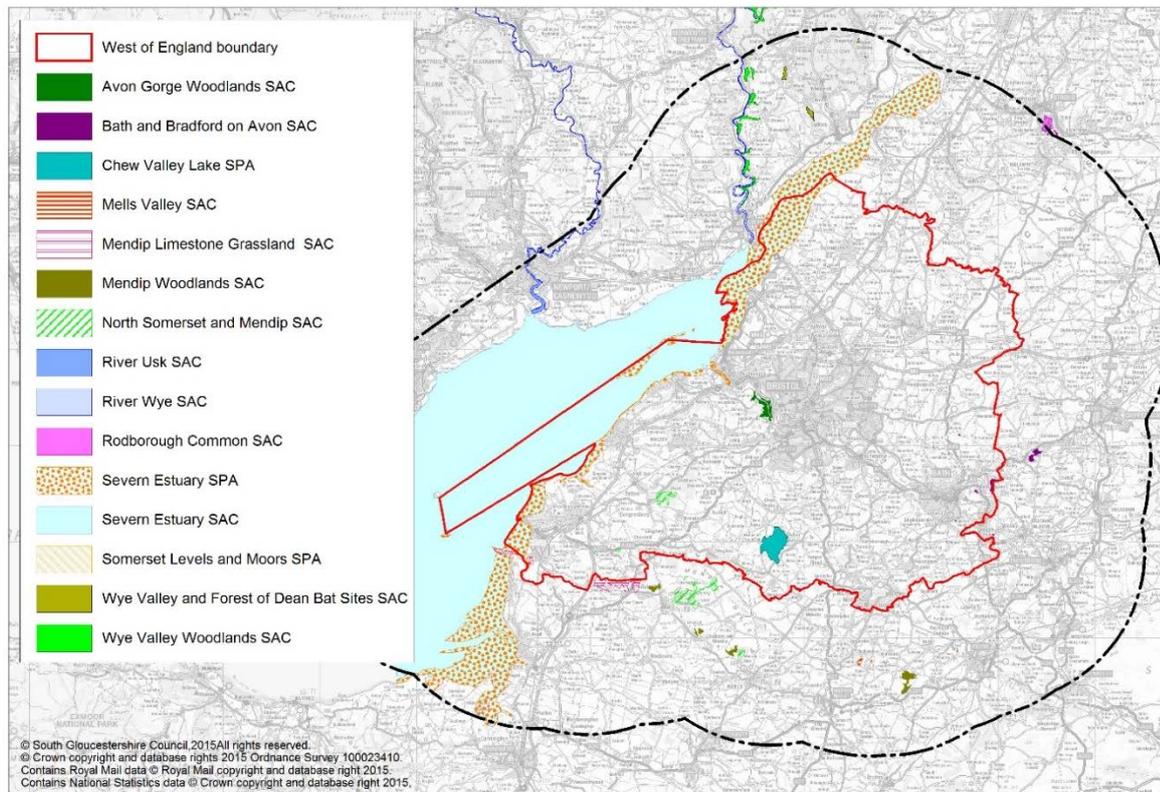


Figure 2

4.5 A summary of each European site, its qualifying criteria, conservation objectives and key sensitivities is set out at Appendix A.

4.6 Once options for development are better defined (at the ‘pre-submission’ stage), some European sites may be ‘screened out’ if, in the context of the site’s Conservation objectives (available to view at <http://publications.naturalengland.org.uk/category/5374002071601152>), it is considered that there are likely to be no significant or in combination effects as a result of the JSP. The findings of this process will be summarised in a table, with the following headings:

Site	Qualifying features	Factors affecting Conservation objectives	Potential impact from JSP	Risk of significant effect (if any)	In combination effects (if any)	Avoidance or mitigation measures (if possible)	Conclusion
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4.7 The result of this may be that some European sites are removed from further consideration, for example because of their distance from any major development identified within the Joint Spatial Plan. Conversely, it may also be that this screening process determines that there is potential for adverse effects from the JSP on particular European sites either alone or in combination with other plans or projects. The screening process will be informed through engagement with Natural England and other relevant prescribed bodies, in line with the requirements of the Duty to Cooperate (DTC).

Stage 2 – Appropriate assessment

4.8 Regulation 61 of the Habitat Regulations stipulates that the ‘appropriate assessment’ process should consider ‘the implications for the site in view of that site's conservation objectives’. As such, the HRA needs to understand the reasons for the European sites’ designation (i.e. the particular species and habitats present); the condition of each site *vis-a-vis* their conservation objectives; the factors which might adversely impact on the qualifying features; and determine whether or not the impact is likely to be significant.

4.9 A profile of each of the affected sites will need to be drawn up based on up to date information. This information will include the reasons for their designation (the qualifying features and species) as well as the factors likely to have the greatest deleterious effects on each site. This work will be undertaken once options for development are better defined.

Stage 3 - Mitigation and Alternatives

4.10 This stage will be undertaken within the process of drafting and formulating the JSP and will run in parallel to it, informing the site allocations therein. It may also need to be informed by specific new studies and analyses, partly because the evidence base informing the HRA for previous Local Plan documents (e.g. Core Strategies) was derived from the Regional Spatial Strategy process and is now quite old; partly because of the ability to assess some of the potential indirect effects of the allocations on European Sites, such as increased traffic, changes in air quality or increased recreational use, will require independent technical analysis. An essential aspect to the Habitat Regulations Assessment of the JSP will be the imperative to work closely and cooperatively with Natural England in order to ensure that any impacts on the scoped European Sites and any requisite mitigation or alternatives stands up to public scrutiny.

4.11 Natural England has also produced Site Improvement Plans for European Sites, which sets out their understanding of the pressures on and condition of European designated sites and potential mitigation measures that might be introduced. This information will be of some material significance in supporting and informing the HRA for the Joint Spatial Plan.

4.12 More information regarding the Improvement Programme for England's Natura 2000 sites (IPENS)/LIFE Natura 2000 (LifeN2K) and the Site Improvement Plans (SIP) are also available (<https://www.gov.uk/government/publications/improvement-programme-for-englands-natura-2000-sites-ipens>) and may be used to inform this part of the process.

5. Next steps

5.1 This paper has been produced by the four unitary authorities which make up the West of England sub-region and has been informed by early engagement with Natural England. Its purpose is to begin the process for undertaking a Habitat Regulations Assessment for the Joint Spatial Plan and it has been produced for the 'issues and options' stage.

5.2 This paper will be shared with authorities adjoining the West of England and other prescribed bodies, with the aim of ensuring that potential impacts on any European site are flagged up through active, ongoing engagement in line with the Duty to Cooperate and addressed as the Joint Spatial Plan progresses.

Appendix A – List of European sites, qualifying features, conservation objectives and key sensitivities

Site	Qualifying features	Conservation objectives	Key site sensitivities
<p>Avon Gorge Woodlands SAC</p>	<p>Annex 1 Habitats that are a primary reason for selection:</p> <ul style="list-style-type: none"> • H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes* <p>Annex 1 Habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> • H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (FestucoBrometalia); Dry grasslands and scrublands on chalk or limestone 	<p>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;</p> <ul style="list-style-type: none"> • 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 	<p><u>Air quality</u> – woodland and grassland.</p> <p>In particular eutrophication or acidification could lead to successional vegetation change.</p> <p><u>Habitat management</u> Maintenance of woodland structure and composition</p> <p><u>Habitat loss</u> Habitat fragmentation</p>
<p>Bath and Bradford-on-Avon Bats SAC</p>	<p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> • S1304. Rhinolophus ferrumequinum; Greater horseshoe bat • S1323. Myotis bechsteinii; Bechstein`s bat <p>Annex II species present as a qualifying feature, but not a primary reason for selection of the site:</p> <ul style="list-style-type: none"> • S1303. Rhinolophus hipposideros; Lesser 	<p>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;</p> <ul style="list-style-type: none"> • 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 	<p><u>Habitat Management</u> Maintenance of foraging and commuting linkage habitat.</p> <p><u>Habitat Loss</u> Habitat fragmentation resulting in loss of connectivity for foraging and commuting.</p>

	horseshoe bat	<p>of qualifying species rely</p> <ul style="list-style-type: none"> • The populations of qualifying species, and, • The distribution of qualifying species within the site. 	<p>Direct loss of roost sites.</p> <p><u>Other Management Issues</u> Local Grazing regimes</p>
Chew Valley SPA	<p>Internationally important bird assemblage. This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:</p> <p>Over winter:</p> <ul style="list-style-type: none"> • A056. Anas clypeata; Northern shoveler (Non-breeding) 	<p>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;</p> <ul style="list-style-type: none"> • 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. 	<p><u>Maintain favourable hydrology</u> Site is sensitive to changes in water levels. Both increases and reductions can impact upon shoveler, due to their need for soft mud in which to feed. Also to fluctuations in water quality including eutrophication and particularly phosphate levels.</p>
Mells Valley SAC	<p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> • H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (FestucoBrometalia); Dry grasslands and scrublands on chalk or limestone • H8310. Caves not open to the public <p>Annex II species that are a primary reason for selection of the site:</p>	<p>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;</p> <ul style="list-style-type: none"> • 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 	<p><u>Air Quality</u> Eutrophication could lead to successional vegetation change</p> <p><u>Habitat Management</u> Maintenance of grassland structure and composition</p> <p>Maintenance of foraging and commuting linkage habitat.</p>

	<ul style="list-style-type: none"> S1304. Rhinolophus ferrumequinum; Greater horseshoe bat 	<ul style="list-style-type: none"> 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. 	<u>Habitat Loss</u> Habitat fragmentation resulting in loss of connectivity for foraging and commuting Direct loss of roost sites <u>Other Management Issues</u> Grazing regime
Mendip Limestone Grasslands SAC	Annex I habitats that are a primary reason for the selection of the site: <ul style="list-style-type: none"> H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco Brometalia); Dry grasslands and scrublands on chalk or limestone Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: <ul style="list-style-type: none"> H4030. European dry heaths H8310. Caves not open to the public H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes* S1304. Rhinolophus ferrumequinum; Greater horseshoe bat 	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; <ul style="list-style-type: none"> 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. 	<u>Air Quality</u> Eutrophication could lead to successional vegetation change <u>Habitat Management</u> Maintenance of grassland structure and composition <u>Habitat Loss</u> Habitat fragmentation <u>Other Management Issues</u> Grazing regime
Mendip Woodlands SAC	Annex I habitats that are a primary reason for the selection of the site:	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation	<u>Air Quality</u> In particular eutrophication or

	<ul style="list-style-type: none"> H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes* 	<p>Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> 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 	<p>acidification could lead to successional vegetation change</p> <p><u>Habitat Management</u> Maintenance of woodland structure and composition.</p> <p><u>Habitat Loss</u> Habitat fragmentation.</p> <p><u>Other Management Issues</u> Grazing regime.</p>
<p>North Somerset and Mendip Bats SAC</p>	<p>Annex I habitats that are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (FestucoBrometalia); Dry grasslands and scrublands on chalk or limestone H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes* <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> H8310. Caves not open to the public <p>Annex II species that are a primary reason for selection of the site:</p>	<p>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;</p> <ul style="list-style-type: none"> 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 	<p><u>Habitat Management</u> Maintenance of foraging and commuting linkage habitat.</p> <p><u>Habitat Loss</u> Habitat fragmentation resulting in loss of connectivity for foraging and commuting.</p> <p>Direct loss of roost sites</p> <p><u>Other Management Issues</u> Local Grazing regimes</p>

	<ul style="list-style-type: none"> • S1303. Rhinolophus hipposideros; Lesser horseshoe bat • S1304. Rhinolophus ferrumequinum; Greater horseshoe bat 		
River Usk / Afon Wysg SAC	<p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</p> <ul style="list-style-type: none"> • 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation <p>Annex II species that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> • 1095 Sea lamprey <i>Petromyzon marinus</i> • 1096 Brook lamprey <i>Lampetra planeri</i> • 1099 River lamprey <i>Lampetra fluviatilis</i> • 1103 Twait shad <i>Alosa fallax</i> • 1106 Atlantic salmon <i>Salmo salar</i> • 1163 Bullhead <i>Cottus gobio</i> • 1355 Otter <i>Lutra lutra</i> <p>Annex II species present as a qualifying feature, but not a primary reason for site selection</p> <ul style="list-style-type: none"> • 1102 Allis shad <i>Alosa alosa</i> 	<ul style="list-style-type: none"> • To maintain the availability of current spawning sites and lamprey nurseries. • To maintain suitable flows, water quality and sediment loads to sustain the population of shad, lamprey and nurseries. • To maintain riparian habitats to ensure optimum conditions for shad lamprey and bullhead. • To identify all linking factors on the population of shad, lamprey and bullhead and to seek to remove or minimise their effects. • Protection of otter breeding sites and resting places. 	<p><u>Water Quality</u> Abstraction threats, changes in water level and water quality, including eutrophication.</p>
River Wye / Afon Gwy SAC	<p>Annex I habitats that are a primary reason for the selection of the site:</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation</p>	<p><u>Water Quality</u> Abstraction threats, changes in water level and</p>

	<ul style="list-style-type: none"> • H3260. Water courses of plain to montane levels with the Ranunculus fluitantis and CallitrichoBatrachion vegetation; Rivers with floating vegetation often dominated by water-crowfoot <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> • H7140. Transition mires and quaking bogs; Very wet mires often identified by an unstable `quaking` surface <p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> • S1092. Austropotamobius pallipes; White-clawed (or Atlantic stream) crayfish • S1095. Petromyzon marinus; Sea lamprey • S1096. Lampetra planeri; Brook lamprey • S1099. Lampetra fluviatilis; River lamprey • S1103. Alosa fallax; Twaite shad • S1106. Salmo salar; Atlantic salmon • S1163. Cottus gobio; Bullhead • S1355. Lutra lutra; Otter <p>Annex II species present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> • S1102. Alosa alosa; Allis shad 	<p>Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> • 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. 	<p>water quality, including eutrophication.</p>
Roborough Common	Annex 1 habitats that are a primary reason for selection of this site:	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site	<u>Air Quality</u> Eutrophication could lead

<p>SAC</p>	<ul style="list-style-type: none"> • H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates 	<p>contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> • 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 	<p>to successional vegetation change</p> <p><u>Habitat Management</u> Maintenance of grassland structure and composition</p> <p><u>Habitat Loss</u> Habitat fragmentation.</p>
<p>Severn Estuary SAC, SPA and Ramsar</p>	<p><u>SAC</u></p> <p>Annex I habitats that are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> • 1130. Estuaries • 1140. Mudflats and sandflats not covered by seawater at low tide • 1330. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> • 1110. Sandbanks slightly covered by sea water all the time • 1170. Reefs <p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> • 1095. <i>Petromyzon marinus</i> (Sea lamprey) • 1099. <i>Lampetra fluviatilis</i> (River lamprey) • 1109. <i>Alosa fallax</i> (Twaiite shad) 	<p>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;</p> <ul style="list-style-type: none"> • 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. 	<p><u>Water Quality</u> Change in tidal regime leading to successional change of shoreline habitat.</p> <p><u>Air Quality – Saltmarsh</u> Eutrophication could lead to successional vegetation change.</p>

	<p><u>SPA</u></p> <p>This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:</p> <p>Over winter:</p> <ul style="list-style-type: none"> • A037. <i>Cygnus columbianus bewickii</i> (Bewick's swan) • Internationally important bird assemblage. <p>This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:</p> <p>On passage:</p> <ul style="list-style-type: none"> • <i>Charadrius hiaticula</i> (Ringed plover) • <i>Calidris alpina alpina</i> (Dunlin) • <i>Nuntenius phaeopus</i> (Whimbrel) • <i>Tringa tetanus</i> (Redshank) <p>Over winter:</p> <ul style="list-style-type: none"> • A394. <i>Anser albifrons albifrons</i>; Greater white-fronted goose (Non-breeding) • A048. <i>Tadorna tadorna</i>; Common shelduck (Non-breeding) • A051. <i>Anas strepera</i>; Gadwall (Non-breeding) • A149. <i>Calidris alpina alpina</i>; Dunlin (Non-breeding) • A162. <i>Tringa totanus</i>; Common redshank (Non- 		<p><u>Habitat Disturbance - SPA</u></p> <p>Wintering waterfowl populations. Displacement, litter, human disturbance – noise, visual.</p>
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breeding)

The Estuary also supports nationally important wintering populations of a further 10 species:

- Anas Penelope (Wigeon)
- Anas crecca (Teal)
- Anas acuta (Pintail)
- Aythya ferina (Pochard)
- Aythya fuligula (Tufted duck)
- Charadrius hiaticula (Ringed plover)
- Pluvialis squatarola (Grey plover)
- Numenius arquata (Curlew)
- Nuntenius phaeopus (Whimbrel)
- Tringa tetanus (Redshank)

Ramsar

Assemblage qualification: A wetland of international importance.

The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.

- Criterion 1: Presence of Annex I features listed above for SAC.
- Criterion 3: Unusual estuarine communities.
- Criterion 4: Run of migratory fish between sea and river via estuary.
- Criterion 5/6: Bird assemblages and species of international importance.

	<ul style="list-style-type: none"> • Criterion 8: Diverse fish populations, important feeding, nursery ground and migration route. 		
Somerset Levels and Moors SPA and Ramsar	<p><u>SPA</u></p> <p>This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:</p> <p>Over winter:</p> <ul style="list-style-type: none"> • A037 <i>Cygnus columbianus bewickii</i>; Bewick's swan (Non-breeding) • A140 <i>Pluvialis apricaria</i>; European golden plover (Non-breeding) • Waterbird assemblage <p>This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:</p> <p>Over winter:</p> <ul style="list-style-type: none"> • A052 <i>Anas crecca</i>; Eurasian teal (Non-breeding) • A142 <i>Vanellus vanellus</i>; Northern lapwing (Non-breeding) • <i>Anas clypeata</i>(Shoveler) • <i>Anas crecca</i>(Teal) • <i>Anas penelope</i>(Wigeon) <p><u>Ramsar</u></p> <p>Assemblage qualification: A wetland of international</p>	<p>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;</p> <ul style="list-style-type: none"> • 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. 	<p><u>Water Quality</u> Maintain favourable hydrology. Water levels and abstraction.</p> <p><u>Air Quality</u> Successional habitat change through eutrophication.</p> <p><u>Habitat Management</u> Grazing issues</p>

	<p>importance.</p> <p>The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.</p>		
Wye Valley & Forest of Dean Bat Sites SAC	<p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> • S1303. Rhinolophus hipposideros; Lesser horseshoe bat • S1304. Rhinolophus ferrumequinum; Greater horseshoe bat 	<p>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;</p> <ul style="list-style-type: none"> • 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. 	<p><u>Habitat Management</u></p> <p>Maintenance of foraging and commuting linkage habitat.</p> <p><u>Habitat Loss</u></p> <p>Habitat fragmentation resulting in loss of connectivity for foraging and commuting.</p> <p>Direct loss of roost sites.</p>
Wye Valley Woodlands SAC	<p>Annex I habitats that are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> • H9130. Asperulo-Fagetum beech forests; Beech forests on neutral to rich soils • H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes* • H91J0. Taxus baccata woods of the British Isles; Yew-dominated woodland* 	<p>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;</p> <ul style="list-style-type: none"> • 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 	<p><u>Habitat Management</u></p> <p>Maintenance of foraging and commuting linkage habitat.</p> <p><u>Habitat Loss</u></p> <p>Habitat fragmentation resulting in loss of connectivity for foraging and commuting.</p>

	<p>Annex II species present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> • S1303. Rhinolophus hipposideros; Lesser horseshoe bat) 	<p>qualifying species</p> <ul style="list-style-type: none"> • 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. 	<p>Direct loss of roost sites.</p> <p><u>Air Quality</u> Eutrophication or acidification could lead to successional vegetation change.</p>
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