

# Habitat Regulations Assessment (HRA): West of England Joint Spatial Plan (JSP) Update to the West of England Joint Committee 30<sup>th</sup> October 2017

## 1). Introduction

1.1 This paper has been produced by the four unitary authorities (UAs) which make up the West of England (WoE) sub-region. Its purpose is to provide an update on the progress of the Habitat Regulations Assessment for the Joint Spatial Plan.

### 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 WoE thrives on its natural environment and excellent quality of life and has 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 additionally makes a significant contribution to the economic success of the area.

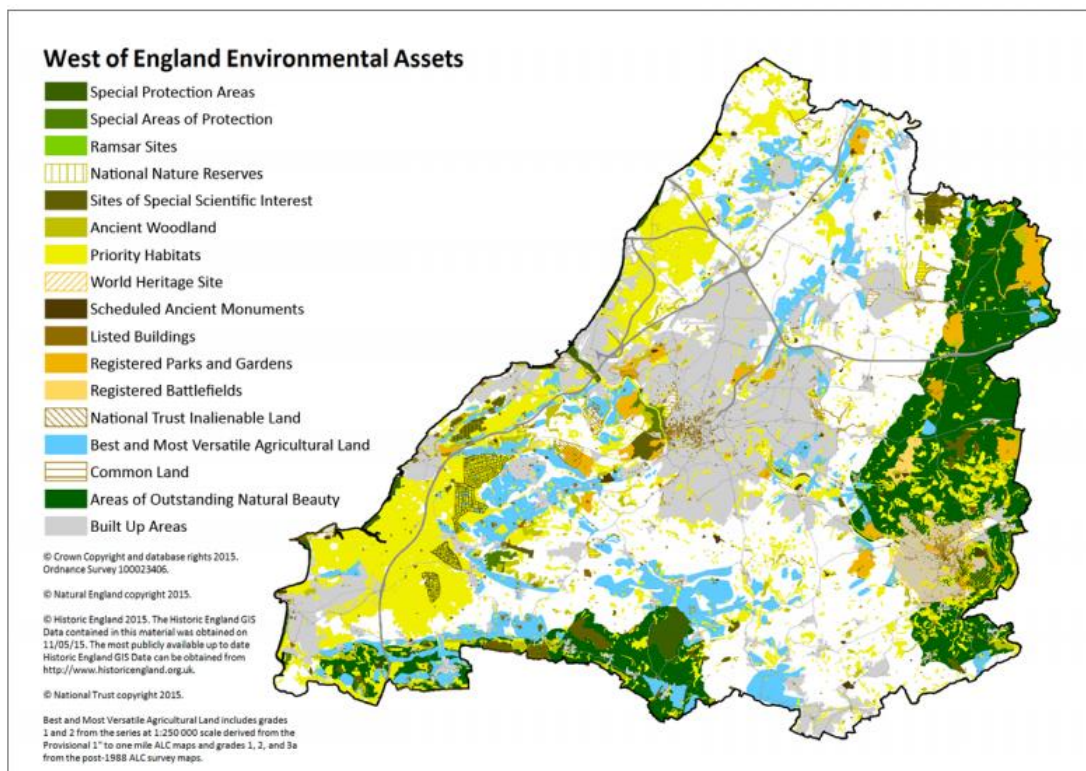


Figure 1 – the West of England’s Environmental Assets.

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### Joint Spatial Plan

1.4 The JSP identifies two Housing Market Areas that operate across the West of England. One focussed on the wider Bristol HMA, which includes Weston-Super-Mare as a sub housing market area, and the other focussed on Bath. The Bath SHMA has been updated to provide consistent information to 2036.

1.5 The Spatial Strategy has been formulated to deliver the Objectively Assessed Need of 97,800 new homes and the Housing Requirement of 102,200 new homes. The SHMA prepared for the West of England evidenced an Objectively Assessed Need (OAN) for housing of 97,800 dwellings for the plan period 2016-2036. This comprises 85,000 dwellings for Wider Bristol Housing Market Area (HMA) & 12,800 dwellings for the Bath HMA. It identifies an overall supply of 105,500 new homes to enable flexibility.

1.6 The JSP will provide the framework to deliver up to 105,500<sup>1</sup> net additional new homes between 2016 and 2036 of which, around 32,200 (30%) should be affordable homes.

1.7 The housing target supports the planned job growth of 82,500 jobs for the period 2016-2036 (or 125,900 jobs between the period from 2010-2036).

### Relationship of the Joint Spatial Plan to Local Plans

1.8 The JSP will, upon adoption, carry significant weight and be used to inform key planning decisions. Whilst it will not replace existing local plans, it will be a material consideration in decision making. In the meantime, existing local plans will continue to deliver existing Core Strategy targets. Local plan reviews will need to respond to the new strategic context. The JSP will when adopted provide the new higher level strategic planning framework for the four authorities to 2036.

1.9 The Housing and Planning Act 2016 has a new route for planning permission for housing led development called 'planning permission in principle' or PIP. A PIP may be granted for housing-led development either on application to the local planning authority (or Secretary of State in some instances), or through qualifying documents. The JSP is not a qualifying document for establishing planning permission in principle. The JSP Spatial Strategy will identify strategic development locations which will be brought forward as allocations through the local plan process.

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1 Opinion Research Services (2016) West of England Housing Target: The basis for the Housing Requirement in the Joint Spatial Plan.

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### 2). Habitat Regulations Assessment

2.1 European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (known as the 'Habitats Directive') 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 (i.e. Local Plans). Accordingly, as a land-use plan, the Joint Spatial Plan (JSP) must be subject to Assessment under Regulation 61 of the Habitat Regulations 2010.

#### **What is the process for carrying out an HRA?**

2.6 Article 6(3) of the Habitats Directive requires an 'appropriate assessment' to be undertaken when a plan or development project is likely to have a significant effect upon a European site.

2.7 Article 6(4) also requires that where an appropriate assessment has been carried out and results in a negative assessment, i.e. any proposed avoidance or mitigation are unable to reduce the potential significant impacts, or if uncertainty remains over the significant effects, the proposal can only be granted if:

- there are no alternative solutions; and
- there are no imperative reasons of overriding public interest (IROPI) for the development; and
- compensatory measures have been secured.

2.8 The regulations make reference to 'competent authorities'. These include relevant public bodies, government ministers, and statutory undertakers etc. who are able to carry out the 'appropriate assessment' of impacts in relation to the Habitats Regulations. Regulation 65 sets out the necessary stages that apply where more than one competent authority is involved in decision making. In this case, the competent authority is the four West of England unitary authorities.

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### 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.

When	Stage	Time	Stage of HRA
October 2017	Draft plan to Infrastructure Advisory Board and Joint Committee		HRA update to inform draft Publication Plan and the Joint Committee.
November 2017 to January 2018	Publication Plan (Reg 19/20)	7 week consultation	Full HRA
Spring 2018	Submit to Secretary of State	TBC	N/A
Mid 2018	Examination in Public (EiP)	TBC	N/A

Table 1

3.3 With this in mind, the purpose of this paper is to update the process for undertaking, a full Habitat Regulations Assessment in support of the Joint Spatial Plan, in line with up to date guidance. In doing so, it is intended that it will 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 Publication Plan in 2017.

3.4 Once the JSP is adopted, it will be for the four UAs, working 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.

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### 4). The HRA Process

4.1 In line with up to date guidance, the JSP has been subject to a four stage process. This process represents a slight change from the three stage process used to assess the majority of the four UA's individual extant Local Plan documents.

4.2 The nature of the JSP means that the HRA required must be 'strategic' in nature and therefore by necessity defers specific assessments of impacts and detailed mitigation requirements to the four unitary authorities Local Plans. Additionally, assessments of transport mitigation to support JSP growth will be further assessed through the updated Joint Local Transport Plan HRA.

4.3 The objective of this HRA is therefore to determine if there can be a reasonable degree of certainty that the quantum of development proposed by the JSP can be delivered through the lower tier plans without resulting in significant harm to Natura 2000 sites.

4.4 Table 2 below sets out the four stages.

Habitat Regulation Assessment – Stage	Purpose
1. Screening	Process for identifying potential impacts of a plan or project on a European site, either individually or in combination, and consideration of whether likely effects will be significant.
2. Appropriate Assessment	Consideration of impacts on integrity of the site, either individually or in combination with other plans and projects, having regard to the site's structure, function and conservation objectives. Where adverse impacts are identified, assess mitigation options to identify impacts on the integrity of the site. This stage should involve consultation. If mitigation options do not result in avoidance of adverse effects permission can only be granted if the remaining 2 stages are followed.
3. Assessment of alternative solutions	Review and examine alternatives to achieve objectives; would these alternative solutions avoid or have less adverse effects on the European sites?
4. Assessment of any 'imperative reasons of overriding public interest' (IROPI)	Where no suitable alternative solution exists and adverse impacts still remain then assess whether the development is necessary for IROPI. If so then identify potential compensatory measures to maintain integrity and coherence of the protected site.

Table 2 – HRA process guide

#### Stage 1 - Screening

4.5 EC Directive 92/43/EEC requires that a screening assessment is undertaken by the competent authority, and should consider the following matters:

- assessment of the project including its objectives; and
- assessment of relevant plans, policies and projects; and
- assessment of relevant European sites that could potentially be affected – including their specific characteristics and conservation objectives.

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4.6 A screening assessment, both alone and in combination, with other identified plans and projects will identify if any significant environmental affects will result affecting the site and conclude whether significant affects are likely or not.

4.7 When undertaking this assessment a precautionary approach is required to decision making and assessment. This means that when the likelihood of significant affects cannot be ruled out on the evidence available, then it must be assumed that a risk of significant affects may exist. These will then need to be addressed through either changes to the scheme, avoidance or through securing mitigation measures.

4.8 If no potential significant affects are identified, the process ends at this stage.

### Stage 2 – Appropriate Assessment

4.9 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.

4.10 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.

4.11 If it is decided that the JSP would be likely to result in significant adverse impacts on a European site, an appropriate assessment will be undertaken. The Regulations do not define ‘significant impacts’, so an informed decision will be made on this issue. In order to decide whether an appropriate assessment is required, a variety of information will be considered. This could include:

- a detailed description of the European site, identifying any/all features potentially affected, highlighting the site’s conservation objectives;
- a detailed description of the proposed development(s), processes, construction, phases, methods of work etc.;
- details of alternatives considered, along with any mitigation measures proposed to reduce, remove or manage impacts;
- provision of necessary data, evidence and reports – including interpretation of that information to aid decision making;
- appraisal of any other plans or projects likely to have a significant effect, either individually or in combination with the proposed development;
- appraisal of whether there is potential for the scheme to require two or more appropriate assessments by different competent authorities.

4.13 Natural England has also produced Site Improvement Plans for European Sites. These set out their understanding of the pressures on, and condition of European designated sites, and identify 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.

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4.14 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.

4.15 When considering whether a plan or project will adversely affect the integrity of the European site, regard will be had to the manner in which the JSP is to be delivered, i.e. through the UA's Local Plans.

### Stage 3 – Alternative Solutions

4.16 At this stage the assessment will, if necessary, include consideration of alternatives, including how mitigation measures may help to reduce or avoid these effects. The opportunities for alternatives will vary depending upon the location and scale of development proposed, and as such, alternative solutions could include proposals of a different scale, location, phasing, a different scheme or no scheme at all.

4.17 Where it has been demonstrated there are no alternative solutions with lesser effects, the project can still be carried out if 'imperative reasons of overriding public interest' apply.

4.18 It is important to note that the detailed policies required to deliver the strategic growth proposed through the JSP will be delivered through UA's Local Plans.

### Stage 4 – Considerations of overriding public interest

4.19 If it is agreed that there are no alternative solutions, and the plan must be progressed for imperative reasons of overriding public interest (IROPI) then it can still do so.

4.20 Where a location hosts a priority natural habitat type or a priority species, the reasons for justifying the scheme must relate to either:

- reasons relating to human health, public safety or beneficial consequences of primary importance to the environment; or
- any other reasons which the competent authority, having due regard to the opinion of the European Commission, consider to be imperative reasons of overriding public interest.

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### 5. Screening

5.1 The initial screening stages have been completed for the draft publication JSP. This process has involved the initial screening in of sites that could feasibly be affected by the JSP, then more detailed screening of the objectives and JSP Policies in terms of sites screened in for further scrutiny. The staged screening approach involved the following:

#### Identifying likely significant effects (LSEs)

5.2 When considering the LSEs of a policy, it is recognised that some policy 'types' cannot affect any European sites. Different guidance documents suggest various classification and referencing systems to help identify those policies that can be safely screened out to ensure the HRA focuses on the policies with any potential to result in LSEs.

5.3 Table 3 below summarises the characteristics of policies that can usually be 'screened out'.

Policy type	Commentary
General statements of policy	The EC recognises that plans or plan components that are general statements of policy or political aspirations cannot have significant effects.
General design/design criteria	A general 'criteria-based' policy expresses the tests or expectations of the plan-making body when it comes to consider particular proposals, or relate to design or other qualitative criteria which do not themselves lead to development (e.g. controls on building design).
External plan/projects	Plans or projects that are proposed by other plans and are referred to in the plan being assessed for completeness.
Environmental protection policies	Policies designed to protect the natural or built environment will not usually have significant or adverse effects.

Table 3

\*European Commission (2000). Managing Natura 2000 sites: the provisions of Art. 6 of the 'Habitats' Directive 92/43/EEC April 2000 at 4.3.2

5.4 This assessment of likely significant effects has been undertaken in support of the publication Joint Spatial Plan.

#### Identification of relevant sites

5.5 Following consideration of the approach taken to HRA for previous Local Plan (development plan) documents in the West of England, e.g. Joint Waste Core Strategy and the Bristol City and South Gloucestershire Core Strategies, a list of Natura 2000 sites within the West of England and up to 15km from the boundary, as shown in Figure 2 (below), have been identified.

5.6 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 created an initial list of 14 sites which were then considered through 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);



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- 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).

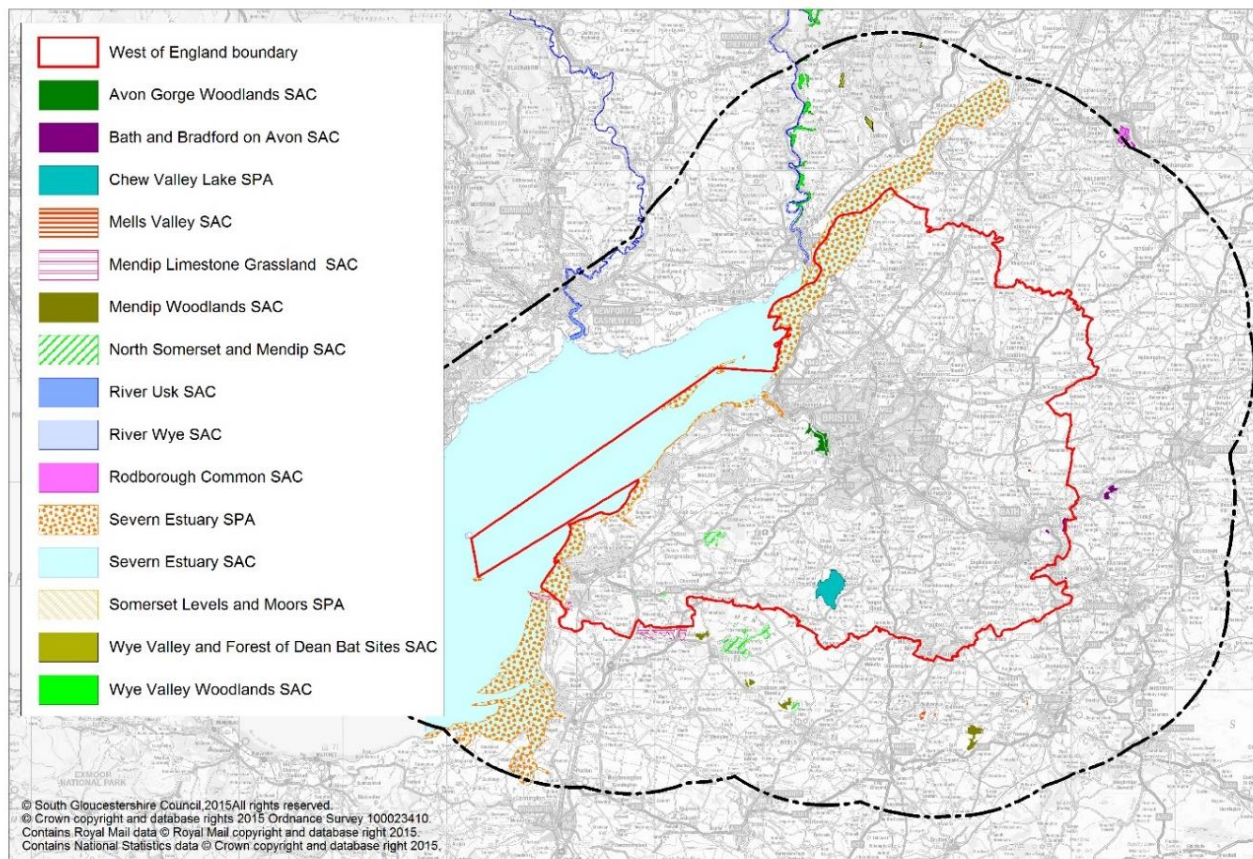


Figure 2

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

### Buffer zones

5.9 The Natura 2000 were then buffered using appropriate buffer zones to help identify any Natura 2000 sites that could be at risk of impact from the JSP proposals, and to filter out those sites not considered at risk of any significant impacts. Each element of the plan has been reviewed and its potential impacts considered.

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5.10 The buffer zones used have been derived from consideration of the nature and character of each Natura 2000 site, including their conservation objectives, and consideration of the various elements of the JSP.

5.11 In this regard it is important to note that the high quality environment of the West of England is recognised as a critical issue for the plan, and the plan has been prepared using a spatial strategy that avoids any direct impacts upon protected sites, including Natura 2000 sites.

5.12 The buffers used to inform the screening stage were the subject of discussions with Natural England. The buffers used were:

- 4 km from the boundaries of the Bat SACs (Bath and Bradford-on-Avon Bats SAC and North Somerset and Mendips Bats SAC).
  - This reflects that these sites were considered to be at most potential risk from loss and fragmentation of foraging areas and flight lines, resulting from the development of greenfield sites and associated potential loss of grazing and hedgerow networks.
- 7km from the boundaries of the Chew Valley Lake SPA, Avon Gorge Woodlands SAC and the Severn Estuary SAC, SPA and Ramsar site.
  - This reflects that these sites were considered to be at most potential risk from an increase in recreational pressures. The buffer was based on the Thames Basin Heaths SPA Framework (LINK) and relates to the distances people travel for recreation.
- 200m from the boundary of sensitive sites (name).
  - This reflects the need to address highlight issues for grassland and woodland sites which are considered to potentially be at risk from increased air pollution resulting from increased traffic movement. This was based on Design Manual for Roads and Bridges (DMRB): Standards for Highways (LINK).

## Outcomes

5.13 Following the buffering exercise, the following sites were screened in for further assessment:

- Chew Valley Lake SPA
- Avon Gorge Woodlands SAC
- Bath and Bradford-on-Avon Bats SAC
- North Somerset and Mendips Bats SAC
- Severn Estuary SAC, SPA and Ramsar

5.14 In order to facilitate the detailed assessment of likely impacts on these sites, the guidance and screening methods within the Handbook for HRA (LINK) were utilised.

5.15 A list of the generic impacts for the sites that have been screened in is set out below.

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### Generic Chew Valley Lake Impacts

**Potential Issues:**

- Reduction in water level – increased abstraction through new housing
- Reduction in water quality – eutrophication through increased visitors/recreation
- Increased recreational use/visitors

**Potential Effects:**

- Disturbance/displacement of SPA birds
- Loss or degrading of habitat available to SPA birds

### Generic Avon Gorge Woodlands Impacts

**Potential Issues:**

- Increased recreational use/visitors
- Increased NOx concentrations and nitrogen deposition.

**Potential Effects:**

- Potential recreational impacts on the Tilio-Acerion forests of slopes, scree and ravines, with potential also for impacts on the secondary interest features - semi-natural dry grassland and scrubland facies: on calcareous substrates (Festuco-Brometalia).
- Potential for eutrophication of qualifying interest feature habitats.

### Generic Bat SAC (Bath and Bradford-on-Avon, North Somerset and Mendips) Impacts

**Potential Issues:**

- Loss of greenfield land
- Increased recreational pressures
- Increased noise and light pollution
- Traffic-generated air pollution
- Increased urban-fringe pressures (domestic cats, noise, disturbance – potentially reducing agricultural viability)
- Reduced viability and potential loss of existing agricultural landscape

**Potential Effects:**

- Reduction of habitat quality and function close to some sites (including function as foraging grounds or access ways)
- Habitat loss close to some sites
- Habitat fragmentation

### Generic Severn Estuary Impacts

**Potential Issues:**

- Greater number of people visiting the Estuary and thus increased recreational pressure from more cyclists, dog walkers etc using coastal footpath (Severn Way).
- Cumulative impact through increased recreational use and development within and around Avonmouth/Sevenside Enterprise Area.

**Potential Effects:**

- Disturbance/displacement of water birds along foreshore of the Severn Estuary.

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### Sequential approach to screening

5.16 The JSP vision and objectives, and policies were considered first and any potential recommendations for change, or requirements for the lower order plans (the four UAs Local Plans) to address were identified.

5.17 The key components of the JSP spatial strategy, strategic development locations (SDLs) and urban living, were then considered. To aid this process a list of generic potential impacts and mitigation solutions were identified and have been used to help assess the likelihood of significant impacts occurring and to identify the scope and nature of mitigation solutions that exist. These measures may then become requirements that need to be set out in JSP policy. Alternatively, they may become requirements to be delivered through the local plan process and/or should be addressed in future work, such as the West of England Environment Plan.

### Natura 2000 site profiles

5.18 Site profiles have been created for each site to capture key site details and to identify likely impacts potentially resulting from the JSP, including cumulative impacts, and to identify potential mitigation solutions that can be included within / through the Plan (the JSP).

5.19 The format of the site profiles are as follows:

1. Qualifying Features
2. Key sites sensitivities
3. Conservation objectives
4. Conservation conditions
5. Site improvement plan
6. Impacts/risks
  - a. Identification of risk/impacts
  - b. Cumulative impacts
7. Mitigation – strategic level narrative
  - a. Potential Impacts
  - b. Mitigation solutions
  - c. JSP measures
  - d. Local Plan measures

5.20 In addition/ alongside the site profiles, a series of tables have been developed to record the initial screening of likely effects of each element of the plan on the screened in sites, and to enable mitigation solutions to be identified and secured. This table includes the following details:

- a) Screening criteria
- b) JSP strategic priorities and policies
- c) SDL buffer screening
- d) JSP Strategic Development Locations (SDLs)
- e) JSP urban living
- f) Non-strategic growth
- g) Small windfall sites
- h) JSP transport mitigation

5.21 The objective of this methodology is to enable any potential adverse impacts of the plan upon Nature 2000 sites to be identified and then removed or moderated to ensure no significant effects result. It

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has been drafted on the basis of known best practice and has been discussed and agreed with Natural England. Further information is available at Appendix B.

### Screening criteria

5.22 The screening categories used have been taken from The Habitats Regulations Assessment Handbook (Tyldesley, D and Chapman, C. (2013)), and are set out below for information/ reference in the table below.

Screening categories	Code
A general statement of policy	A
Policy listing general criteria for testing proposals	B
Proposals referred to but not proposed by the plan	C
Environmental protection policies	D
Steering change away from positive sites	E
Do not propose change, but control approach (e.g. design)	F
No conceivable effect	G
Actual or theoretical effects cannot undermine conservation objectives	H
Likely Significant Effect (LSE) on a site alone	I
No Likely Significant Effect (LSE) alone but an effect - check in combination	J
No Likely Significant Effect (LSE) even in combination	K
Likely Significant Effect (LSE) in combination	L

5.23 Any component of the JSP allocated a screening category of I, J or L (highlighted above in yellow) required an action to be taken or an amendment made to the Plan. Recommended solutions to address these issues will be set out in the full HRA which will be published alongside the publication version of the JSP in November.

### Status of this document

5.24 The HRA is at an advanced stage of preparation, and has followed the process agreed with Natural England. The screening process has been completed and has informed the preparation of the draft Publication Plan.

5.25 This process screened in three policies for further review in the context of the requirements of HRA. Full details of this will be set out in the final HRA Report. Through working with Natural England, recommendations for additional policy wording and plan requirements have been identified which enable those policies to be screened out.

5.26 The HRA has therefore screened out any likely significant effects (LSE) and in doing so has informed the preparation of the draft Publication JSP document. Details of the process will be set out in full in the HRA report published alongside the publication version JSP.

5.27 A full HRA report is currently being finalised and will be published for formal consultation alongside the publication version Joint Spatial Plan in November 2017.

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

Site	Qualifying features	Conservation objectives	Key site sensitivities
<p><b>Avon Gorge Woodlands SAC</b></p>	<p>Annex 1 Habitats that are a primary reason for selection:</p> <ul style="list-style-type: none"> <li>• H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes*</li> </ul> <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"> <li>• H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (FestucoBrometalia); Dry grasslands and scrublands on chalk or limestone</li> </ul>	<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"> <li>• The extent and distribution of qualifying natural habitats</li> <li>• The structure and function (including typical species) of qualifying natural habitats, and</li> <li>• The supporting processes on which qualifying natural habitats rely</li> </ul>	<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><b>Bath and Bradford-on-Avon Bats SAC</b></p>	<p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> <li>• S1304. Rhinolophus ferrumequinum; Greater horseshoe bat</li> <li>• S1323. Myotis bechsteinii; Bechstein`s bat</li> </ul> <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"> <li>• S1303. Rhinolophus hipposideros; Lesser horseshoe bat</li> </ul>	<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"> <li>• The extent and distribution of the habitats of qualifying species</li> <li>• The structure and function of the habitats of qualifying species</li> <li>• The supporting processes on which the habitats of qualifying species rely</li> <li>• The populations of qualifying species, and,</li> </ul>	<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>

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		<ul style="list-style-type: none"> <li>The distribution of qualifying species within the site.</li> </ul>	
<b>Chew Valley SPA</b>	<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"> <li>A056. <i>Anas clypeata</i>; Northern shoveler (Non-breeding)</li> </ul>	<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"> <li>The extent and distribution of the habitats of the qualifying features</li> <li>The structure and function of the habitats of the qualifying features</li> <li>The supporting processes on which the habitats of the qualifying features rely</li> <li>The population of each of the qualifying features, and,</li> <li>The distribution of the qualifying features within the site.</li> </ul>	<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>
<b>Mells Valley SAC</b>	<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"> <li>H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>FestucoBrometalia</i>); Dry grasslands and scrublands on chalk or limestone</li> <li>H8310. Caves not open to the public</li> </ul> <p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> <li>S1304. <i>Rhinolophus ferrumequinum</i>; Greater horseshoe bat</li> </ul>	<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"> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species</li> <li>The structure and function (including typical species) of qualifying natural habitats</li> <li>The structure and function of the habitats of qualifying species</li> <li>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely</li> <li>The populations of qualifying species, and,</li> </ul>	<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> <p><u>Habitat Loss</u> Habitat fragmentation resulting in loss of</p>

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		<ul style="list-style-type: none"> <li>The distribution of qualifying species within the site.</li> </ul>	<p>connectivity for foraging and commuting</p> <p>Direct loss of roost sites</p> <p><u>Other Management Issues</u> Grazing regime</p>
<p><b>Mendip Limestone Grasslands SAC</b></p>	<p>Annex I habitats that are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> <li>H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco Brometalia); Dry grasslands and scrublands on chalk or limestone</li> </ul> <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"> <li>H4030. European dry heaths</li> <li>H8310. Caves not open to the public</li> <li>H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes*</li> <li>S1304. Rhinolophus ferrumequinum; Greater horseshoe bat</li> </ul>	<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"> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species</li> <li>The structure and function (including typical species) of qualifying natural habitats</li> <li>The structure and function of the habitats of qualifying species</li> <li>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely</li> <li>The populations of qualifying species, and,</li> <li>The distribution of qualifying species within the site.</li> </ul>	<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><u>Habitat Loss</u> Habitat fragmentation</p> <p><u>Other Management Issues</u> Grazing regime</p>
<p><b>Mendip Woodlands SAC</b></p>	<p>Annex I habitats that are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> <li>H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes*</li> </ul>	<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"> <li>The extent and distribution of qualifying natural habitats</li> </ul>	<p><u>Air Quality</u> In particular eutrophication or acidification could lead to successional vegetation change</p> <p><u>Habitat Management</u></p>



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		<ul style="list-style-type: none"> <li>• The structure and function (including typical species) of qualifying natural habitats, and</li> <li>• The supporting processes on which qualifying natural habitats rely</li> </ul>	<p>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><b>North Somerset and Mendip Bats SAC</b></p>	<p>Annex I habitats that are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> <li>• H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (FestucoBrometalia); Dry grasslands and scrublands on chalk or limestone</li> <li>• H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes*</li> </ul> <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"> <li>• H8310. Caves not open to the public</li> </ul> <p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> <li>• S1303. Rhinolophus hipposideros; Lesser horseshoe bat</li> <li>• S1304. Rhinolophus ferrumequinum; Greater horseshoe bat</li> </ul>	<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"> <li>• The extent and distribution of qualifying natural habitats and habitats of qualifying species</li> <li>• The structure and function (including typical species) of qualifying natural habitats</li> <li>• The structure and function of the habitats of qualifying species</li> <li>• The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely</li> <li>• The populations of qualifying species, and,</li> <li>• The distribution of qualifying species within the site</li> </ul>	<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>

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<p><b>River Usk / Afon Wysg SAC</b></p>	<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"> <li>• 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation</li> </ul> <p>Annex II species that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> <li>• 1095 Sea lamprey <i>Petromyzon marinus</i></li> <li>• 1096 Brook lamprey <i>Lampetra planeri</i></li> <li>• 1099 River lamprey <i>Lampetra fluviatilis</i></li> <li>• 1103 Twaite shad <i>Alosa fallax</i></li> <li>• 1106 Atlantic salmon <i>Salmo salar</i></li> <li>• 1163 Bullhead <i>Cottus gobio</i></li> <li>• 1355 Otter <i>Lutra lutra</i></li> </ul> <p>Annex II species present as a qualifying feature, but not a primary reason for site selection</p> <ul style="list-style-type: none"> <li>• 1102 Allis shad <i>Alosa alosa</i></li> </ul>	<ul style="list-style-type: none"> <li>• To maintain the availability of current spawning sites and lamprey nurseries.</li> <li>• To maintain suitable flows, water quality and sediment loads to sustain the population of shad, lamprey and nurseries.</li> <li>• To maintain riparian habitats to ensure optimum conditions for shad lamprey and bullhead.</li> <li>• To identify all linking factors on the population of shad, lamprey and bullhead and to seek to remove or minimise their effects.</li> <li>• Protection of otter breeding sites and resting places.</li> </ul>	<p><u>Water Quality</u> Abstraction threats, changes in water level and water quality, including eutrophication.</p>
<p><b>River Wye / Afon Gwy SAC</b></p>	<p>Annex I habitats that are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> <li>• H3260. Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation; Rivers with floating vegetation often dominated by water-crowfoot</li> </ul> <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this 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"> <li>• The extent and distribution of qualifying natural habitats and habitats of qualifying species</li> <li>• The structure and function (including typical species) of qualifying natural habitats</li> <li>• The structure and function of the habitats of qualifying species</li> </ul>	<p><u>Water Quality</u> Abstraction threats, changes in water level and water quality, including eutrophication.</p>

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	<ul style="list-style-type: none"> <li>• H7140. Transition mires and quaking bogs; Very wet mires often identified by an unstable `quaking` surface</li> </ul> <p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> <li>• S1092. Austropotamobius pallipes; White-clawed (or Atlantic stream) crayfish</li> <li>• S1095. Petromyzon marinus; Sea lamprey</li> <li>• S1096. Lampetra planeri; Brook lamprey</li> <li>• S1099. Lampetra fluviatilis; River lamprey</li> <li>• S1103. Alosa fallax; Twaite shad</li> <li>• S1106. Salmo salar; Atlantic salmon</li> <li>• S1163. Cottus gobio; Bullhead</li> <li>• S1355. Lutra lutra; Otter</li> </ul> <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"> <li>• S1102. Alosa alosa; Allis shad</li> </ul>	<ul style="list-style-type: none"> <li>• The supporting processes on which qualifying natural habitats and habitats of qualifying species rely</li> <li>• The populations of qualifying species, and,</li> <li>• The distribution of qualifying species within the site.</li> </ul>	
<p><b>Roborough Common SAC</b></p>	<p>Annex 1 habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates</li> </ul>	<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"> <li>• The extent and distribution of qualifying natural habitats</li> <li>• The structure and function (including typical species) of qualifying natural habitats, and</li> <li>• The supporting processes on which qualifying natural habitats rely</li> </ul>	<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><u>Habitat Loss</u> Habitat fragmentation.</p>

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<p><b>Severn Estuary SAC, SPA and Ramsar</b></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"> <li>• 1130. Estuaries</li> <li>• 1140. Mudflats and sandflats not covered by seawater at low tide</li> <li>• 1330. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</li> </ul> <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"> <li>• 1110. Sandbanks slightly covered by sea water all the time</li> <li>• 1170. Reefs</li> </ul> <p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> <li>• 1095. <i>Petromyzon marinus</i> (Sea lamprey)</li> <li>• 1099. <i>Lampetra fluviatilis</i> (River lamprey)</li> <li>• 1109. <i>Alosa fallax</i> (Twaite shad)</li> </ul> <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"> <li>• A037. <i>Cygnus columbianus bewickii</i> (Bewick's swan)</li> <li>• Internationally important bird assemblage.</li> </ul>	<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"> <li>• The extent and distribution of the habitats of the qualifying features</li> <li>• The structure and function of the habitats of the qualifying features</li> <li>• The supporting processes on which the habitats of the qualifying features rely</li> <li>• The population of each of the qualifying features, and,</li> <li>• The distribution of the qualifying features within the site.</li> </ul>	<p><u>Water Quality</u></p> <p>Change in tidal regime leading to successional change of shoreline habitat.</p> <p><u>Air Quality – Saltmarsh</u></p> <p>Eutrophication could lead to successional vegetation change.</p> <p><u>Habitat Disturbance - SPA</u></p> <p>Wintering waterfowl populations. Displacement, litter, human disturbance – noise, visual.</p>
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	<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"><li>• <i>Charadrius hiaticula</i> (Ringed plover)</li><li>• <i>Calidris alpina alpina</i> (Dunlin)</li><li>• <i>Nuntenius phaeopus</i> (Whimbrel)</li><li>• <i>Tringa tetanus</i> (Redshank)</li></ul> <p>Over winter:</p> <ul style="list-style-type: none"><li>• A394. <i>Anser albifrons albifrons</i>; Greater white-fronted goose (Non-breeding)</li><li>• A048. <i>Tadorna tadorna</i>; Common shelduck (Non-breeding)</li><li>• A051. <i>Anas strepera</i>; Gadwall (Non-breeding)</li><li>• A149. <i>Calidris alpina alpina</i>; Dunlin (Non-breeding)</li><li>• A162. <i>Tringa totanus</i>; Common redshank (Non-breeding)</li></ul> <p>The Estuary also supports nationally important wintering populations of a further 10 species:</p> <ul style="list-style-type: none"><li>• <i>Anas Penelope</i> (Wigeon)</li><li>• <i>Anas crecca</i> (Teal)</li><li>• <i>Anas acuta</i> (Pintail)</li><li>• <i>Aythya ferina</i> (Pochard)</li><li>• <i>Aythya fuligula</i> (Tufted duck)</li><li>• <i>Charadrius hiaticula</i> (Ringed plover)</li><li>• <i>Pluvialis squatarola</i> (Grey plover)</li><li>• <i>Numenius arquata</i> (Curlew)</li><li>• <i>Nuntenius phaeopus</i> (Whimbrel)</li><li>• <i>Tringa tetanus</i> (Redshank)</li></ul>		
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	<p><u>Ramsar</u></p> <p>Assemblage qualification: A wetland of international 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> <ul style="list-style-type: none"> <li>• Criterion 1: Presence of Annex I features listed above for SAC.</li> <li>• Criterion 3: Unusual estuarine communities.</li> <li>• Criterion 4: Run of migratory fish between sea and river via estuary.</li> <li>• Criterion 5/6: Bird assemblages and species of international importance.</li> <li>• Criterion 8: Diverse fish populations, important feeding, nursery ground and migration route.</li> </ul>		
<p><b>Somerset Levels and Moors SPA and Ramsar</b></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"> <li>• A037 <i>Cygnus columbianus bewickii</i>; Bewick’s swan (Non-breeding)</li> <li>• A140 <i>Pluvialis apricaria</i>; European golden plover (Non-breeding)</li> <li>• Waterbird assemblage</li> </ul>	<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"> <li>• The extent and distribution of the habitats of the qualifying features</li> <li>• The structure and function of the habitats of the qualifying features</li> <li>• The supporting processes on which the habitats of the qualifying features rely</li> <li>• The population of each of the qualifying features, and,</li> <li>• The distribution of the qualifying features within the site.</li> </ul>	<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>

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	<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"> <li>• A052 Anas crecca; Eurasian teal (Non-breeding)</li> <li>• A142 Vanellus vanellus; Northern lapwing (Non-breeding)</li>   <li>• Anas clypeata(Shoveler)</li> <li>• Anas crecca(Teal)</li> <li>• Anas penelope(Wigeon)</li> </ul> <p><u>Ramsar</u></p> <p>Assemblage qualification: A wetland of international 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>		
<p><b>Wye Valley &amp; Forest of Dean Bat Sites SAC</b></p>	<p>Annex II species that are a primary reason for selection of the site:</p> <ul style="list-style-type: none"> <li>• S1303. Rhinolophus hipposideros; Lesser horseshoe bat</li> <li>• S1304. Rhinolophus ferrumequinum; Greater horseshoe bat</li> </ul>	<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"> <li>• The extent and distribution of the habitats of qualifying species</li> <li>• The structure and function of the habitats of qualifying species</li> <li>• The supporting processes on which the habitats of qualifying species rely</li> <li>• The populations of qualifying species, and</li> </ul>	<p><u>Habitat Management</u></p> <p>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>

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		<ul style="list-style-type: none"> <li>The distribution of qualifying species within the site.</li> </ul>	
<p><b>Wye Valley Woodlands SAC</b></p>	<p>Annex I habitats that are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> <li>H9130. Asperulo-Fagetum beech forests; Beech forests on neutral to rich soils</li> <li>H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes*</li> <li>H91J0. Taxus baccata woods of the British Isles; Yew-dominated woodland*</li> </ul> <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"> <li>S1303. Rhinolophus hipposideros; Lesser horseshoe bat)</li> </ul>	<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"> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species</li> <li>The structure and function (including typical species) of qualifying natural habitats</li> <li>The structure and function of the habitats of qualifying species</li> <li>The supporting processes on which qualifying natural habitats and habitats of qualifying species rely</li> <li>The populations of qualifying species, and,</li> <li>The distribution of qualifying species within the site.</li> </ul>	<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>Air Quality</u> Eutrophication or acidification could lead to successional vegetation change.</p>