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**APPROPRIATE ASSESSMENT
OF**

**SOUTH SOMERSET DISTRICT COUNCIL'S
CORE STRATEGY:**

ISSUES AND OPTIONS

**Screening Report
for
Bracket's Coppice SAC**

October 2008



This report was prepared by Somerset County Council on behalf of South Somerset District Council, as the 'competent authority' under the 'Habitat Regulations' 1994 (amended 2007)

Cover photograph: Bechstein's bat – Joint Nature Conservation Committee

Executive Summary

This report contributes to South Somerset District Council's legal obligation under the Conservation (Natural Habitats &C.) (Amendment) Regulations 2007 [the 'Habitat Regulations'] to carry out an Appropriate Assessment on its plans for effects on Natura 2000 sites. In this case it is the Core Strategy at its Issues and Options Stage that is assessed.

Before a plan can be adopted the 'competent authority' (South Somerset District Council) needs to prove that the plan would have no significant effects on Natura 2000 sites' integrity to the satisfaction of Natural England. An uncertain result is not acceptable and is treated as adverse until proven otherwise.

This report consists of the first step of the Appropriate Assessment process, which is to screen policies to determine whether there is any potential for a significant effect on Natura 2000 sites from them, either directly or indirectly, and in combination with other plans and projects. Following analysis of each policy the report then gives recommendations for amendments or additions to policies to ensure compliance with the Habitat Regulations. Where no conclusion can be reached further work is scoped.

Natura 2000 sites consist of Special Areas of Conservation (SAC) designated for habitats and animal species, and Special Protection Areas (SPA) designated for bird species. Ramsar sites designated under the Ramsar Convention on Wetlands 1971 are also included following Government policy.

This report gives an Appropriate Assessment of Bracket's Coppice SAC site only. Two other Natura 2000 sites have been identified as potentially being affected by policy in the South Somerset District Council Core Strategy. These are the Somerset Levels and Moors and Severn Estuary (Bridgwater Bay) SPA/ Ramsar sites. Although only part of the Levels and Moors site is within South Somerset, other component parts of this site and the Severn Estuary are downstream of the development options which may give rise to water related issues. These sites are being assessed separately by consultants and in partnership with Somerset County Council and two other district councils as there is a significant in combination effects and as an approach was recommended by Natural England.

Following screening of the policies contained in the Issues and Options report of the South Somerset District Council Core Strategy the following policy additions are recommended by this report for inclusion in the Preferred Option stage document to ensure compliance with the Habitat Regulations.

- The inclusion of a **Bat Protection Zone** policy and mapping specifically for Bracket's Coppice SAC. This would be an area on the Dorset border southeast of Crewkerne and south of Yeovil. The mapping would show areas of habitat that support the population of Bechstein's bats present in Bracket's Coppice SAC.

If included in the Preferred Option no further assessment on the SAC would be required.

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1. Introduction

- 1.1 This report details the findings of the first, screening step of the Appropriate Assessment (AA) process of the South Somerset District Council Core Strategy. South Somerset District Council's Core Strategy (and any Supplementary Planning Documents) are required to be assessed through the Appropriate Assessment process as all plans can potentially affect a Natura 2000 site. The definition of 'Appropriate Assessment' is simply an assessment, which must be appropriate to its purpose under the Habitats Directive and Regulations. According to the Conservation (Habitats &c.) Regulations 1994, regulations 48(1) & 85B(1) (amended 2007 Regulations), before authorising a plan which is likely to have a significant effect on a European site and is not connected to the management of the site the Council shall assess the implications for the site in view of its conservation objectives.
- 1.2 The purpose of Appropriate Assessment of land use plans is to ensure that protection of the integrity of European sites (Natura 2000 sites) is a part of the planning process at a regional and local level. The requirement for Appropriate Assessment of plans or projects is outlined in Article 6(3) and (4) of the European Communities (1992) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (known as the 'Habitats Directive').
- 1.3 This report is concerned with all Natura 2000 sites affecting/likely to be affected by development in South Somerset, except the Somerset Levels and Moors and the Severn Estuary sites. These sites will be covered in separate Appropriate Assessment being carried out on behalf of South Somerset District Council by a consultant. However, it is intended that a single Appropriate Assessment statement, setting out the results of both processes, will accompany the submission of the Core Strategy.
- 1.4 Natura 2000 sites include European Sites - Special Protection Areas (SPA) classified under the EC Birds Directive 1979 and Special Areas of Conservation (SAC) and candidate Special Areas of Conservation (cSAC) designated under the EC Habitats Directive 1992, and, as a matter of Government policy, all Ramsar sites as if they are fully designated European Sites for the purpose of considering development proposals that may affect them.

2. Screening Exercise

- 2.1 The Department for Communities and Local Government's (DCLG) consultation document '*Planning for the Protection of European Sites: Appropriate Assessment*' (August 2006). This document gives three main tasks to the AA process:
 1. Likely significant effects
 2. Appropriate assessment and ascertaining the effect on site integrity
 3. Mitigation and alternative solutions
- 2.2 The process is further detailed in '*The Appropriate Assessment of Spatial Plans in England*', published by the Royal Society for the Protection of Birds (Dodd *et al*, 2007).
- 2.3 The RSPB guidance (2007) sets out a 3-step approach to appropriate assessment as follows.

Step 1: Screening for likely significant effects.

This is the initial evaluation of a plan's effects on a Natura 2000 site. If it cannot conclude there will be no significant effect upon any Natura 2000 site, an AA is required. In the DCLG guidance this is called evidence gathering.

Step 2 Appropriate Assessment – scoping and further information gathering

Preparation for the AA where the screening has shown there is likely to be significant effects upon a Natura 2000 site.

Step 3 Appropriate Assessment

An evaluation of the evidence gathered on impacts and consideration of whether changes to the plan are needed to ensure that it will have no adverse effect upon any Natura 2000 site. This should be the end of the AA process and the plan can be adopted.

- 2.4 This report contains Step 1 of the process and compiles information in order to assess the likely effects of potential policy options and development proposals contained within the Core Strategy on Natura 2000 sites alone, or in combination with other plans or projects.
- 2.5 When carrying out this screening, it must be viewed as a coarse filter and therefore a 'Precautionary Approach' has been taken in the assessment of significance. The EC Guidance sets out a number of principles as to how to approach decision making during the process. The primary one is the 'Precautionary Principle', which requires that the conservation objectives of Natura 2000 sites should prevail where there is uncertainty. In other words if the answer is 'don't know' an adverse impact is assumed. This is the case throughout the AA process.
- 2.6 Once potential impacts have been identified, their significance will be considered. A judgement about significance is made in relation to the conservation objectives and targets using the Precautionary Principle.
- 2.7 Natural England and other relevant stakeholders will be consulted on the screening opinion to ensure all elements of the plan are considered which, either alone or in combination, have the potential for a significant effect on relevant sites. This will help the Councils identify potential impacts, likely pathways for those impacts and key indicators to be used for identifying impacts. The screening should therefore look at the significant effects of the plan objectives and of each individual policy.
- 2.8 This screening report will include the following information for the Somerset Natura

2000 sites:

- Why the site is important for wildlife, i.e. the features (species and habitats) for which the site was designated;
- The conservation objectives for the site;
- The latest assessment of the sites ecological condition; and
- Any particular problems or sensitivities of the site's features that could be affected by a plan's policies or proposals

3. Characteristics and Description of the Natura 2000 Sites

Introduction

- 3.1 This section identifies which Natura 2000 sites are potentially affected
- 3.2 Special Areas of Conservation (SAC) are designated due to the presence or providing ecological support to habitats, listed in Annex I, and species, listed in Annex II of the Habitats Directive (92/43/EEC).
- 3.3 Special Protection Areas (SPA) are listed for bird species listed under Article 4 of the Birds Directive (79/409/EEC).
- 3.4 Ramsar sites are important wetland sites that have been designated under the Ramsar Convention on Wetlands 1971. Under Government policy, as set out in Planning Policy Statement 9: Biodiversity and Geological Conservation, they are to be treated as Natura 2000 sites.

Location of Natura 2000 sites within District Area

- 3.5 The following Natura 2000 sites are present within the administrative area of South Somerset District Council.

- Somerset Levels and Moors SPA/Ramsar

- 3.6 This assessment of this site is the subject of a separate report prepared by a consultant.

Location of Natura 2000 sites outside of the District Area

- 3.7 The following sites are located outside of the administrative boundaries of South Somerset District Council and may be affected by development from within the district council area.

- Bracket's Coppice SAC

- 3.8 Full details of each of the Bracket's Coppice SAC site can be found in Appendix 1. Table 1 below gives an analysis of each of the sites including listing qualifying features, give comment on their nature conservation importance and sets out the key environmental conditions necessary to support site integrity.

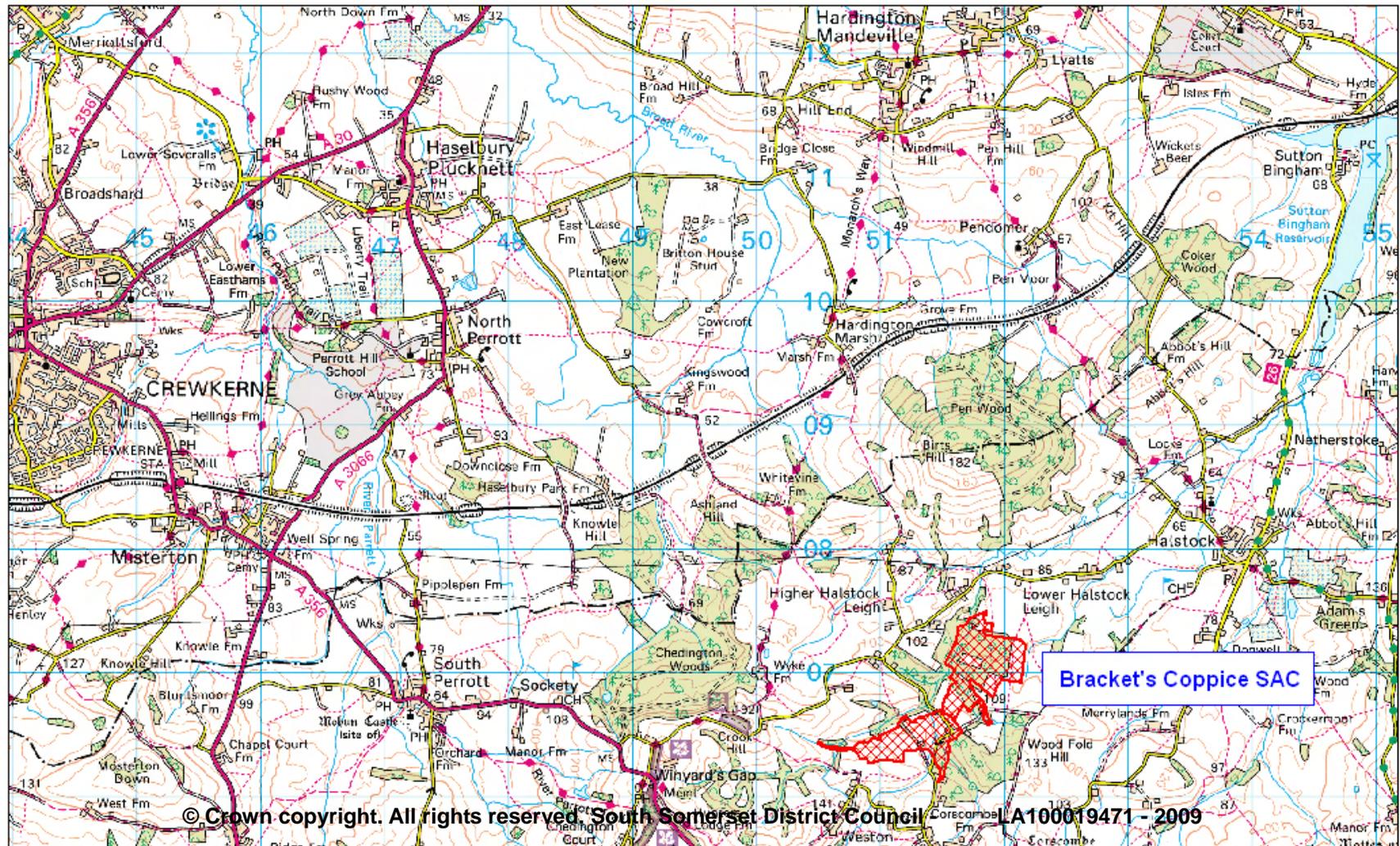
Table 1: Natura 2000 Site Analysis

Site	Qualifying Features	Comments on nature conservation importance	Key environmental conditions to support site integrity
Bracket's Coppice SAC	Bechstein`s bat <i>Myotis bechsteinii</i>	Bechstein's bat is one of the UK's rarest mammals, recorded from only a small number of sites in southern England and Wales. Very few maternity roosts are currently known. One of the first maternity colonies of Bechstein's bat was discovered using bat-boxes in this small woodland.	Undisturbed roosts Woodland management Availability of decaying and veteran trees Maintenance and connectivity of habitats used as flight lines on and off site. (Bechstein's bats may forage up to 3.8 kilometres from their roost sites ¹)
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	<i>Molinia</i> meadows are widely but discontinuously distributed in Britain.	Appropriate management Water table

¹ Boye & Dietz, 2005)

3.9 Bracket's Coppice is located about 7 kilometres south east of Crewkerne and 8 kilometres south of Yeovil near Corscombe in Dorset.

Map 1: Bracket's Coppice SAC, Corscombe



4. Description Of The Development Plans

Introduction

- 4.1 This section sets out brief description of the Core Strategy to be assessed. Policies and proposals in the plans would need to be further assessed. The Core Strategy is part of the Local Development Framework, a set of documents, which together will set out the spatial strategy for the district.
- 4.2 The Core Strategy DPD will set the broad local planning framework for the District Council up to 2026. It will set out a broad approach in terms of planning policies and allocations of land for strategic site development against which decisions on future development relating to where we live, work, spend our leisure time and how we travel, will be considered. The broad principles and policies in the Core Strategy will form the basis for more detailed policies and proposals to be prepared in other documents and will be used directly in respect of decisions on planning applications.
- 4.3 Site Allocation DPDs and Area Action Plans would be produced in accordance with the Core Strategy and identify specific sites for development in the District over the next 20 years. These documents will identify non-strategic sites, which meet the broad strategy for locating smaller scale development set out in the Core Strategy, identify the type and level of development on each site, and identify when and how development will be implemented.
- 4.4 The DCLG guidance recommends that Appropriate Assessments are undertaken throughout the production of Core Strategy, i.e. starting from the Issues and Options stage.
- 4.5 In preparing the Core Strategy key issues, problems and drivers of change facing South Somerset now and in the future are identified in the Issues and Options stage of Core Strategy preparation. South Somerset District Council published a consultation report, which sets out options for a spatial strategy, in March 2008.
- 4.6 Due in part to significant changes by Government in the planning system the Core Strategy has not progressed to the Preferred Options stage in line with the agreed Local Development Scheme (3-year work programme). The strategic level of growth for the District has recently become much clearer through the publication of the Regional Spatial Strategy for the South West's Proposed Changes in July 2008. Work on a new Sustainable Community Strategy for the District is progressing well as is the comprehensive evidence base for the LDF, of which this Appropriate Assessment will form part. The South Somerset Local Development Framework should become the 'spatial expression' of the District's Sustainable Community Strategy and take into account its objectives and priorities.

Current Progress

- 4.7 The South Somerset Core Strategy has reached, at the time of writing this report the Issues and Options stage, which was consulted upon between March and May 2008. Although a Preferred Options stage was scheduled for completion in the autumn of 2008 this has not occurred due to changes occurring in the planning system being implemented by the Government. In terms of the Appropriate Assessment process however this delay has meant that options can now be refined before entering the Preferred Option stage and will accord with Government guidance on Appropriate Assessment (August 2006).

5. Analysis of Issues and Options

Introduction

- 5.1 This screening assessment is made on the Issues and Options report of March 2008, which was produced prior to the publication of the RSS Proposed Changes mentioned above, which will ultimately determine the exact level of growth that the LDF will need to make provision for.
- 5.2 Key policy options are outlined in Table 3 below, together with a broad assessment of impacts. For full details of each of the policies refer to the Core Strategy: Issues and Options Report, March 2008.
- 5.3 Every policy option has then been assessed against each of the qualifying features for the Natura 2000 site. Table 3 below sets out the key policy options in terms of feature and give an assessment. Many policy options will have a neutral effect on each site feature and are therefore not detailed any further within this report as they would not have any significant effect on a Natura 2000 site.
- 5.4 "Significant" is interpreted as an effect likely to adversely affect a Natura 2000 site's integrity. "Integrity" is described in ODPM Circular 06/2005: Biodiversity and Geological Conservation as '*the site's coherence, ecological structure and function across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of species for which it was classified*' (ODPM Circular 06/2005, para. 20).

Types of Impact

- 5.5 There are a number of potential impacts on Natura 2000 sites arising from the implementation of optional policies for the Core Strategy. These were identified in the Habitat Regulations Assessment (HRA) report of the draft RSS (2006) and are set out in the Table 2 below.
- 5.6 An analysis of the findings of the Habitat Regulations Assessment for the draft Regional Spatial Strategy is given in Appendix 2.

Table 2: Types of Impact

Likely operations to result as a consequence of policy	Potential impacts on Natura 2000 site
House building and related infrastructure, traffic and mixed use development, sluice/barrage installation	Water table: Possible changes in water levels due to abstraction, drainage, etc.
	Toxic contamination: air, soil and water pollution, tipping
	Non-toxic contamination: Eutrophication due to sewage treatment works discharge
	Non physical disturbance: human presence, artificial lighting, traffic and pets
Recreation and Tourism	Physical damage: erosion, trampling
	Non physical disturbance: human presence, water sports and pets

Likely operations to result as a consequence of policy	Potential impacts on Natura 2000 site
Alterations, changes, conversions to listed and other buildings	Loss or alteration of roost sites for bats (applied to sites with bat species listed as a feature only)

Plan Analysis

5.7 Table 3 analyses the policies in the Issues and Options Report and for each option gives an assessment of its potential impact on Natura 2000 sites. Those policies that have a potential significant effect are highlighted in Orange. Impacts on each qualifying feature for each site affected are then assessed in detail in Section 6.

Table 3: Plan Analysis

Policy	Options	Impact on Natura 2000 Sites
S1. Levels of development	A. 13,600 dwellings within South Somerset District Housing Market Area of which 6,400 dwellings to be provided for at Yeovil	Water abstraction – streams on the site feed Sutton Bingham reservoir, which supplies Yeovil with water, may lead to impacts on the hydrology of the site in periods of dry weather. Recreational impacts – part of the site (38ha) is a Dorset Wildlife Trust nature reserve open to the public
	B. 16,600 dwellings within South Somerset District Housing Market Area of which 7,400 dwellings to be provided for at Yeovil	As option A but with increased risk of impacts. Increased dwellings in Yeovil will put further pressure on water supply.
	C. 19,700 dwellings within South Somerset District Housing Market Area of which an undefined number of dwellings to be provided for at Yeovil	As for option A but with an increased risk of impacts over option B, although as number undefined for Yeovil this policy may be more favourable or more adverse than other policies.
	D. Draft RSS EiP Panel Report recommendation of 19,700 dwellings, of which 6,400 should be within the existing area of Yeovil and 5,000 should be within an area of search for urban extension of Yeovil, and 8,300 should be elsewhere in the South Somerset Housing Market Area (district) outside Yeovil.	As option A but with further risk of impact than option B. Increased dwellings in Yeovil will put further pressure on water supply.
	E. Growth in excess of 19,700 reflecting the Government’s Housing Green Paper “Homes for the future: more affordable, more sustainable”, July 2007	As Option A but location are not defined and could result in increased or less risks to the Natura 2000 site

Policy	Options	Impact on Natura 2000 Sites
S2. Distribution of development	<p>A. RSS Development Policy B "Market Towns"</p>	<p>Locational policy with development occurring in Yeovil and Crewkerne, which are within generally 10 kilometres of the site. Closeness will increase risks of recreational disturbance.</p>
	<p>B. RSS Development Policy C "Small Towns & Villages"</p>	<p>As Option B except development may occur in settlements closer to the site than Crewkerne and Yeovil and hence increased risk of recreational impacts on the site.</p>
S3 Distribution of development (non Yeovil)	<p>A. Distribute the residual dwellings and commensurate jobs, infrastructure etc. to only Development Policy B settlements</p>	<p>See Policy S2 Option A</p>
	<p>B. Distribute the residual dwellings and commensurate jobs, infrastructure etc. to only some Development Policy B (Market Towns) and C Small Towns & Villages) settlements</p>	<p>This policy may reduce the risk of recreational impacts if residual development is directed away from Crewkerne and villages to the south east of the town and south of Yeovil. However, as specific locations are not stated it must be assumed that Crewkerne and other villages could be developed and therefore using the precautionary principle the risk of impact remains.</p>
	<p>C. Distribute the residual dwellings and commensurate jobs, infrastructure etc. to all Development Policy B and C settlements</p>	<p>There would be increased risk of recreational disturbance, as Crewkerne and villages towards the SAC would have development.</p>
	<p>D. An alternative option.</p>	<p>Uncertain as the Option is not defined and therefore an adverse affect is assumed under the precautionary principle</p>
S4 Sustainable development (density for residential development)	<p>A. 50 dph; B. 60 dph; C. 70 dph; D. An alternative density; E. Locationally-specific target densities set for different Development Policy A, B and C settlements (SSCT's, Market Towns, Small Towns & Villages) and elsewhere with higher densities in Town Centres than suburban areas, reflecting settlement form and housing</p>	<p>No significant effect likely</p>

Policy	Options	Impact on Natura 2000 Sites
	need. F. An alternative option.	
S5 Sustainable development (previously developed land)	A. 40%; B. 50%; C. 60%; D. An alternative percentage; If choosing this option, please provide a justification for the percentage; E. Locationally-specific target percentages should be set for different Development Policy A, B and C settlements and elsewhere	No significant effect likely
H1 Affordable housing contribution	See Issues and Options report	No significant effect likely
H2 Affordable housing percentage	See Issues and Options report	No significant effect likely
H3 Affordable housing in rural settlements	See Issues and Options report	No significant effect likely
H4 Affordable housing distribution within larger developments	See Issues and Options report	No significant effect likely
H5 Gypsies and travellers	A. Criteria to address the following only: • Site access, parking and road safety of occupants • Landscaping and visual amenity • Proximity to contaminated land • Access to the highway network	No significant effect likely – the policy relates to use of land in the South Somerset area and the SAC is located in Dorset.
	B. In addition to 'A' above criteria relating to accessibility to local services such as shops and schools.	
	C. Another option not suggested above.	
H6 Sufficiency in properties to meet needs of households	A. Require a % of all housing in the district to meet lifetime homes standards	No significant effect likely
	B. Be seeking to provide a % of new dwellings as 1 and 2 bedroom dwellings	No significant effect likely

Policy	Options	Impact on Natura 2000 Sites
	C. Be providing more sheltered or warden assisted housing to meet the particular needs of the elderly	No significant effect likely
EP1 Employment	A. Planning to provide for the 9,100 jobs in the Yeovil Travel To Work Area, which equates to somewhere in the region of 7,800 - 10,700 jobs in the district by 2026	The policy is not locational in the travel to work area so the precautionary principle must assume that there is a potential significant effect from loss of habitat used as flight lines or feeding areas within Somerset to development or from the introduction of artificial lighting.
	B. An alternative option.	
EP2 Provision of business units	A. Making it a requirement that on larger sites, a proportion of the development is for smaller business units	No significant effects likely but see EP1
	B. Making it a requirement that on all sites, a proportion of the development is for smaller business units	
	C. Concentrating smaller units on an enterprise centre model such as the Yeovil Innovation Centre and Chard Enviro Centre	No significant effects likely
	D. Providing small advanced industrial units just for small businesses.	The policy is not locational so the precautionary principle must assume that there is a potential significant effect from loss of habitat used as flight lines or feeding areas within Somerset to development or from the introduction of artificial lighting.
EP3 Retail	A. Allocate land to bring forward new proposals for retailing to respond to the needs these areas will face in coming years	The policy is not locational so the precautionary principle must assume that there is a potential significant effect from loss of habitat used as flight lines or feeding areas within Somerset to development or from the introduction of artificial lighting.
	B. Make no allocations, but include a criteria based policy that positively encourages retailing in appropriate locations	No significant effect likely - it is considered that appropriate locations would preclude use of rural areas on the Somerset/ Dorset border south east of Crewkerne.
	C. An alternative option.	Uncertain as the Option is not defined and therefore an adverse affect is assumed under the precautionary principle
EP4 Retail premises re-use	See Issues and Options report	No significant effect likely

Policy	Options	Impact on Natura 2000 Sites
EP5 Farm diversification	<p>Criteria against which farm diversification schemes would be assessed could include:</p> <p>A. Role of the scheme in the continuing viability of the farm;</p> <p>B. Compatibility with the existing farm operation;</p> <p>C. Sustainability of the scheme;</p> <p>D. The proposed reuse/replacement of existing buildings;</p> <p>E. Development of new buildings;</p> <p>F. Scale of the development</p>	<p>Potential significant effect due to changes in land use and from redevelopment of buildings. There may be loss of hedgerows and woodland used as bat flight lines and for feeding. Changes to buildings may result in loss of night roost sites.</p>
EP6 Tourism	<p>A. Retain the existing Local Plan approach to tourism (Policy ME10), but include criteria to ensure that the development is sustainable and contributes to a sustainable rural economy</p>	<p>Uncertain – proposals would be considered on sustainability grounds but off site effects may be overlooked with regard to bat habitat. Therefore a precautionary approach is adopted. Direct effects on site are not considered, as the SAC is unlikely to attract significant numbers of tourists.</p>
	<p>B. Direct all major tourism proposals to higher order settlements (Development Policy A and B), allowing some tourism development in Development policy C settlements and outside development boundaries where they satisfy sustainability criteria (contributes to a sustainable rural economy)</p>	<p>As for A as policy retains allowance for tourist development outside of development boundaries.</p>
	<p>C. An alternative option</p>	<p>Uncertain as the Option is not defined and therefore an adverse affect is assumed under the precautionary principle</p>
TA1 Public transport	<p>A. New development should be located/designed to optimise high quality public transport accessibility</p>	<p>No significant effect likely</p>
	<p>B. Protect and improve public transport routes/hubs and support the creation of new ones where possible</p>	<p>No significant effect likely</p>
	<p>C. Seek to expand Demand Responsive Transport</p>	<p>No significant effect likely</p>

Policy	Options	Impact on Natura 2000 Sites
	D. An alternative option	No significant effect likely
TA2 Walking and Cycling	A. Protect and improve existing cycling and pedestrian routes	No significant effect likely
	B. Provide cycle and pedestrian routes to link new development with new/existing services	No significant effect likely
	C. New development should be located / designed to prioritise the needs of pedestrians and cyclists over cars	No significant effect likely
	D. Provide facilities for secure bicycle parking within new development	No significant effect likely
	E. An alternative option	No significant effect likely
TA3 Traffic demand management	a) In order to reduce the amount of traffic - traffic demand management measure options: A. Congestion charging B. Workplace parking levies C. Parking strategies, including charges D. Management of road space including bus priority	No significant effect likely
	b) Travel choice options: E. Measures to improve travel choice F. Travel plans and travel awareness G. Car clubs/car sharing H. School and Education Travel Planning I. Visitor Plans J. Public Transport Information Systems.	No significant effect likely
TA4 Location of traffic demand measures	A. Yeovil	No significant effect likely
	B. Chard, Crewkerne, Ilminster and Wincanton	No significant effect likely
	C. Bruton, Castle Cary/Ansford, Langport/Huish Episcopi, Martock, Milborne Port, Somerton, and South Petherton	No significant effect likely

Policy	Options	Impact on Natura 2000 Sites
	D. An alternative settlement option	No significant effect likely
TA5 Residential parking standards	Criteria: A. Dwelling size B. Accessibility to public transport C. Accessibility to services/community facilities D. Availability of on-street parking E. An alternative option b) Alternatively: A. There should be a single residential parking policy B. Each 'tier' of settlement should have parking standards C. A combination of all of the above.	No significant effect likely
TA6 Access to services	A. Encourage the location of essential services near to their users, and residential uses near to existing services	No significant effect likely – However see policies S2 and S3 - development of services would be dependent on residential locations in Somerset.
	B. Direct future development to locations accessible by public transport	No significant effect likely
	C. Encourage a mix of uses within new development	No significant effect likely – However see policies S2 and S3 - development of services would be dependant on residential locations in Somerset.
	D. All of the above	No significant effect likely – However see policies S2 and S3 - development of services would be dependent on residential locations in Somerset.
	E. An alternative option	Uncertain as the Option is not defined and therefore an adverse affect is assumed under the precautionary principle
TA7 Timing of service provision	A. Immediately before housing is occupied B. At the same time as the housing becomes occupied C. After a set number of homes become occupied D. Different timings depending on the type of service	No significant effect likely

Policy	Options	Impact on Natura 2000 Sites
HW1 Protection of existing open space, sport and recreation areas	A. Require potential developers to carry out an assessment to determine that areas are no longer needed for any recreational purpose, methodology to be pre-agreed with SSDC	No significant effect likely
	B. Require potential developers to consult with the local community to determine support for proposals, methodology to follow principles of Statement of Community Involvement	No significant effect likely
	C. Require potential developers to fund equivalent replacement resources (could be land, new facility or improvement to existing facility) in suitable areas	No significant effect likely
	D. Encourage the redevelopment of redundant sites for alternative recreational purposes if need is demonstrated under greenspace strategy	No significant effect likely
	E. Provide additional protection by way of “no development areas”	No significant effect likely
	F. Other	No significant effect likely. Policy concerns existing greenspace.
HW2 Facilities for new development	Criteria for provision of community facilities, e.g. playing areas, schools, churches	No significant effect likely
EQ1 Code for sustainable homes	Adoption standards	No significant effect likely
EQ2 Building Research Establishment Environmental Assessment Method (BREEAM)	Level of BREEAM standards in new buildings, e.g. from pass to excellent	No significant effect likely and potentially beneficial – BREEAM includes standards for ecology and may provide roost spaces for bats.
EQ3 Proportion of renewable energy generated by development	Criteria for proportion	No significant effect likely

Policy	Options	Impact on Natura 2000 Sites
EQ4 Renewable energy	A. Set out broad locations that would be appropriate for large scale renewable energy uses	The policies are not locationally or criteria specific at this stage and therefore the precautionary principle assumes a potential significant effect from loss of bat flight lines and with wind turbines from bat mortality due to collision with blades (see Hötker et al, 2006)
	B. Include a criteria-based policy for considering proposals for renewable energy generation within the Development Management policies	
	C. Both A and B	
	D. An alternative option	
EQ5 Opportunities for biodiversity enhancement	A. Require new development to contribute to South Somerset Biodiversity Action Plan targets, where appropriate; B. Require new development to seek biodiversity enhancement in line with the South West Nature Map, where appropriate; C. Set out the broad locations of existing and proposed Green Infrastructure; D. An alternative option	No significant effect likely. Policy is more likely to be positive.
EQ6 Design	Building for Life standards and design quality	No significant effect likely
DMTA1	Policy for new development to be designed in a way that gives priority to people over ease of traffic movement and provides more priority road space for pedestrians, cyclists and public transport.	No significant effect likely
DMTA2	Road design and safety	No significant effect likely
DMTA3	Retail re-use	No significant effect likely
DMTA4	Parking provision assessed for each settlement	No significant effect likely
DMEP1	Criteria based policy identifying how, and what employment land and premises will be protected from unsuitable development	No significant effect likely
DMEP2	A strict policy ensuring that employment sites/premises are not lost to housing unless there is an absolute need for that housing.	No significant effect likely

Policy	Options	Impact on Natura 2000 Sites
DMEP3	A criteria based policy identifying the type of farm diversification schemes viewed as acceptable	Uncertain as criteria are not defined - If included this policy should include criteria on prevention of compromising the integrity of the Natura 2000 site
DMEQ1	Retention of adopted Local Plan Policy ST6 and assesses Design and Access Statements against this policy criterion to ensure all development delivers high quality places.	No significant effect likely
DMEQ2	A new list of criteria to assess Design and Access Statements against	No significant effect likely
DMEQ3	Require consultation from a Police Architectural Liaison Officer on schemes to ensure they are 'Secure By Design'	Potential conflict between what the Police regard as secure and the requirements of bats.
DMEQ4	A policy addressing issues such as flood risk, impact on air quality, water quality, light pollution noise and other potentially polluting impacts of development	No significant effect likely
DMEQ5 (on-site renewable energy)	A. The renewable energy requirement set out in Policy RE5 of the draft RSS	No significant effect likely
	B. The renewable energy requirement set out in Policy RE5 of the Panel Report into the draft RSS	No significant effect likely
	C. Go beyond the draft RSS target and develop an evidence based on-site renewable energy requirement policy, extending the draft RSS requirement to apply to all new buildings	No significant effect likely
	D. An alternative option	No significant effect likely
DMHQB1	Retain and expand Local Plan Policy CR2 to cover the provision of urban parks, the provision of which would be sought from all development.	No significant effect likely as urban parks are likely to be developed within or adjacent to existing towns. Potentially there could be provision to reduce any recreational impacts on the SAC.
DMH1/ DMH2/ DMH3	Housing densities	No significant effect likely

Policy	Options	Impact on Natura 2000 Sites
DMH4 Conversion of buildings to residential use	A. Sustainable location; B. Where there is a proven local housing need that would not otherwise be met; C. Where there is not a more appropriate economic use for the building; D. Where the building has failed marketing, including freehold sale of the property; E. Where the essence of the building is preserved and/or maintained; F. Alternative criteria	Policy does not define a sustainable location and therefore as the precautionary approach is used it is assumed that there is potential for the loss of bat roosts. The criteria does not currently contain a policy for their protection. However, Bechstein's bats feed on the wing and are unlikely to use buildings for night roosting to rest therefore it is considered that there would be no significant effect on the SAC

Policies Requiring Further Screening

5.8 The policies or policy options that require further assessment, highlighted in orange in Table 3, are listed in the following table:

Table 4: Policies/Policy Options to be Screened for Significant Effects on Bracket's Coppice SAC

	Policy/ Proposal	Comment
S1	Levels of development (all options)	Recreational pressure from development in Yeovil and Crewkerne increasing commensurate with requirements for housing numbers. Water abstraction to support increased demand in Yeovil may also have an effect on the site's hydrology and hence it's features for which it is designated.
S2	Distribution of development (all options)	
S3	Distribution of development (non Yeovil) (all options)	
EP1	Employment (all options)	As these policies are non-locational it cannot be concluded that there would not be loss of habitat in Somerset supporting the SAC's bat population due to employment or business development.
EP2	Provision of business units (option D)	
EP3	Retail (options A & C)	
EP5	Farm diversification	Although a sustainability criteria option is considered it is not specific in recognising off sites effects of changes to habitats and buildings used by the SAC bat population. This may be overlooked at scheme level.
EP6	Tourism (all options)	It is assumed that visitors to site are unlikely to be tourists. However, the policy proposals are non locational concerning development for tourists and therefore it cannot be concluded that there would not be loss of habitat in Somerset supporting the SAC's bat population due to employment or business development.

	Policy/ Proposal	Comment
TA6	Access to services (option E)	Undefined option for the location of services could potentially have an impact on bat habitat inside Somerset.
EQ4	Renewable energy (all options)	Renewable energy from wind turbines are likely to have adverse effects on bat populations if located in areas used as flight lines or for feeding. (e.g. see Hötker <i>et al</i> , 2006) These areas are likely to be outside boundaries of a SAC supporting bats.
DMEP3	A criteria based policy identifying the type of farm diversification schemes viewed as acceptable	See comments for EP5
DMEQ3	Require consultation from a Police Architectural Liaison Officer on schemes to ensure they are 'Secure By Design'	There may be conflict of what is deemed secure in terms of landscaping by the police and what is required as habitat to support bats.

Management for Nature Conservation Purposes

5.9 The Core Strategy does not introduce any management measures for nature conservation purposes at this stage.

6. Analysis of Effects on Natura 2000 Sites

Introduction

- 6.1 This section looks at the likely direct, indirect or secondary impacts of policy options, identified as potentially having a significant effect in Section 5, on the favourable condition of the designated site Bracket's Coppice, alone or in-combination with other relevant plans. Plan analysis in Section 5 also assessed that different impacts are not anticipated from potential Core Strategy policy options and any Site Allocations DPDs as both results in increased levels of development.
- 6.2 The determination of favourable condition is separate from the judgement of effect upon integrity. For example, there may be a time-lag between a plan being implemented and a consequent adverse effect upon integrity becoming manifest in the condition assessment. In such cases, a plan may have an adverse effect upon integrity even though the site remains in favourable condition.
- 6.3 In addition, and in order to secure the long term presence and stability of Natura 2000 sites and the network, climate change should be a key consideration in the application of appropriate assessment. Consideration should be given as to whether the plan inhibits in any way the potential of species to adapt to climate change.
- 6.4 The following tables analyse potential impacts on Natura 2000 sites and are additionally informed by the HRA report, through a literature search and in consultation with stakeholders. The Precautionary Principle is used so that where an affect is uncertain it is assumed to be adverse.
- 6.5 Note: The assessment does not take into account mitigating or preventative measures at this stage.
- 6.6 The table form is based on Table A3.2 in Appendix 3 of the RSPB guidance (Dodd *et al*, 2007).

Table 5: POLICY/PROPOSAL		S1, S2, S3 Levels and Distribution of Development					
Qualifying feature	Attribute	Target	Possible impacts	Likely significant effect alone?	Other plans or projects in-combination	Likely significant effect in-combination?	Overall likely significant effect conclusion
Bechstein's Bat <i>Myotis bechsteinii</i>	Disturbance	Degree of human activity around roost areas	<u>Disturbance</u> Disturbance from human activity including increased noise levels	No – it is considered that the site is not well known in Yeovil or Crewkerne and would attract only a small number of visitors even with an increased human population. The car park on the site is small and site access is difficult due to steep and muddy tracks. In addition there are nearer sites of similar attraction just to the south of Yeovil.	North Dorset Core Strategy	No – for the same reasons as alone and as Dorset population centres are also remote.	No significant effect likely - Increased recreational use is not likely to be significant and the site is partly managed by the Dorset Wildlife Trust, who has the power to restrict or close the site to public access.
<i>Molinia</i> meadows	Extent	Area	<u>Habitat Degradation</u> Habitat deterioration and loss from trampling, etc.; nitrogen enrichment from dog fouling				

Table 5: POLICY/PROPOSAL		S1, S2, S3 Levels and Distribution of Development					
Qualifying feature	Attribute	Target	Possible impacts	Likely significant effect alone?	Other plans or projects in-combination	Likely significant effect in-combination?	Overall likely significant effect conclusion
	Sward composition	Negative indicator species	<u>Water Abstraction</u> Streams flow in to Sutton Bingham reservoir, which supplies Yeovil with its water.	Yes – increased demand for water may put additional pressure on supplies to the reservoir especially in summertime with predicted climate change effects.	None	No	Potential significant effect – risk of changed hydrology on Bracket's Coppice SAC due to higher demand in Yeovil.

Table 6: POLICY/PROPOSAL		EP1 (all options) Employment, EP2 (option D) Provision of business units, EP3 (Options A & C) Retail, EP6 (all options) Tourism , TA6 (Option E) Access to services					
Qualifying feature	Attribute	Target	Possible impacts	Likely significant effect alone?	Other plans or projects in-combination	Likely significant effect in-combination?	Overall likely significant effect conclusion
Bechstein's Bat <i>Myotis bechsteinii</i>	Population ²	Maintenance	<u>Loss of habitat</u> As none of the policy options are locational there is potential for loss of habitat forming flight lines and feeding habitat outside the SAC within Somerset	Yes – any single development may cause habitat loss resulting in severance from feeding habitat or direct loss of feeding habitat. In addition, there may be indirect effects from the installation of artificial lighting.	None	No	Potential significant effect – indirect or direct loss of habitat from development resulting from implementation of policy proposals affecting viability of bat population on SAC.

² Although not specifically stated in the Conservation Objectives for the site, as an Annex II species (the qualifying feature), Bechstein's Bats are still required under Article 2 of the 'Habitats Directive' 1992 for the 'Favourable Conservation Status' of the population, the habitat supporting it and its local distribution to be maintained or enhanced. As a maternity colony the population would be considered to be of 'significance'.

Table 7: POLICY/PROPOSAL		EP5 Farm Diversification, DMEP3 Criteria policy for farm diversification					
Qualifying feature	Attribute	Target	Possible impacts	Likely significant effect alone?	Other plans or projects in-combination	Likely significant effect in-combination?	Overall likely significant effect conclusion
Bechstein's Bat <i>Myotis bechsteinii</i>	Population	Maintenance	<p><u>Loss of habitat</u></p> <p>As there is no locational element to the policy there is potential for loss of habitat forming flight lines and feeding habitat outside the SAC within Somerset</p>	<p>Yes – any changes in farming practice may result in direct loss of habitat supporting prey species and/ or loss of hedgerows and other features used as flight lines. In addition, there may be indirect effects from the installation of artificial lighting.</p> <p>However, it should be noted that the Core strategy cannot control farming practices, only farm diversification.</p> <p>They may make use of night roosts, which may be at risk from alterations to farm buildings or tree loss</p>	None	No	Potential significant effect – indirect or direct loss of habitat from development resulting from implementation of policy proposals affecting viability of bat population on SAC.

Table 8: POLICY/PROPOSAL		EQ4 (all options) Renewable Energy					
Qualifying feature	Attribute	Target	Possible impacts	Likely significant effect alone?	Other plans or projects in-combination	Likely significant effect in-combination?	Overall likely significant effect conclusion
Bechstein's Bat <i>Myotis bechsteinii</i>	Population	Maintenance	<u>Bat mortality</u> Wind turbines are known to cause mortality to bats both from collision and from air pressure changes causing haemorrhaging in the lungs.	Yes – any wind turbine, including micro turbines, are potentially going to cause mortality, which may affect the maintaining of population numbers and hence viability.	Somerset Wind Energy Initiative / Somerset Renewable Energy Strategy	Yes - No locational information on wind turbines. The Somerset Renewable Energy does not state avoidance of Natura 2000 sites and their ecological footprint	Potential significant effect – the policy is not locational and poorly sited turbines of any scale may result in bat mortality

Table 9: POLICY/PROPOSAL		DMEQ3 Secure by Design					
Qualifying feature	Attribute	Target	Possible impacts	Likely significant effect alone?	Other plans or projects in-combination	Likely significant effect in-combination?	Overall likely significant effect conclusion
Bechstein's Bat <i>Myotis bechsteinii</i>	Population	Maintenance	<p><u>Loss of habitat</u></p> <p>The policy is generic and as there are no locational policies for development stated there would potential for loss of habitat forming flight lines and feeding habitat outside the SAC within Somerset</p>	<p>Uncertain – 'Secure by Design' criteria may specify vegetation on schemes that are necessary to bats. In addition, there may be indirect effects from the installation of artificial lighting. However, if the scheme is locationally appropriate there should be no effects on bats. Therefore, see assessment under S1, S2, S3 and EP1, EP2, EP3 and EP5.</p>	None	No	No significant effect – policy is dependent on location, which is defined by S1, S2, S3 and EP1, EP2, EP3 and EP5.

Mitigation and Conclusions

- 6.7 This section analyses those policies where a potential significant effect has been identified in the detailed screening tables above. The table below lists each policy or policy option, the potential impact arising from implementation of the policy and recommend mitigation to negate the potential significant effect.
- 6.8 Where mitigation at this stage does not obviate the potential for a significant effect, policies need to be re-considered before bringing them forward to the Preferred Option stage of the Core Strategy.

Table 10: Mitigation and Conclusions

Policy /Policy Option	Feature	Potential Issue	Mitigation	Conclusion
S1, S2 and S3 Levels and Distribution of Development	<i>Molinia</i> meadows	Water Abstraction	Water abstraction would be regulated by Environment Agency processes	No significant effect
EP1 (all options) Employment, EP2 (option D) Provision of business units, EP3 (Options A & C) Retail, EP6 (all options) Tourism, TA6 (Option E) Access to services	Bechstein's Bats	Habitat loss	A policy forming 'Bat Protection Zones' with mapping identifying areas used by Bechstein's bats ³ in the Preferred Options stage.	No significant effect if: Policy and mapping added for Bat Protection Zones
EP5 Farm Diversification, DMEP3 Criteria policy for farm diversification	Bechstein's Bats	Habitat loss	A policy forming 'Bat Protection Zones' with mapping identifying areas used by Bechstein's bats in the Preferred Options stage. The policy should contain provision for the protection of bats from farm diversification.	No significant effect if: Policy and mapping added for Bat Protection Zones
EQ4 (all options) Renewable Energy	Bechstein's bats	Mortality associated with wind turbines	A policy excluding wind turbine development within Bat Protection Zones	No significant effect if: Policy and mapping added for Bat Protection Zones

³ Bats require connectivity of habitat features for commuting and foraging. Active management of the habitats used by bats for these activities may be required. The importance of linear habitat features off site for bat flight lines should be recognised.

7. Recommendations

Introduction

- 7.1 This section outlines what further action is required to ensure that the South Somerset District Council Core Strategy is compliant with the requirements of the Habitats Regulations. It first summarises amendments and /or changes to policy for the Preferred Option stage of the Core Strategy, and secondly, identifies what issues arising from the Core Strategy where stage 2 of Appropriate Assessment process is required.

Recommended Policy Amendments and Additions

- 7.2 It is recommended that the following policy amendments and/or additions be included in the Preferred Options stage of the Core Strategy. Adoption of these measures should eliminate the need to make any further assessment necessary in the Appropriate Assessment process and would ensure that the plan is compliant with the requirements of the Habitats Regulations with regard to Natura 2000 sites.

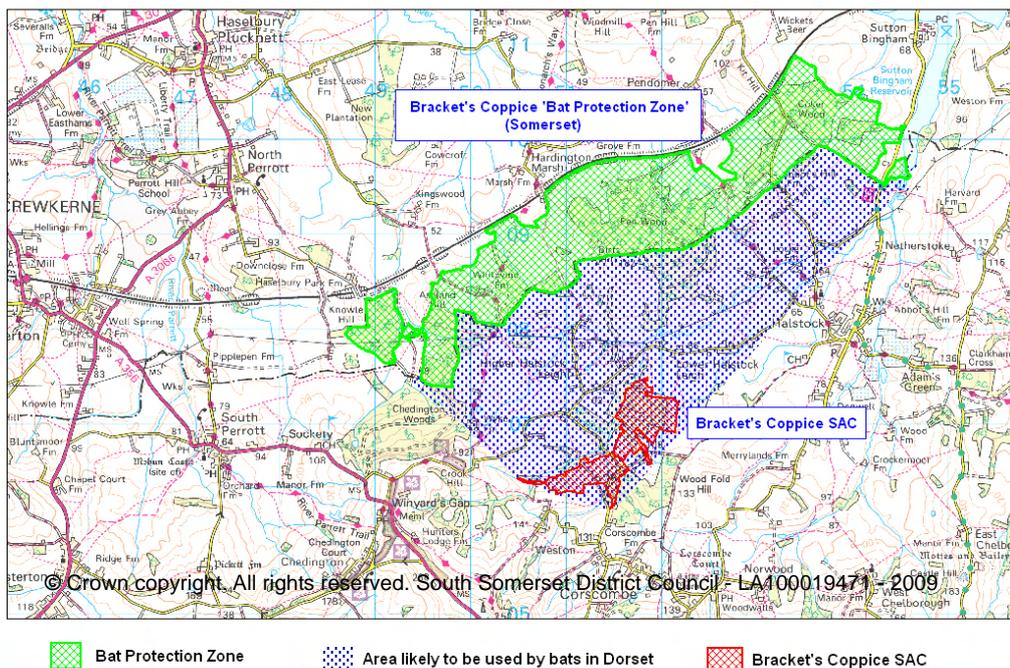
Bat Protection Zones

- 7.3 A new policy on Bat Protection Zones should be inserted into the Preferred Option for the Core Strategy. Bat Protection Zones are areas around a SAC designated for bat species that ecologically support and maintain the sites bat population. Bat species listed in Annex II of the Habitats Directive 1992 are required to be maintained at 'Favourable Conservation Status'. This condition is reflected in the conservation objectives and targets for bat SACs.
- 7.4 Favourable Conservation Status is defined as when:
- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
 - The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
 - There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.
- 7.5 Policies contained within the Issues and Options report of the South Somerset District Council Core Strategy potentially affects habitat use (directly and indirectly), prey availability and roost sites used by Bechstein's from Bracket's Coppice SAC. Policies affecting these sites are EP1 (all options) Employment, EP2 (option D) Provision of business units, EP3 (Options A & C) Retail, EP6 (all options) Tourism, TA6 (Option E) Access to services, EP5 Farm Diversification, DMEP3 Criteria policy for farm diversification and EQ4 (all options) Renewable Energy. A Bat Protection Zone policy would obviate significant effects on these SACs from these policies.
- 7.11 Somerset County Council and Somerset Environmental Records Centre have produced mapping of Bat Protection Zones in Somerset and is available for use in district council DPDs. The mapping has been developed using aerial photographic interpretation and the results of radio tracking carried out on behalf of English Nature following research into the species concerned as part of the Econet project.
- 7.12 A policy for Bat Protection Zones should include a strong forewarning that any

development resulting in adverse impacts on bats would not be permitted in these areas. Adverse effects would include the removal of habitat used as flight lines or for feeding, changes in land use reducing prey availability, the installation of artificial lighting and/or the erection of wind turbines of any scale. The policy should contain provision for the protection of bats from farm diversification where adverse effect would be caused and the exclusion of wind turbines within the Bat Protection Zones.

- 7.14 This policy would be in addition to any retained nature conservation policy from the South Somerset District Council Local Plan and site and species legislation as the policy is specific as mitigation on a Natura 2000 site. The Appropriate Assessment process requires a clear audit trail. Relying on generic policy and legislation as mitigation would in effect devolve responsibility down from the Core Strategy to site level assessments. This could risk the soundness of the policy in the Core Strategy if the found that the development was not possible due to restrictions arising from an Appropriate Assessment at the lower level.
- 7.15 The good practice guidelines accompanying Planning Policy Statement 9: Biodiversity and Geological Conservation (2006) promotes the mapping of important species mapping in Core Strategies.
- 7.16 Mapping methodology - As areas in South Somerset are potentially used to support the Bracket's Coppice population mapping has been developed to show areas likely to be used by the colony within South Somerset. For components of the SAC where Bechstein's are present a buffer of 3.8 kilometres around the maternity roost site area is formed. Woodland feeding areas are digitised within this buffer that is linked by flyways to the site roosting area. Then starting with maternity roosts, Minimum Convex Polygons (MCP) of these areas within home range are formed. There can be more than one MCP as feeding areas are sufficiently separated. The MCP is then modified by either inclusion or exclusion of whole fields using OS Mastermap through interpretation of habitat suitable for Bechstein's bats. This process uses aerial photographic interpretation and available habitat data.

Map 2: Bracket's Coppice SAC 'Bat Protection Zone' (Somerset)



Appropriate Assessment Step 2 – Scoping and Further Information Gathering

- 7.17 No further assessment would be required if the above recommendations were adopted in Preferred Options stage of the South Somerset District Council Core Strategy.

Bibliography

- Bat Conservation Trust/ BMT Cordah Limited. 2005. *A Review and Synthesis of Published Information and Practical Experience on Bat Conservation within a Fragmented Landscape*. The Three Welsh National Parks, Pembrokeshire County Council & Countryside Commission for Wales.
- Bat Conservation Trust/ Institute of Lighting Engineers. n/d. *Bats and Lighting the UK*. Bat Conservation Trust.
- Boye, Dr. P. & Dietz, M. 2005. *English Nature Research Reports Number 661: Development of good practice guidelines for woodland management for bats*. Peterborough: English Nature
- Department for Communities and Local Government. 2006. *Planning for the Protection of European Sites: Appropriate Assessment Under The Conservation (Natural Habitats, &c.) Regulations 20006 – Guidance for Regional Spatial Strategies and Local Development Documents*. DCLG, London
- Dodd, A.M., Cleary, B. E., Dawkins, J. S., Byron, H. J., Palframan, L. J. & Williams, G. M. 2007. *The Appropriate Assessment of Spatial Plans in England*. Sandy: Royal Society for the Protection of Birds
- Entwhistle, A. C., Harris, S., Hutson, A. M., Racey, P. A., Walsh, A., Gibson S. D., Hepburn, I. & Johnston, J. 2001. *Habitat management for bats: A guide for land managers, landowners and their advisors*. JNCC, Peterborough.
- Fitzsimmons, P., Hill, D. & Greenaway F. 2002. *Patterns of habitat use by female Bechstein's bats (Myotis bechsteinii) from a maternity colony in a British woodland*. Brighton: University of Sussex.
- Greenway, F. & Hill, D. 2005. *Woodland management advice for Bechstein's bat and barbastelle bat*. Peterborough, English Nature.
- Hoskin, R. & Tyldesley, D. 2006. *How the scale of effects on internationally designated nature conservation sites in Britain has been considered in decision making: A review of authoritative decisions*. English Nature Research Report No. 704. Peterborough: English Nature.
- Hötker, H., Thomsen, K-M. & Jeromin, H. 2006. *Impacts on biodiversity of exploitation of renewable energy sources: the example of birds and bats*. Norderstedt: Books on Demand GmbH
- Kerth, G., Almasi, B. Ribí, N., Thiel, D. & Lüpoki, S. 2003. Social interactions among wild female Bechstein's bats (*Myotis bechsteinii*) living in a maternity colony: in *acta ethol* (2003) 5:107–114
- Land Use Consultants. 2005. *Going, going, gone? The cumulative effects of land development on biodiversity in England*. English Nature Research Report No. 626. Peterborough: English Nature.
- Land Use Consultants. 2006. *Habitats Regulations Report of the Draft South West Regional Spatial Strategy: Screening Report*. South West Regional Assembly, Taunton.
- Limpens, H. J. G. A. & Kapteyn, K. 1991. Bats, their behaviour, and linear landscape elements: in *Myotis* 29: 63-71.
- Safi, K. & Kerth, G. 2003. Secretions of the interaural gland contain information about individuality and colony membership in the Bechstein's bat: in *Animal Behaviour*, 2003, 65, 363–369
- Scott Wilson, Levett-Therivel Sustainability Consultants, Treweek Environmental Consultants & Landuse Consultants. 2006. *Appropriate Assessment of Plans*. Scott Wilson, Levett-Therivel Sustainability Consultants, Treweek Environmental Consultants & Landuse

Consultants

Somerset County Council. 2007. *Somerset Econet project*. Wellington: Somerset Environmental Records Centre.

South West Regional Assembly. 2006. *The Draft Regional Spatial Strategy for the South West 2006 – 2026*. South West Regional Assembly, Taunton

Underhill-Day, J. C. 2005. *A literature review of urban effects on lowland heaths and their wildlife*. English Nature Research Report No. 623. Peterborough: English Nature.

<http://www.english-nature.org.uk/Special/ssi/>

<http://www.jncc.gov.uk/page-4>

http://www.southwest-ra.gov.uk/nqcontent.cfm?a_id=2655

Appendix 1: Bracket's Coppice SAC Description

Qualifying Features

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

Not applicable

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

[6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils \(*Molinion caeruleae*\)](#)

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

1323 [Bechstein`s bat *Myotis bechsteinii*](#)

One of the first maternity colonies of Bechstein's bat was discovered using bat-boxes in this small woodland.

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

Not applicable.

Conservation Objectives and Targets

The following tables set out the objectives and targets for each of the qualifying criteria. It is against these objectives and targets that significant effects are assessed. Only Bechstein's Bats are considered as other features lie out of Somerset influence.

***Myotis bechsteinii* Bechstein's bat**

Operational Feature	Criteria Feature	Attribute	Measure	Target
Semi-natural woodland	Bat roosts in trees Bechstein's bat	Extent of site containing suitable habitat	Extent/location of stands as identified on map	*No loss of ancient semi-natural stands * At least 80% of recent semi-natural stands maintained. *At least the area of ancient woodland retained.
		Natural processes and structural development	Age/size class variation within and between stands Presence of open space and old trees Dense understorey in areas where bats forage and roost. Standing dead trees	*At least the current level of structural diversity maintained. *Canopy cover present over 50-90% of area *Understorey present over 50% of area *All standing dead trees retained

Operational Feature	Criteria Feature	Attribute	Measure	Target
		Regeneration potential of woodland	Successful establishment of young stems in gaps or on edge	<p>*Signs of seedlings growing through at sufficient density to maintain required canopy cover over a 10-year period</p> <p>* No more than 20% of areas regenerated by planting.</p> <p>* All planting material of locally native stock</p>
		Composition	<p>Cover of native versus non-native species (all layers)</p> <p>Death, destruction or replacement of native woodland species through effects of non-native fauna or external unnatural factors</p>	<p>* At least the current level of site-native species maintained.</p> <p>* At least 90% of cover in any one layer of site-native or acceptable naturalised species.</p> <p>Death, destruction or replacement of native woodland species through effects of introduced fauna or other external unnatural factors not more than 10% by number or area in a five year period.</p> <p>Cover of native versus non-native species (all layers)</p>
		5. Species, habitats, structures characteristic of the site.	<p>Presence of streams with high water quality and natural flows</p> <p>Presence of veteran trees with old growth</p>	<p>*No overall loss of open water</p> <p>*EA scale for quality</p> <p>*Maintain at least current number of veteran trees subject to natural change.</p> <p>*Maintain all trees known to contain natural roosts.</p> <p>*Maintain adequate number of mature trees & standing dead trees to provide suitable conditions over a large proportion of the site to support bat roosts.</p>
			Disturbance	Degree of human activity around roost areas

Molinia meadows on chalk and clay (*Molinion caeruleae*)

Operational Feature	Criteria Feature	Attribute	Measure	Target
Unimproved marshy grassland	M24	*Extent	Total area (ha), mapped in relation to a site-specific reference level to be determined, in period early June - end of August.	No reduction in area and any consequent fragmentation without prior consent
		*Sward composition: positive indicator species	Record the frequency of positive indicator species from the list below to give an overall total of 2 frequent and 3 occasional. Record in period early June - end of August.	Overall total of at least two species/taxa frequent plus at least three species/taxa occasional throughout the sward.
		*Sward composition: frequency and cover of <i>Molinia caerulea</i>	Record the frequency and % cover of <i>Molinia caerulea</i> . Record in period early June - end of August.	At least frequent throughout the sward but no more than 80% cover
		*Sward composition: negative indicator species	Record the frequency and % cover of negative indicator species. Record in period early June- end of August.	No species more than occasional throughout the sward or singly or together more than 5% cover
		*Sward composition: cover of <i>Juncus</i> spp	Record the % cover of <i>Juncus</i> species from groups A and B. Record in period early June - end of August.	All species combined no more than 80% cover, of which no more than 50% made up of spp. from Group B
		*Sward composition: negative indicator species.	Record the % cover of negative indicator species. Record in period early June - end of August.	No more than 20% cover.
		*Sward composition: negative indicator species.	Record the % cover of negative indicator species. Record in period early June - end of August.	No more than 10% cover.
		*Sward composition: negative indicator species	Record the % cover or frequency of negative indicator species in period early June - end of August.	No more than 5% cover.
				All tree and scrub species excluding <i>Salix repens</i> and <i>Myrica gale</i> , considered together.

Operational Feature	Criteria Feature	Attribute	Measure	Target
		*Sward composition: % cover of <i>Phragmites australis</i>	Record the % cover of <i>Phragmites australis</i> in period early June-end of August.	No more than 10% cover.
		Sward composition: % cover of <i>Myrica gale</i> .	Record the % cover of <i>Myrica gale</i> in period early June - end of August.	No more than 10% cover
		Sward composition: negative indicator species.	Record the frequency and % cover of negative indicator species. Record in period early June - end of August.	No more than occasional throughout the sward or more than 5% cover
		Sward structure: average height	Record sward height in period early June - end of August. (Upper target refers to pastures only.)	M24a Sward 5 cm or greater (excluding <i>Juncus</i> spp.) but no more than 25% over 60 cm
				M24b, M24c Sward 2 cm or greater (excluding <i>Juncus</i> spp.) but no more than 25% over 15 cm
		Sward structure: litter	Record cover of litter where in a more or less continuous layer, distributed either in patches or in one larger area. Record in period early June - end of August for pastures.	Total extent no more than 25% of the sward
		Sward structure: bare ground	Record extent of bare ground distributed through the sward, visible without disturbing the vegetation. Record in period early June - end of August.	No more than 10%

Condition

Based on the tables for the equivalent Site of Special Scientific Interest the condition of the affected components, by % of site, is as follows:

SPA component site	Favourable	Unfavourable recovering	Unfavourable no change	Unfavourable declining	Destroyed, part destroyed
	55.48	41.64	2.88	0	0

Description

Bechstein's bat is a woodland species. They prefer semi natural or ancient woodland but will make use of oak and mixed forestry plantations. Most summer roost sites for

Bechstein's bats are in woodpecker holes, although sometimes they use loose bark or tree crevices. They change roosts nearly every day and therefore large number of sites required, perhaps as many as 50. (Greenway, 2004) In one colony the actual roost site was hedgerow tree 3.5 kilometres from the main plantation foraging area. Hedgerow trees are not uncommon for colonies foraging in plantations, as frequently they are the only trees available with woodpecker holes (Fitzsimmons *et al*, 2002)

The standard pattern of foraging within a colony is for suitable canopy areas within woodland to be divided between individuals. About 50 hectares of mature oak with good understorey and small streams seams is ideal. (Greenway, 2004) Other woodland would need to be larger to sustain a colony, for example coniferous woodland home ranges of 100 hectares per individual has been recorded. (Boye & Dietz, 2005; Fitzsimmons *et al*, 2002). They may make use of night roosts (Safi & Kerth, 2003; Kerth *et al*, 2003)

Bechstein's bats have a small range of movement around summer roost of 1 kilometre. The main foraging areas are usually 500 -1500 metres from roost. Sometimes they will fly up to 3.8 kilometres. Foraging range is smaller in continuous woodlands than those in fragmented forests. (Boye & Dietz, 2005; Fitzsimmons *et al*, 2002)

Sensitivities

Current factors considered to be causing loss or decline in Bechstein's bat include:

- Loss, damage or fragmentation of woodland habitats
- Loss, destruction or disturbance of roost sites
- Disturbance of underground swarming sites

(Bat Conservation Trust/ BMT Cordah Ltd., 2005)

Bechstein's bats are also sensitive to artificial lighting, which can disrupt or deny habitat use, and avoid streetlights (Outen, 2002; BCT/ILE, n/d).

Vulnerability

The Bechstein's bat colony at Bracket's Coppice has been intensively studied since its discovery in 1998. The species appears to require closed canopy high forest with veteran trees where old forest conditions are present for both roosting and foraging. The bat forages along adjoining hedges, around hedgerow trees and copses that extend beyond the SAC boundary.

Summary of standards/factors which maintain site integrity

- Appropriate management to maintain habitat diversity with a variety of broadleaved tree species of good age structure, a scrub layer, and other habitats such as ponds, rivers, hedges, grassy field verges and extensively managed pasture, which provide foraging areas and important habitat connectivity through linear features.
- The presence of dead, dying and "veteran" trees in situ and bat boxes are important for bat roosting, hibernating and breeding.
- Avoidance of disturbance to the bats while they are at maternity or hibernating roosts.
- Importance of the water quality within a stream passing through the site.

Existing trends and pressures

In the EA Habitats Regulations Reg. 50 Review of Consents, there is one consented abstraction identified as potentially having a significant effect on the site (with respect to there being sufficient drinking water available for the bats) and it is currently undergoing Stage 3 appropriate assessment. However, from their work to date the EA advised it is unlikely to be having an adverse effect on the site's integrity.

Appendix 2: Habitats Regulations Assessment of the Draft Regional Spatial Strategy

Introduction

Up a tier of plan making from Local Development Documents (LDD), Land Use Consultants produced a Habitats Regulations Assessment (HRA) report in February 2007 for the draft Regional Spatial Strategy for the South West (RSS). Its conclusions with regard to issues affecting Somerset's Natura 2000 sites are set out in the following sections. The report noted that itself would provide a valuable pointer for issues to be addressed through LDD, as well as informing the screening stages of local level HRAs.

In Appendix 4 of the HRA report many of the effects on Natura 2000 sites were identified as being 'uncertain', which must, therefore, be assumed to be adverse lacking further evidence. This was the case with many of the Somerset sites.

This section extracts the findings of the Appropriate Assessment stage of the HRA report of the draft RSS for Somerset. The report classified the main issues as follows:

- Water abstraction
- Water quality
- Tourism, recreation and related pressures (including urban effects)
- Air quality
- Physical habitat loss or damage from development

It also considered impacts from other issues such as renewable energy, mineral extraction and woodland management.

Water Abstraction

Both groundwater and surface water levels can be affected by abstraction for public water supply and for industrial and agricultural uses. Climate change is likely to lead to drier summers, which could reduce the availability of water at a time when both population growth and per capita water usage is increasing.

The Draft RSS provides for 460,000 additional dwellings in the South West over the period 2006 to 2026. The Draft RSS also plans for increases in economic activity, and the provision of community services and facilities. The planned growth is likely to add to pressure on water resources, potentially affecting Natura 2000 sites if the resulting abstractions from ground and surface water sources are not sustainable.

Water Quality

Many Natura 2000 sites are dependent upon there being appropriate water quality to support their integrity, including water courses and estuaries and other wetland habitats, as well as less obvious habitat types (such as heathlands) which may be dependent on ground water quality. Water quality can be affected by a number of factors, such as:

- Pollution from toxic chemicals, metals, oils, pesticides, etc., arising for example from accidental spills, industrial processes, run-off from urban areas, and agriculture.
- Pesticides and nutrient enrichment, for example from agricultural fertilisers, leading to eutrophication.
- Discharges from sewage treatment works, and over-flowing foul water systems at times of high rainfall and flooding.

Many of the most significant risks to water quality in the South West are as a result of agricultural activity, which largely falls outside the remit of the planning system. However, the amount of development proposed in the Draft RSS potentially increases the risk of water quality being affected due to extra loads being placed on sewage treatment works, increased hard surfacing and hence run-off, and potential accidental spills, for example from port related activity. Diffuse pollution could result in an in combination impact.

Tourism, Recreation And Urban Effects

The South West Region is a popular holiday destination, and has many environmental assets that attract both visitors and residents alike. This can lead to significant pressure on often sensitive habitats resulting in damage and disturbance to the species they support.

Typical impacts of tourism and recreation include:

- Physical damage, for example from trampling and erosion.
- Disturbance to species, such as ground-nesting birds and wintering wildfowl, from walking, cycling, and water sports.
- Air pollution (dealt with under air quality below) and disturbance from traffic.
- Disturbance from dogs and damage from dog excrement.

In addition, in particular where sites are close to urban areas, recreational pressures can be exacerbated by other damaging activities (referred to as 'urban effects'), such as light and noise pollution, rubbish tipping, vandalism, arson, and predation particularly by cats.

The impacts of tourism, recreation and urban effects can affect a wide variety of habitat types. Some of the most sensitive are heathland habitats, coastal habitats including dunes, shingle banks and estuaries, other wetlands and watercourses, woodland and grasslands.

Air Quality

Government air quality statistics show that air quality in the South West is generally good with low levels of sulphur, nitrogen dioxides and particulates in comparison to the rest of England. However, pockets of poor air quality exist in the region, especially within large urban industrial areas such as Bristol, but also notably Yeovil, where an Air Quality Management Area was designated in 2002. Air quality can significantly affect biodiversity, and specifically the integrity of Natura 2000 and Ramsar sites.

The UK Air Pollution Information System (APIS) provides data with respect to different types of air pollution, and allows analyses to be carried out with respect to individual locations. However, it provides an indication of where issues with respect to air quality impacts on Natura 2000 sites could be occurring.

Certain interest features of Natura 2000 or Ramsar sites can be directly and/or indirectly affected by pollutants concentrated in the air such as oxides of nitrogen (NO_x), oxides of sulphur (SO_x) or ammonia, or by pollutants deposited on the ground through acidification or terrestrial eutrophication via soil (deposition of nitrogen). The different types of air pollutant that could affect Natura 2000 sites are summarised below under 'aerial' pollutants and 'deposition' pollutants. Only some of the pollutants are likely to arise as a result of proposals in the emerging RSS.

Acid deposition (also referred to as acid rain and acid precipitation) represents the mix of atmospheric pollutants, particularly oxides of sulphur and nitrogen, which together cause precipitation to become more acidic when converted to sulphuric and nitric acids, and lead to the acidification of soils and freshwaters. The term encompasses wet deposition, dry deposition and the direct impaction of cloud water on hills, sometimes referred to as "occult deposition". In the South West, acid deposition loads appear to be related to both location and habitat type, with a large concentration around the central part of the region, and smaller areas in the east of Cornwall and south of Dorset showing high exceedance loads for this pollutant. However, this applies only to certain habitat types within these areas, namely heathland (e.g. wetland habitats, such as raised bog and blanket bog (e.g. Holme Moor and Clean Moor); and grazing marsh (e.g. Somerset Levels and Moors). Quants categorised as unimproved hay meadow, also displays a pollutant load significantly exceeding critical loads.

Nitrogen deposition. These are derived mainly from nitrogen oxides (NO_x) and ammonia (NH₃) emissions – NH₃ is generally deposited in high quantities to semi-natural vegetation through intensive agriculture, whilst reduced N (NH_y) is primarily emitted from intensive animal units and, more recently, vehicles with the introduction of catalytic converters. Exceedance loads for this pollutant in the South West are the greatest in bog habitats and woodland of all types. Cliffs and shingle habitats are also sensitive to nitrogen deposition. However, the deposition loads for these habitats are lower than for the region's woodlands,

probably due to their more remote locations, which are less likely to be affected by intensive agriculture, and therefore cliffs and shingle habitats are slightly less at risk from nitrogen deposition.

Physical Habitat Loss or Damage from Development

The most significant effect that could occur to a Natura 2000 site would be direct physical loss or damage from development. It is unlikely, however, that actual development of a Natura 2000 site would result from the RSS's implementation because of the policy safeguards that it contains, and because further HRA and regulatory mechanisms at the local authority LDF level, and consideration of individual development projects, would preclude this from happening.

Nonetheless, there are a number of aspects of the emerging RSS where the potential for physical damage could arise. The main issues identified through the Appropriate Assessment process were development in close proximity to protected Natura 2000 sites, including coastal sites arising from port development, waterside employment and flood defences.

There are specific issues relating to bats (where these are qualifying features) that need to be considered when assessing the potential effects of the emerging RSS. In many instances, Natura 2000 sites will have been designated for bat breeding and roosting sites. However, bats often rely on foraging habitat some distance away from the designated sites, and on habitat features linking foraging locations with breeding and roosting sites. As a result, in order to maintain the integrity of the Natura 2000 sites, and in particular to ensure that there are no adverse effects on bats as qualifying features, the foraging habitat and flight paths also need to be considered, and direct effects such as physical loss from development, or from indirect effects such as disturbance from people, traffic or artificial lighting need to be avoided.