



South Somerset District Council draft Core Strategy incorporating preferred options

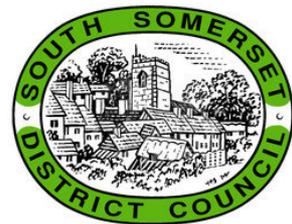
Habitats Regulations Assessment for the Somerset Levels and Moors International Sites

South Somerset District Council

5 October 2010

Final Report

9T3999



ROYAL HASKONING

thinking in
all dimensions

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SUMMARY

The need for this assessment arises from the EC *Habitats Directive* (92/43/EEC) and its implementation in the UK under *The Conservation of Habitats and Species Regulations 2010* (the 'Habitats Regulations' – previously the *Conservation (Natural Habitats &c.) Regulations 1994*). Habitats Regulations Assessment is required for a plan or project which, either alone or in combination with other plans or projects, is likely to have a significant effect on the integrity of a international site (one that forms part of the Natura 2000 network, plus Ramsar sites) and which is not directly connected with the management of the site.

In 2009, Royal Haskoning undertook a scoping assessment of several Somerset Authorities' developing land use plans (Royal Haskoning, 2009). Assessments were made of plans provided by Sedgemoor District Council, Taunton Deane District Council, South Somerset District Council, Somerset County Council, and Mendip District Council. In the case of South Somerset District Council, Royal Haskoning's remit was to consider the potential impacts of the Core Strategy Issues and Options Report upon the Somerset Levels and Moors and Severn Estuary internationally designated sites. The aim of the report was to identify those policies and options which were likely to, or could potentially, have a significant impact on these sites. It also determined the nature of the likely impacts, and to recommended, where necessary, mitigation and avoidance measures.

The initial (scoping) assessment concluded that the South Somerset District Council policies would not have an impact upon the Severn Estuary SAC/SPA/Ramsar sites, and that they could be scoped out of further assessment. This Stage 2 report concurs with the original assessment – the Preferred Options policies upon which this assessment is being undertaken, are not expected to have any impacts upon the Severn Estuary sites. The Severn Estuary International Sites are therefore not considered further in this report.

This Stage 2 report represents an assessment of the final suite of policies being proposed by South Somerset District Council in their draft Core Strategy incorporating preferred options. These policies are scheduled for public consultation starting in October 2010.

Following discussion with Natural England and other consultees and based on the sensitivities of the interest features of the sites making up the Somerset Levels and Moors, there are three potential mechanisms by which the South Somerset District Council Core Strategy could impact these designated sites. These impacts form the focus of the more detailed 'Appropriate Assessment' to determine whether it could be concluded that the likely significant impacts identified would have no adverse effect on the integrity of the sites that collectively form the Somerset Levels and Moors. The impacts are:

- Increased disturbance to birds from recreational activities;
- Impacts upon invertebrates owing to reductions in water quality; and
- Impacts upon birds from renewable energy infrastructure (especially wind turbines) along or in proximity to flight lines.

A preliminary assessment of the policies concluded that seven of them did have at least the potential to affect international sites. These were taken through to the Appropriate Assessment stage, presented in the draft HRA (July 2010).

A revised suite of policies (hereafter referred to as the 'final policy suite') were issued by South Somerset District Council in September 2010. The final policy suite introduces seven new policies (additional to those considered in the draft HRA), and revises and/or re-numbers many of the existing policies. The final policy suite incorporates changes and amendments recommended in the draft HRA. Four policies within the final suite are now considered in the Appropriate Assessment stage as the potential for a significant effect can not be ruled out. These policies are:

- Policy SS3 District-wide housing provision;
- Policy SS4 Delivering new housing growth;
- Policy YV2 Yeovil urban extension; and
- Policy CV1 Chard growth area.

Following the Appropriate Assessment stage, it was possible to conclude that these four policies would not, either alone or in-combination with other plans and programmes, result in adverse effects on the integrity of the Somerset Levels and Moors internationally designated sites.

This report represents the final HRA of the final policy suite being submitted for public consultation in October 2010.

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1 INTRODUCTION

This report forms the final conclusion of a Habitat Regulations Assessment (HRA) for South Somerset District Council. It reflects an assessment of the draft Core Strategy incorporating preferred options, prior to public consultation in autumn 2010.

The need for this assessment arises from the *EC Habitats Directive (92/43/EEC)* and its implementation in the UK under the *Conservation of Habitat and Species Regulations 2010* (previously the *Conservation (Natural Habitats &c.) Regulations 1994*, as amended)). HRA is required where a plan or project not directly connected with the management of an International Site is likely to have a significant effect on the integrity of that site, either alone or in combination with other plans or projects. Sites nominated for designation at European or international level are also considered within the assessments.

This document presents an assessment of the policies detailed within South Somerset District Council's draft Core Strategy incorporating preferred options. It identifies whether any of these policies, either alone or in-combination with other plans or policies, are likely to have a significant effect on International Sites¹. Where such an effect is identified, the 'Appropriate Assessment' (**Section 6**) considers whether the effect will have or lead to an adverse effect on the integrity of those sites designated as internationally important for wildlife.

The final Appropriate Assessment is a decision by the 'competent authority', in this case South Somerset District Council, as to whether the proposed plans or projects laid out within their Core Strategy document can be determined as not having an adverse effect on the integrity of any International Sites. Planning Policy Guidance Note 9 (PPG9, the precursor to PPS9) (Department of the Environment, 1994) defined a site's integrity as the '*coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or population of the species for which the site is classified*'.

Building on a scoping study (Royal Haskoning, 2009) this assessment is focussed on 12 sites (each nationally-designated as Sites of Special Scientific Interest) that are collectively covered by two international nature conservation designations (described in full in **Section 3**):

- Somerset Levels and Moors Ramsar; and
- Somerset Levels and Moors SPA.

¹ Special Areas of Conservation (SAC, or Candidate Special Area of Conservation (cSAC)), designated under the Habitats Directive, and Special Protection Areas (SPA) designated under the *Birds Directive (79/409/EEC)*, form part of the EU-wide Natura 2000 network. UK Government policy (PPS9 and Circular 06/05) requires that 'Ramsar sites', designated under the Ramsar Convention (*The Convention on Wetlands of International Importance, especially as Waterfowl Habitat*) are subject to the same provisions. This definition encompasses those European sites below the high tide mark (whether SPA or SAC) which, following the updated nomenclature used in the Marine and Coastal Access Act 2009, are referred to as European Marine Sites. The term international sites will be used throughout this report when referring to these designated sites.

Other internationally designated sites that fall within the ‘zone of influence’ of South Somerset District’s draft Core Strategy incorporating preferred options are being assessed in separate work undertaken by Somerset County Council.

1.1 Stage 1 Report

In 2009, Royal Haskoning undertook a Scoping Report for Somerset Authorities’ developing land use plans² (Royal Haskoning, 2009). Its aim was to identify those policies and options in the documents that were likely to or could potentially have a significant impact on any designated site.

The full list of policies from the South Somerset District Council Core Strategy Issues and Options report were appraised in the Stage 1 (Scoping) Report. It determined that the policies and options considered only had the potential for significant effect on the Somerset Levels and Moors. A more detailed technical assessment was made on all remaining policies that considered their relevance with regard to effects on International Sites against the conservation objectives (provided by Natural England) for each of the sites.

Further detail on the findings of the Stage 1 Report can be found in **Section 4.1**.

1.2 Structure of the Report

The rest of this report is set out as detailed below:

- Section 2 Methodology
- Section 3 Sites and features
- Section 4 Policy development and assessment
- Section 5 Impacts associated with policies
- Section 6 The alone assessment
- Section 7 Mitigation
- Section 8 In-combination assessment
- Section 9 Conclusion and next steps
- Section 10 References

²The strategy documents covered by the Stage 1 report were:

- Mendip District Council Core Strategy Issues and Options Report;
- Sedgemoor District Council Core Strategy Issues and Options Report;
- South Somerset District Council Core Strategy Issues and Options Report;
- Taunton Deane Local Plan and Emerging Allocations (2009); and
- Somerset County Council Minerals Plan.

2 METHODOLOGY

This section outlines the general HRA methodology and the process that was undertaken for the Stage 2 assessment.

2.1 Requirement for Habitats Regulations Assessment

Under Regulation 61 (1) of *The Conservation of Habitat and Species Regulations 2010*, HRA is required for a plan or project, which either alone or in combination with other plans or projects, is likely to have a significant effect on the integrity of an International Site and which is not directly connected with the management of the site.

2.2 Application of Habitat Regulations Assessment to Land use Plans

Following a European Court of Justice ruling in 2005, which determined that the United Kingdom had not transposed the Habitats Directive into law in the correct manner, land use plans have been subject to Habitats Regulations Assessment to determine impacts on sites designated under the Habitats and Birds Directives. The 2010 Habitats Regulations revision now includes provisions for Land Use Plans.

HRA is considered to be a risk-based assessment, drawing on available information. The Department for Communities and Local Government (DCLG) has produced draft guidance on carrying out Appropriate Assessment for the protection of International Sites for Regional Planning Bodies and Local Planning Authorities (DCLG, 2006). It addresses determining the need for an Appropriate Assessment for a given plan and the provision of an assessment if one is required. The documents: *'Planning for the Protection of European Sites: Appropriate Assessment'* (DCLG, 2006) and *'The Assessment of Regional Spatial Strategies under the Provisions of the Habitats Regulations – Draft Guidance'* (English Nature, 2006), provide a cohesive source of guidance for assessments. Further documents which have provided scope to this work are the Royal Society for the Protection of Birds (RSPB) publication *'The Appropriate Assessment of Land Use Plans in England'* (2007), the more recent guidance for competent authorities (Tyldesley and Hoskin 2008).

2.3 Habitat Regulations Assessment Methodology

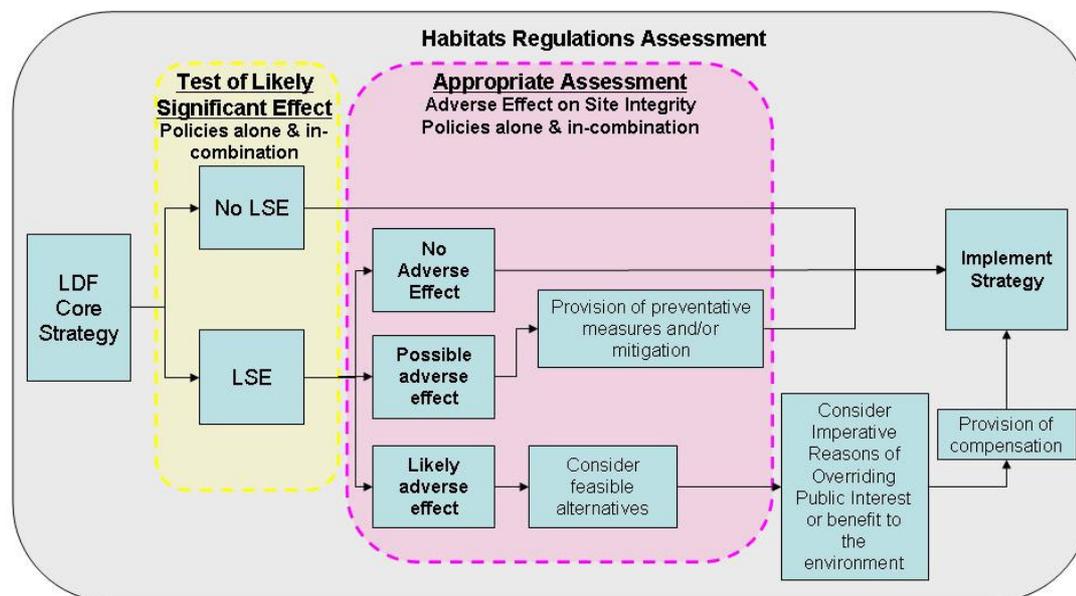
The general process of a HRA is shown in **Figure 2.1**. Initially an assessment is undertaken of whether the policies and land allocations from a Core Strategy have the potential to have a Likely Significant Effect (LSE), either alone or in-combination, upon the relevant International Sites. Those policies that can be scoped out of the further assessment stages are deemed suitable for inclusion in the Core Strategy.

Policies which are determined to have an LSE are taken through to the 'Appropriate Assessment' stage. This involves a more detailed review of the policies or land allocations and assessing their potential impacts on the integrity of the International Sites against information gathered on the condition of the site, and any further details concerning the likely impact.

If it cannot be concluded at this stage that the policies will not have an adverse impact on the International Sites then mitigation or avoidance measures must be developed

and specified which can be used to prevent any declines in the condition of the site or sites in question.

Figure 2.1. The Habitats Regulations Assessment Process



However, any policies for which mitigation or preventative measures cannot be established should be reconsidered and alternatives proposed. If the policy lacks a viable alternative it will be necessary to consider whether the policy is required. Guidance issued by the Department of Central and Local Government (DCLG) in 2006 states:

‘After mitigation measures have been exhausted on an emerging option and it is shown to still have a potentially negative effect on the integrity of a European site, and in absence of any other alternative solution, as a rule the option should be dropped.

In the exceptional circumstance and as an exception to that rule, if the pursuit of the option is justified by ‘imperative reasons of overriding public interest (IROPI)’ consideration can be given to proceeding in the absence of alternative solutions. In these cases compensatory measures must be put in place to offset negative impacts’.

In circumstances where IROPI prevails, the relevant Government department has to be shown that there were no possible mitigation measures or alternative solutions that would negate the adverse effects on the site, along with either of the following:

- That the plan is being undertaken for reasons relating to human health, public safety or beneficial consequences of primary importance to the environment; and /or
- That the plan is being undertaken for imperative reasons of overriding public interest.

Mitigatory or compensatory measures must also be carried out if proceeding with a plan or policy that is likely to have adverse impacts on an internationally designated site. Consultation is required with the appropriate Government department throughout this process to ensure the overall integrity of the International Site network is not detrimentally impacted.

2.4 Our Methodology

The draft policies contained within the South Somerset District Council Core Strategy Issues and Options Report were assessed in the Stage 1 (Scoping) Report (by Royal Haskoning, 2009a) (see **Section 4.1**). These policies were reviewed to identify any that could have the potential to have a significant effect upon the integrity of the International Sites in question.

Following completion of the Stage 1 report, South Somerset District Council issued a suite of Core Strategy preferred options policies which were reviewed in the draft HRA (prepared by Royal Haskoning for SSDC in 2010).

A final policy suite was issued by South Somerset District Council in September 2010 which has subsequently been assessed and form the focus of this, the final HRA of the Core Strategy. Policies deemed to have at least the potential for an LSE are considered within the Appropriate Assessment stage. Means of preventing or mitigating any identified impacts are discussed where necessary.

This assessment of the final policy suite suggests feasible measures, supported by available guidance and best practice, by which South Somerset District Council can mitigate and/or avoid adverse impacts.

2.5 In-combination Assessment

As well as considering direct and in-direct impacts of policies, they must also be considered cumulatively alongside other policies in an 'in-combination' assessment. Policies which, in isolation, have been assessed as having no LSE could have a significant effect when considered collectively. The collective impact of more than one policy could be significant despite these policies, when considered alone, having no significant impact.

The in-combination assessment of the policies provided by South Somerset District Council is detailed in **Section 8** of this report.

2.6 Consultation

Consultation was undertaken with various external parties at Stage 1 of this assessment, and ongoing liaison with Natural England, the Environment Agency, Wessex Water, South Somerset District Council and Somerset County Council has taken place. A summary of the consultation undertaken is provided in **Table 2.1**.

Table 2.1 Summary of Consultation Responses

Consultee	Response/Key Comments
Natural England	<ul style="list-style-type: none"> • Recreational disturbance problems are considered to be low level issues on the Somerset Levels and Moors. • Somerset Wildlife Trust is concerned about access issues at Westhay Moor. Visitors come from all over the country to see the flocks of starlings in winter time. • Visitors will predominantly use the sites where there are car parks. <p>Wind Turbines:</p> <ul style="list-style-type: none"> • Significant issue if wind turbines are located in flyways. Data needed on links between coast and Levels and movement through the Levels.
Wessex Water	<ul style="list-style-type: none"> • Development of the Core Strategy preferred options, and the new housing provision therein, can be supported with existing water treatment works capacity
Somerset County Council Ecologist	<p>Considers that:</p> <ul style="list-style-type: none"> • Where people are coming from to visit the International Sites is more important than numbers. Locals are more likely to be dog walking.
RSPB	<p>Recreational disturbance:</p> <ul style="list-style-type: none"> • The associated increase in dogs caused by an increase in residential property is an issue. • Mitigation could include the distribution and size of car parks, which control numbers accessing the sites. Also, parking should be stopped elsewhere, e.g. in wide splays.

Working findings of the draft report were discussed with Natural England and Somerset County Council's ecologist to ensure that the proposed conclusions and mitigation were appropriate. Views on the draft HRA were also sought through summer 2010, during which time the final policy suite was being finalised by South Somerset District Council. Both Natural England and the County Ecologist supported the findings of the draft HRA.

3 SITES AND FEATURES

In this section we look at the Somerset Levels and Moors International Sites in detail, highlighting their interest features that form the basis for the designation. The Somerset Levels and Moors is a designated Ramsar site and Special Protection Area (SPA). A more detailed description of the sites and their interest features is included below. The location of the Somerset Levels and Moors, their extent, local settlements, rivers and main roads are shown on **Figure 3.1** which also illustrates the extent of central and western South Somerset District.

The Somerset Levels and Moors is widely regarded as one of the most important lowland (with much of the basin lying at between 2m and 7m above Ordnance datum) wetland landscapes in Britain (English Nature, 1997). The site is of international conservation importance and is therefore designated as both an SPA and a Ramsar site (refer to **Section 3.1** and **3.2**. Full details of the SPA and Ramsar sites, detailing all interest features, are given in the assessment tables at **Appendix A**). The Levels and Moors International Sites are composed of a patchwork of individual SSSIs that fall within the boundary of several district councils.

The component SSSIs that are considered to be potentially affected by policies contained within SSDC's Core Strategy are detailed below:

- King's Sedge Moor (822 hectares), which straddles the border between Sedgemoor and South Somerset Districts, and lies immediately east of Othery;
- West Sedge Moor (1,016 hectares), again straddling the border between Sedgemoor and South Somerset Districts and situated north-west of Curry Rivel;
- West Moor (213 hectares), which sits at the confluence of the Rivers Isle and Parrett, 5km to the north-west of Martock;
- Wet Moor (491 hectares), located along the River Yeo immediately south of Huish Episcopi; and
- Southlake Moor (197 hectares), situated on the west bank of the River Parrett and largely falling within Sedgemoor District, this site is 2km south-west of Othery.

3.1 Somerset Levels and Moors Special Protection Area

Designated in 1997, the Somerset Levels and Moors SPA is one of the largest areas of traditionally managed wet grassland and fen habitats in the lowland United Kingdom (JNCC, 2010a). The SPA covers just less than 6,400 hectares in the floodplains of the Rivers Brue, Parrett, Axe and Tone. The site is made up of 13 individual SSSIs. The dominant feature of the site is humid and mesophile grassland with areas of improved grassland, bogs, marshland, areas of standing water, fen and broad-leaved woodland. Over winter the site supports a large number of bird species including common teal *Anas crecca*, Bewick's swan *Cygnus columbianus bewickii*, golden plover *Pluvialis apricaria* and northern lapwing *Vanellus vanellus*.

3.2 Somerset Levels and Moors Ramsar

The Somerset Levels and Moors Ramsar site covers 6,388 hectares and is one of the most important sites for breeding wading birds in southern Britain, featuring a number of internationally important wildfowl including teal *Anas crecca* and northern lapwing. Species of national importance that are present include gadwall *Anas strepera* and common snipe *Gallinago gallinago*. Internationally important numbers of wildfowl visit the site in the winter. An extensive range of invertebrates, particularly beetles, are supported by the large network of ditches. The majority of the site comprises open wet grassland and ditches with a wide range of plant communities. The sites fall within the floodplains of the Rivers Axe, Parrett, Tone, Brue and their tributaries, and feature areas of former raised peat bog, modified significantly in recent years by human activity, and now resulting in areas of open water, reedbeds and fens (JNCC, 2010b).

3.3 Site Condition and Management Objectives

Much of the data available for assessing the condition of International Sites relates to component Sites of Special Scientific Interest (SSSIs) rather than features of the International Site. However, SSSI condition is a useful tool for assessing International Sites and identifying whether issues relevant to the HRA are resulting in unfavourable conditions. Natural England produces Conservation Objectives for all SSSIs, which relate to maintaining the features for which the site was designated. These objectives can be transferred to the wider, International Site.

The overarching generic objective for all sites is:

“subject to natural change, maintain the site in favourable condition”.

More specific objectives for each site are provided in favourable condition tables. These detail targets and thresholds for a range of environmental and biological parameters which should be met in order to attain favourable condition. This is synonymous with attaining or maintaining site integrity.

For qualifying species (SPAs), Conservation Objectives can be generalised as:

- To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and
- To ensure for the qualifying species that the following are maintained in the long term:
 - Populations of the species as a viable component of the site;
 - Distribution of the species within the site;
 - Distribution and extent of habitats supporting the species;
 - Structure, function and supporting processes of habitats supporting the species; and
 - No significant disturbance of the species.

These conservation objectives, along with those provided by Natural England that are specific to the features of the International Sites (see **Appendix A** for full breakdown), have been used to assess the potential impact the Core Strategy policies may have upon the integrity of the sites.

A full description of the sites covered, including all the features for which the sites are designated and the specific conservation objectives, are given in the detailed assessment tables (used for the Appropriate Assessment stage) in **Appendix A**.

4 TEST OF LIKELY SIGNIFICANT IMPACT (LSE)

This section undertakes an assessment of the draft Core Strategy incorporating preferred options, and identifies whether these policies are likely to have, or have the potential for a significant effect on the International Sites. It updates previous assessments carried out in the Stage 1 report, and the draft HRA. Whilst HRA assesses at the 'plan level', each policy is initially considered individually.

4.1 Results of the Stage 1 report

The Stage 1 report (Royal Haskoning, 2009), reviewed the initial batch of draft policies provided by South Somerset District Council – the Issues and Options Report (March, 2008). A number of policies were identified in the Issues and Options report where the direct, indirect or secondary impacts of the development(s) relating to these policies would either be likely to have a significant effect on site integrity or have the potential for significant effects.

An assessment of the SSSIs which comprise the International Sites was also undertaken. It found that six of 12 sites were deemed to be in an 'unfavourable' condition. These were all component SSSIs of the Somerset Levels and Moors SPA and Ramsar sites. The reasons for the unfavourable condition of the site included:

- fertiliser use;
- inappropriate water levels and water level management;
- water pollution and agriculture/run off;
- public access and disturbance;
- vehicles;
- grazing; and
- peat extraction.

Peat extraction has been carried out in the Site since the middle of the last century; Natural England considered this to be a reason for the unfavourable condition of a number of the SSSIs.

Additional issues relating to options proposed were identified from the review of the sites' condition status, as well as other sources including the Regional Spatial Strategy and its HRA. One of the key issues identified was that additional housing development will demand further water resources, resulting in increased abstraction which could have an impact upon International Sites. Also, additional housing development will put increased demand on wastewater treatment systems which it was suggested had the potential to lead to eutrophication in the International Sites.

The impacts that were deemed likely to arise following the Stage 1 and 2 Reports are the ‘impact mechanisms’ in the source-pathway-receptor model considered in this report. These are:

- **Increased recreational disturbance** to birds at the Somerset Levels and Moors designated sites;
 - Impact is due to population growth and increased recreation within the district, particularly in Yeovil and Chard and also in Crewkerne, Ilminster, Wincanton, Somerton and Ansford / Castle Cary.
- **Increased water quality impacts** to invertebrates within the Somerset Levels and Moors Ramsar due to changes in water quality arising from run-off and increased sewage treatment works that could arise from development at Langport/ Huish Episcopi, South Petherton, Somerton and Martock. As part of the Stage 2 report, development allocations for Yeovil, Chard, Crewkerne and Ilminster were also considered.
- Potential development of **renewable energy projects near, and in the flyways** to the Somerset Levels and Moors designated sites that could adversely impact birds.

4.2 Appraisal of the draft Core Strategy including preferred options (July 2010)

Following completion of the Stage 1 report in 2009, draft preferred policies were developed by South Somerset District Council. The draft HRA assessed the preferred options policies, and the test of LSE concluded that of the 50 policies assessed, seven had at least the potential for an effect on the interest features or overall condition of the Somerset Levels and Moors SPA and Ramsar sites. That assessment in the draft HRA (provided for information as **Appendix D**) has been updated for this final report. **Table 4.1** reports the assessment of the final policy suite of 57 policies, which includes the following new policies:

- Policy SS3 – District-wide housing provision;
- Policy YV1 – Brownfield & Greenfield housing provision for Yeovil;
- Policy EP7 – New tourism proposals;
- Policy EP8 – Major new tourist facilities;
- Policy EQ4 – Green infrastructure;
- Policy EQ5 – Woodlands and forests; and
- Policy EQ6 – Air quality.

4.3 Appraisal of draft Core Strategy incorporating preferred options (October 2010)

A total of 57 policies form the draft Core Strategy incorporating preferred options. They were assessed for Likely or Potential Significant Effect in terms of recreational disturbance, water quality impacts on invertebrates and the impact of renewable energy (wind) developments upon the designated sites (as discussed above), with the results provided in **Table 4.1**.

Table 4.1 Assessment of draft final policies. Policies that have changed since in the final policy suite are labelled accordingly. 'No material change' indicates that whilst policies may have undergone some minor changes these do not affect the previous assessment.

Key	
Potential for adverse effect	-
No adverse effect	o
Potential positive effect, at the plan level	+
New or amended policies since the draft HRA, and alterations to conclusions, are identified by a darker boundary	

<p>Policy SS1 – Settlement Hierarchy</p> <p>This policy sets out where provision for new housing in South Somerset District is going to be made. It is an over-arching policy that alone is not a commitment to the undertaking of a scheme of works and therefore a conclusion of no Likely Significant Effect has been made.</p>	o
<p>Policy SS2 – Development in rural settlements</p> <p>The inferred small scale of the development detailed in this policy within rural settlements across the district is not expected to have any impacts on the Somerset Levels and Moors International Sites. Therefore our analysis concludes no Likely Significant Effect.</p>	o
<p>Policy SS3 – District-wide housing provision – new policy</p> <p>Policy SS3 makes provision for the development of new dwellings commensurate with the requirements laid out within the South Somerset District plan. The plan period runs from April 2006 to March 2026 and includes the delivery of approximately 16,600 dwellings. 8,200 dwellings are to be located in Yeovil, with 8,400 located in market towns and rural centres elsewhere within the district. There is potential for Likely Significant Effect arising from this policy, due to the large number of new residents who will be living in the district, and the potential for knock-on impacts in terms of visitor disturbance to designated sites.</p>	-

<p>Policy SS4 – Delivering new housing growth (previously policy HG1 – no material change)</p> <p>A substantial development of new homes, of which 8,200 will be located in and around Yeovil (this <u>includes</u> those specified in Policy YV2) are amongst those specified in this policy which details where the new homes being delivered under policy SS3 will be located. It is important to highlight that there is considerable overlap between policies SS3 and SS4. Therefore the significant increase in population associated with these developments up to 2026 may result in a Likely Significant Effect upon the designated sites primarily through increased visitation and recreational disturbance from a growing population. Water quality issues may also arise due to increased effluent treatment and outflow.</p>	-
<p>Policy SS5 – Delivering new employment land (previously policy EP1 – downward revision of total land area to be developed by 20 hectares)</p> <p>Whilst the majority of these sites are located upstream of the Somerset Levels and Moors designated sites, the scale of proposed developments and their distances from the designated sites, means it is unlikely that an LSE will arise as a result of this policy's implementation. 1.5ha of land is proposed for development at Langport or Huish Episcopi, immediately adjacent to the Levels and Moors. However, at 1.5ha in total, no Likely Significant Effect is anticipated.</p>	o
<p>Policy SS6 – Phasing & cumulative impact (previously policy SS3 – no material change)</p> <p>The policy specifies that any developments in the district must be commensurate with proposed infrastructure enhancements, i.e. the planned infrastructure must be appropriate to support the scale of any new development. New infrastructure will be secured through planning obligations, the majority of which will be focussed on the main urban settlements in the district. This policy will not have a Likely Significant Effect upon the International Sites.</p>	o
<p>Policy SS7 – Planning obligations (previously policy SS4 – no material change)</p> <p>Detailing the types of planning obligation that South Somerset District Council will require, this policy should lead to improvements in community infrastructure such as green spaces, facilitating enhancements to biodiversity and a reduction in CO₂ emissions. No Likely Significant Effect is expected, with positive impacts (though not directly upon the International Sites), as outlined above, having the potential to arise from its implementation.</p>	o
<p>Policy SS8 - Viability (previously policy SS5 – no material change)</p> <p>A conclusion of No Likely Significant Effect was made following analysis of this policy. The policy is guiding South Somerset District Council's approach to seeking developer contributions, depending upon the nature and scale of new developments.</p>	o

<p>Policy YV1 – Brownfield and Greenfield housing provision for Yeovil – new policy</p> <p>Policy YV1 details the site allocation of the total number of new dwellings proposed for Yeovil in terms of the number to be built on Brownfield sites and the number to be built on Greenfield sites. No Likely Significant Effect upon site integrity is expected to arise directly as a result of adopting of this policy.</p>	o
<p>Policy YV2 – Yeovil urban Extension (previously policy TV1 – housing figures revised downwards and preferred location for development specified)</p> <p>The Yeovil extension makes provision for 3,700 new dwellings, 23 hectares of new employment land and primary and secondary school provision to the south of the town (Keyford/Barwick area). Whilst being developed to an eco-town standard, the substantial increase in population that can be expected (circa 9,000), combined with Yeovil’s relative proximity to the designated sites (approximately 12 miles), means that there remains potential for Likely Significant Effect arising from this policy, primarily due to increasing visitor pressure and associated disturbance to designated features.</p>	-
<p>Policy YV3 – Yeovil urban village (previously policy TV2 – no material change)</p> <p>This is a small scale development in the centre of Yeovil to include around 400 new dwellings and additional retail and leisure provision. Given the relative small scale of the development, no Likely Significant Effect is expected.</p>	o
<p>Policy CV1 – Chard growth area (previously policy TV3 – no material change)</p> <p>Over 3,200 dwellings, of which around 2,200 will be delivered in the core strategy plan period up to 2026, new retail provision, leisure facilities and schools are proposed for Chard in this policy that has the potential for Likely Significant Effects through increased visitor and disturbance pressure and/or water quality impacts (as Chard is upstream of the designated sites on the River Isle). Chard is approximately 20 miles by road from the Somerset Levels and Moors.</p>	-
<p>Policy CV2 – Chard phasing (previously policy TV4 – no material change)</p> <p>This policy details the timescales within which the housing provision (as specified in policy SS3) will be delivered. Concerned with timescales rather than the actual development of new dwellings, we conclude that there is no Likely Significant Effect arising from this policy, subject to other provisions contained within the policy suite (e.g. Policy SS6).</p>	o

<p>Policy CV3 – Chard obligations (previously policy TV5 – no material change)</p> <p>There will be no Likely Significant Effect arising from the adoption or implementation of this policy as it deals with developer contributions for developments in the Chard area.</p>	○
<p>Policy CV4 – Modal shift for Chard (previously policy TA4 – no material change)</p> <p>Similar to policy TA1 and YV4 in its aims, this policy is specific to Chard. No Likely Significant Effect is anticipated arising from its implementation.</p>	○
<p>Policy HG1 – Strategic housing sites (previously policy HG2 – no material change)</p> <p>This policy details the safeguarding of a number of strategic sites for future residential development, but within the current plan period. With actual delivery of housing figures being covered by other dedicated policies, the safeguarding of the sites detailed in this policy for future development will result in no Likely Significant Effect.</p>	○
<p>Policy HG2 – Housing density (previously policy HG5 – no material change)</p> <p>Setting out the requirements for housing density for the developments specified in previous policies, no Likely Significant Effect is expected arising from the introduction of this policy.</p>	○
<p>Policy HG3 – Use of previously developed land for new housing development (previously policy HG6 – no material change)</p> <p>This policy details the Council's desire for no less than 30% of new dwellings to be sited on land that has previously been developed. There will be no Likely Significant Effect arising as a result of its implementation.</p>	○
<p>Policy HG4 – Provision of affordable housing (previously policy HG3 – no material change)</p> <p>Policy HG4 is designed to ensure that the appropriate provision is made for affordable homes throughout the district. No Likely Significant Effect is expected to arise resulting from its adoption or implementation, as the numbers of homes (i.e. an element that <i>does</i> have the potential for LSE) proposed are covered in preceding policies.</p>	○
<p>Policy HG5 – Achieving a mix of market housing (previously policy HG4 – no material change)</p> <p>This policy defines the required mix of housing types to be provided as part of the developments that have been detailed in policies SS4, CV2, YV2 and CV1. With development/construction of the homes covered under the policies above, the actual types of properties built will not result in any Likely Significant Effect upon the designated sites.</p>	○

<p>Policy HG6 – Gypsies, travellers and travelling showpeople (previously policy HG7 – policy strengthened and now specifies that <i>international</i> Sites will not be adversely impacted by developments)</p> <p>Policy HG6 aims to ensure that the accommodation of Gypsies and other travelling groups are provided in appropriate locations. We have concluded no Likely Significant Effect for this policy as the policy contains wording sufficient to ensure that the Levels and Moors nationally and internationally designated sites are safeguarded.</p>	○
<p>Policy HG7 – Replacement dwellings and extensions in the countryside (previously policy HG8 – no material change)</p> <p>This policy is concerned with replacing existing developments in rural areas and extensions to existing buildings. This infers very small scale, localised development from which no Likely Significant Effect is expected.</p>	○
<p>Policy HG8 – Housing for agricultural & related workers (previously policy HG9 with LSE – mitigation text incorporated)</p> <p>This policy will ensure that new accommodation provided for full-time workers in agriculture, forestry, horticulture, and related disciplines meets a range of South Somerset District Council requirements. Following revision of the original policy, it now specifies that developments will not be permitted that result in adverse impacts upon the integrity of internationally designated sites. It is therefore now possible to conclude that No Likely Significant Effect will arise as a result of this policy's adoption.</p>	○
<p>Policy HG9 – Removal of agricultural and other occupancy conditions (previously policy HG10 – no material change)</p> <p>Policy HG9 details how South Somerset District Council will ensure that permission to remove restrictive occupancy conditions (ensuring provision of homes to those people who are employed in agriculture, forestry or similar) will only be provided subject to a strict set of criteria. No Likely Significant Effect is anticipated.</p>	○
<p>Policy EP1 – Strategic employment sites (previously policy EP2 – no material change)</p> <p>Policy EP1 details the location of strategic employment sites throughout the district within the current plan period. Given that none of the sites specified are in close proximity to the designated site, no Likely Significant Effect is anticipated.</p>	○

<p>Policy EP2 – Office development (previously policy EP3 – no material change)</p> <p>Policy EP2 will ensure that new office developments are located appropriately, and specifically that they should be within existing town centres. Where this is not possible, other potential sites are detailed in order of preference with those near city centres having priority. Given that these developments are unlikely to be substantial in size, and that they will be located in, or in proximity to, town centres, no Likely Significant Effect is concluded (particularly given additional protection afforded by policies such as EQ3).</p>	○
<p>Policy EP3 – Safeguarding employment land (previously policy EP4 – no material change)</p> <p>This policy details how the District Council intend to safeguard land for employment. This is primarily focused on previously used land with changes of use not being permitted unless the proposal delivers environmental enhancement or improvements. No Likely Significant Effects are anticipated.</p>	○
<p>Policy EP4 – Conversion or re-use of buildings in the countryside (previously policy EP5 – no material change)</p> <p>This policy will not result in a Likely Significant Effect on the designated sites – the nature of works associated with this policy will be small scale and highly localised. The policy includes wording specifying that consideration is necessary for wildlife and habitats, particularly internationally designated sites and Sites of Special Scientific Interest.</p>	○
<p>Policy EP5 – New build live/work units (previously policy EP6 – no material change)</p> <p>No Likely Significant Effect is expected to arise from the adoption of this policy.</p>	○
<p>Policy EP6 – Expansion of existing businesses in the countryside (previously policy EP7 – policy strengthened)</p> <p>This policy concerns the expansion of existing businesses in rural areas. It specifies that there is to be ‘no impact on the countryside with regard to scale, character and appearance of new buildings...’. No Likely Significant Impact is anticipated given the small and localised nature of the works, and the inclusion of text specifying that developments cannot result in adverse impacts upon sites designated at a national or international level.</p>	○

<p>Policy EP7 – New tourism proposals – new policy</p> <p>This policy outlines guidance for new tourism proposals within the district. Following assessment of the policy, it has been determined that No Likely Significant Effect will arise from the adoption of this policy. The policy states that new tourism proposals must not harm the district’s environmental assets, or compromise the national directive for the protection of the countryside. <i>However, we recommend that this policy could be further strengthened to make specific reference to internationally designated sites.</i></p>	○
<p>Policy EP8 – Major new tourist facilities – new policy</p> <p>No Likely Significant Effect is anticipated. The policy sets out guidelines for assessing larger scale tourist developments against sustainable development objectives. The policy in itself will not result in new developments; rather it is setting out guidance for new developments under Policy EP7.</p>	○
<p>Policy EP9 – Farm diversification (previously policy EP8 with LSE – policy strengthened)</p> <p>The wording of this policy specifies that developments will not be permitted if adverse impacts on internationally designated sites arise. Therefore our assessment can now determine No Likely Significant Effect.</p>	○
<p>Policy EP10 – Retail hierarchy (previously policy EP9 – no material change)</p> <p>This policy concerns the Council’s aspirations for retail facilities provided in town centres; no Likely Significant Effect is anticipated.</p>	○
<p>Policy EP11 – Presumption against major new regional shopping facilities (previously policy EP10 – no material change)</p> <p>This policy states that new ‘major’ shopping facilities will not be permitted within the district other than in Yeovil town centre. No Likely Significant Effect is expected to arise from the policy’s introduction.</p>	○
<p>Policy EP12 – Retail vitality and viability (previously policy EP11 – no material change)</p> <p>This policy is again focused on town centres and will not have a Likely Significant Effect on the designated sites.</p>	○
<p>Policy EP13 – Protection of retail frontages (previously policy EP12 – no material change)</p> <p>Outlining the importance of retail units in defined shopping frontages not being transferred to non-retail use, no Likely Significant Effect upon the designated sites is anticipated from the introduction/adoption of this policy.</p>	○
<p>Policy EP14 – Comparison floorspace in Yeovil (previously policy EP13 – no material change)</p> <p>This policy guides the net increase in floorspace arising from new goods retail developments guided under separate policies. No Likely Significant Effect is anticipated.</p>	○

<p>Policy EP15 – District & local centres (previously policy EP14 – no material change)</p> <p>Ensuring that the proposed developments within Chard and Yeovil are in scale and keeping with the towns, this policy is not expected to result in a Likely Significant Effect.</p>	○
<p>Policy EP16 – Protection & provision of local shops, community facilities and services (previously policy EP15 – no material change)</p> <p>This policy is designed to ensure that key local shops and facilities of importance to surrounding communities are maintained and not adversely impacted by proposed developments. No Likely Significant Effect upon the designated sites is anticipated.</p>	○
<p>Policy TA1 – Low carbon travel (previously named ‘Generic district-wide modal shift’ - no material change)</p> <p>This policy covers the ways in which South Somerset District Council intend to enable modal shift; i.e. reducing the numbers of drive-alone vehicles and enabling wider uptake of alternatives such as walking, cycling, public transport use and car sharing. The policy should bring about benefits through a reduction in traffic and associated emissions of greenhouse gases, and may lead to people travelling to the sites by alternative modes of transport. Our analysis concluded that the policy will have no Likely Significant Effect on the designated sites.</p>	○
<p>Policy TA2 – Travel plans (previously policy TA5 – no material change)</p> <p>Policy TA2 details the requirement for all development sites to provide travel plans to minimise traffic generation arising from the development and enabling modal shift to alternatives such as car sharing, public transport and cycling. No Likely Significant Effect is anticipated.</p>	○
<p>Policy TA3 – Transport impact of new development (previously policy TA6 – no material change)</p> <p>Focusing on limiting the impacts arising from increasing road traffic at new developments and maximising the opportunities for more sustainable modes of transport, this policy is not anticipated to have a Likely Significant Effect upon the designated sites.</p>	○
<p>Policy TA4 – Parking standards (previously policy TA7 – no change)</p> <p>This policy, which specifies the parking standards for new developments (residential and commercial), is not anticipated to have any impact upon the designated sites. Therefore, no Likely Significant Effect is concluded.</p>	○

<p>Policy YV4 – Modal shift for Yeovil (previously policy TA2 – no material change)</p> <p>Similar to policy TA1 in its aims, this policy is specific to Yeovil and outlines District Council plans for reducing the level of single-occupancy vehicles and enabling wider uptake of more sustainable alternatives such as walking, car-sharing and cycling. Minimum standards for new developments are included to indicate what will be expected as a minimum; i.e. provision of bus shelters and cycling infrastructure. Expected to bring about beneficial impacts in the local area (i.e. in terms of noise reduction, road safety, emissions reduction and an improvement in quality of life), No Likely Significant Effect upon the Levels and Moors is anticipated arising from its implementation.</p>	○
<p>Policy YV5 – Modal shift for Yeovil eco-town (previously policy TA3 – no material change)</p> <p>Similar to policy TA1 and YV4 in its aims, this policy is specific to the proposed Eco-town development on the edge of Yeovil. No Likely Significant Effect is anticipated arising from its implementation.</p>	○
<p>Policy HW1 – Provision of open space and outdoor playing space in new developments – (previously policy HW3 - no material change)</p> <p>Policy HW1 is designed to ensure that new developments provide a satisfactory level of playing and amenity space – it is not anticipated that the policy will result in a Likely Significant Effect on the designated sites.</p> <p>Furthermore, providing green spaces for recreational purposes may lead to benefits for the designated sites as people may feel that have sufficient green space locally, or in the vicinity of their homes, and therefore may not need to travel to the Somerset Levels and Moors for recreation.</p>	+
<p>Policy HW2 – Provision of sports and recreational facilities in new development (previously named ‘indoor sports provision’)</p> <p>Ensuring that the provision of indoor sporting facilities across South Somerset District is satisfactory, there will be no Likely Significant Effect arising from this policy. New developments will be assessed against the number of people who will live there on completion, with contributions made by developers accordingly to ensure adequate sporting facilities are available.</p>	○
<p>Policy HW3 – Sports zone (new policy)</p> <p>Policy HW3 sets out the provision for a new Sports Zone of approximately 1.5ha in size in Yeovil. This facility will increase the opportunities available to all members of the community in terms of indoor leisure and the promotion of healthy lifestyles. No Likely Significant Effect upon the Somerset Levels and Moors is anticipated as a result of the introduction of this policy.</p>	○
<p>Policy HW4 – Protection of play spaces & youth provision</p> <p>Ensuring that there will be no loss in formal play areas, this policy is not expected to result in a Likely Significant Effect.</p>	○

<p>Policy EQ1 – Addressing climate change in South Somerset – (previously LSE – mitigation text now included)</p> <p>This policy is designed to address climate change in South Somerset and the introduction of renewable sources of energy features in it. Whilst policies which address climate change are designed to result in an environmental ‘good’, an adverse impact to bird species/designated sites may arise where emissions reductions and renewable energy plans result in wind turbine developments. This policy now specifies that developers cannot proceed with plans for wind turbines if they will pose a risk to migratory birds and/or birds using key sites such as the Somerset Levels and Moors. On the basis of this, it is now possible to determine that policy EQ1 will not result in any significant effects upon the designated sites.</p>	○
<p>Policy EQ2 – Design</p> <p>This policy is designed to ensure that the design of new developments contributes to the character and distinctiveness of the district. It specifies that developers must not risk the integrity of locally, nationally or internationally designated sites. No Likely Significant Effect is anticipated.</p>	○
<p>Policy EQ3 – Biodiversity</p> <p>This policy is designed to ensure that all new developments take full account of the potential impacts upon biodiversity and limit them wherever possible. It is not expected to result in Likely Significant Effect upon the designated sites.</p>	○
<p>Policy EQ4 – Green Infrastructure – new policy</p> <p>This policy outlines how South Somerset District Council will promote the provision of green infrastructure throughout the district. This will occur through enhancement of existing areas including open space, woodland and river corridors as well as through ensuring new developments provide sufficient quality and quantity of open space. Through the development of a network of green infrastructure, there is the potential for beneficial impacts upon the designated sites as people may have more opportunities for recreation locally, rather than travelling sites such as the Somerset Levels and Moors. Local biodiversity benefits can also be expected. It is not anticipated that the policy will result in a Likely Significant Effect on the designated sites.</p>	+
<p>Policy EQ5 – Woodlands and Forests – new policy</p> <p>Policy EQ5 is designed to ensure that woodlands and forests are protected and enhanced throughout the district. Ancient trees should also be protected and conserved. Levels of woodland should not fall below the 2005 figure. There is no Likely Significant Effect anticipated as a result of the introduction of this policy.</p>	○

<p>Policy EQ6 – Air Quality – new policy</p> <p>Policy EQ6 is designed to ensure that air quality standards are not compromised by new developments. The policy also states that increased traffic levels arising due from new developments that may have adverse impacts on internationally designated sites, must have suitable mitigation measures in place. No Likely Significant Effect is expected to arise as a result of this policy’s adoption.</p>	○
<p>Policy EQ7 – Equine development (previously policy EQ4 – LSE; policy strengthened)</p> <p>This policy will apply principally to rural areas and therefore potentially to sites in proximity to the Levels and Moors designated sites. To address the potential for adverse impacts arising from equine developments within the district, the policy specifically states that developments will only be permitted where it can be demonstrated that there will be no adverse impacts upon internationally designated sites. The policy is therefore assessed as having no likely significant effect upon site integrity.</p>	○

4.4 Summary

Completion of the assessment concluded that there were four policies within the final policy suite where there remains at least the potential for a significant effect on the Somerset Levels and Moors. These policies are:

- Policy SS3 District-wide housing provision;
- Policy SS4 Delivering new housing growth;
- Policy YV2 Yeovil urban extension; and
- Policy CV1 Chard growth area.

The revision of policies in the draft Core Strategy incorporating preferred options, undertaken following the draft HRA, implemented recommendations in the HRA such that the assessment of likely significant effect has altered. A summary of the changes affecting policies that were deemed to have the potential for LSE in the draft report is shown in **Table 4.2**:

Table 4.2 Summary of Policies where LSE was Determined in the Draft and Final HRA

Draft Report LSE Policy Number & Name	Final report Policy Number & Name	Detailed assessment in final HRA?	Comments
	Policy SS3 District-wide housing provision (new policy)	Yes	Refer to Sections 5 and 6
Policy TV1 Yeovil urban extension	Now policy YV2 Yeovil urban extension	Yes	
Policy TV3 Chard growth area	Now policy CV1 Chard growth area	Yes	
Policy HG1 Delivering new housing growth	Now policy SS4 Delivering new housing growth	Yes	
Policy HG9 Housing for agricultural and related workers	Now policy HG8 Housing for agricultural and related workers	No	Mitigation text now included, no LSE anticipated
Policy EP8 Farm diversification	Now policy EP9 Farm diversification	No	
Policy EQ1 Addressing climate change in South Somerset	Policy EQ1 Addressing climate change in South Somerset	No	
Policy EQ4 Equine Development	Policy EQ4 Equine Development	No	

These policies were all deemed to have the potential for adverse impacts through one or more of the following impact mechanisms:

- 1) Increased recreational disturbance;
- 2) Increase water quality impacts; and
- 3) Impact of large scale renewable energy projects.

Impacts (1) and (2) were highlighted in the Stage 1 report and draft HRA, and still require consideration at this stage. These impacts are considered in more detail in **Section 5**. Impact (3) was identified in the draft HRA as an additional potential impact owing to Policy EQ1 including renewable energy projects. Although the final suite contains an amended version of this policy, mitigating the potential for significant or adverse effect, discussion of the issue remains incorporated below to inform implementation of the policy. No further impacts were identified through the course of this assessment. **Appendix B** highlights which of the impacts identified could arise as a result of the adoption or introduction of each of the four policies.

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5 IMPACTS ASSOCIATED WITH POLICIES

In this section, the impacts highlighted in **Section 4.4** are considered in more detail. The main objective is to establish whether or not the policies identified as having a likely or potentially significant effect could actually result in adverse impacts upon site integrity. The determination of policy impact (the Appropriate Assessment) is considered in **Section 6**.

The section is structured such that it addresses each impact in turn, as appropriate considering the combined impacts of a number of policies. Issues concerning birds and habitat disturbance have been combined into one section, recreational disturbance, as in this case the issues considered are very similar and this approach avoids any duplication of information.

5.1 Recreational Disturbance

The Somerset Levels and Moors is an internationally designated site owing to the presence of a number of migratory and overwintering bird species. Both the Ramsar and SPA citations identify individual bird species, and the assemblages of over-wintering bird species, as justification for the sites' status. Policies which have a direct impact on the number of people using these areas for recreation have the potential to cause disturbance to those bird species, and therefore to degrade the quality of the interest features of the sites. In the context of the Habitats Directive, according to the precautionary principle, and to support bird assemblages within a dynamic mosaic of habitat types, it has been broadly considered that all habitats support the cited species of both Ramsar and SPA designations in some way. Therefore policies which result in an increase in housing or promote and/or encourage tourism in the district have the potential to cause disturbance to these species, if suitable mitigation measures are not built into the policy. Within the final policy suite, adoption of policies SS3 (District-wide housing provision), SS4 (Delivering new housing growth), YV2 (Yeovil urban extension) and CV1 (Chard growth area) could still result in adverse impacts from recreational disturbance.

5.1.1 Existing pressure – bird disturbance

A survey of bird disturbance at Moorlinch SSSI, one of the sites which comprise the Somerset Levels and Moors, was undertaken in 2001. The survey focused on waterfowl species using a wet area of the site. It found that the people using the pathways or drives throughout the site had a low level impact on bird species (Chown, 2002). The majority of wildfowl species observed during the survey were present in the inaccessible areas of the SSSI and this was thought to be partly due to the lack of suitable habitat in proximity to paths (Chown, 2002).

As highlighted in **Section 3**, the Somerset Levels and Moors is an extremely important site for a number of bird species. The Site's designation under the Ramsar convention and as an SPA reflect this. Nationally significant numbers of Bewick's swan, teal, golden plover and lapwing assemble over the winter months, with mute swan *Cygnus olor*, wigeon *Anas penelope*, pintail *Anas acuta* and shoveler *Anas clypeata* also resident during the winter although not currently designated. King's Sedge Moor is of significant importance to breeding waders including redshank *Tringa totanus* and curlew *Numenius arquata*.

Natural England considers that recreational disturbance is at a low level throughout the Somerset Levels and Moors designated area. Visitor numbers across the site are unknown due to its size, however it is estimated that Shapwick Heath, which is also an RSPB reserve, receives 7,500 visitors each year. Visitor numbers to the Somerset Levels and Moors appear to be restricted by the location and size of the car parks around the area. Both the SPA and Ramsar designations cite overwintering bird species as a key attribute of the designation. Recreational disturbance is largely a seasonal issue, with visitors not associated with bird watching likely to only represent a pressure at times when the site is not ‘housing’ many of the features for which it is designated; i.e. in the summer months.

5.1.2 Site visitor surveys – Somerset Levels and Moors

Between January and February 2010, visitor surveys were undertaken at various locations across the Somerset Levels and Moors (both in South Somerset District and Sedgemoor District). The aim of the surveys was to identify the reasons for visiting the site and to establish how far people were travelling. The sites picked for survey were the main car parks and/or access points to the International Sites. Additional information which recorded the time of the visit, the weather and the number of adults and dogs, was also collated. The surveys were undertaken at the main car parks located throughout the sites or at the access points onto the sites. The number of people recorded visiting each site is illustrated in **Table 5.1**.

Table 5.1 Visitor numbers at the various Somerset Levels and Moors sites. The surveys were undertaken in early January and late February. Highlighted rows indicate those survey sites considered within this HRA

Site	Number of people visiting the site	Survey dates
Gold Corner	4	03/01/10 & 21/02/10
Peat Moors	159	03/01/10 & 21/02/10
Ashcott Corner	203	02/01/10 & 21/02/10
West Hay Moor	84	02/01/10 & 21/02/10
Beer Wall	20	02/01/10 & 20/02/10
Greylake Bridge	67	02/01/10 & 20/02/10
New Bridge	58	02/01/10 & 20/02/10
Burrow Mump	54	02/01/10 & 20/02/10
Ablake Clyce	27	03/01/10 & 21/02/10

Figure 5.1 illustrates the responses given when visitors were asked why they were visiting the Somerset Levels and Moors. The results are based upon surveys taken at a number of different sites, as identified in **Table 5.1**. The single category with the most respondents was for people visiting to watch birds; 125 out of 332 visitors questioned. Walking was also identified as a popular reason for visiting. The range of activities covered by ‘other’ includes climbing, photography, fishing, jogging, and observing other wildlife.

Figure 5.1 Key Visitor Activities on the Somerset Levels and Moors Designated Site - combined results from all sites surveyed

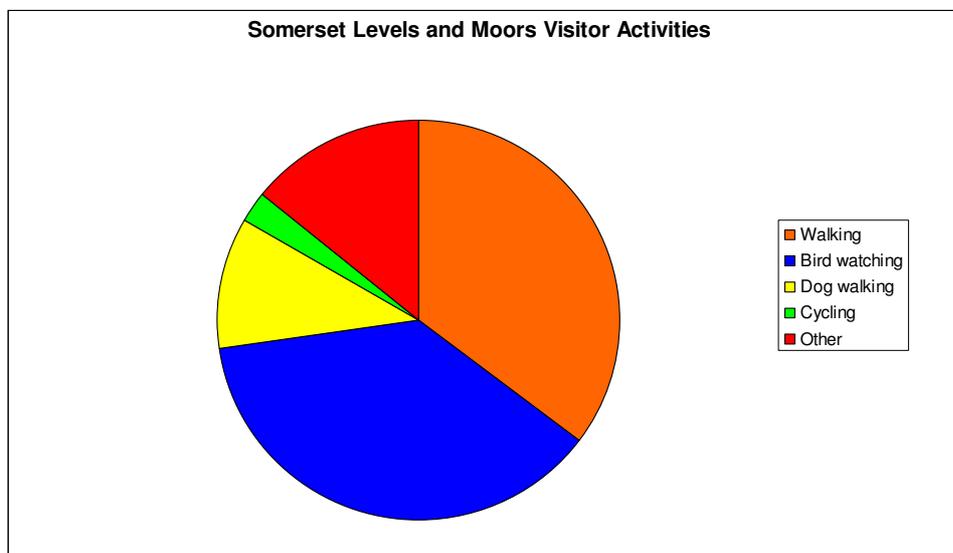
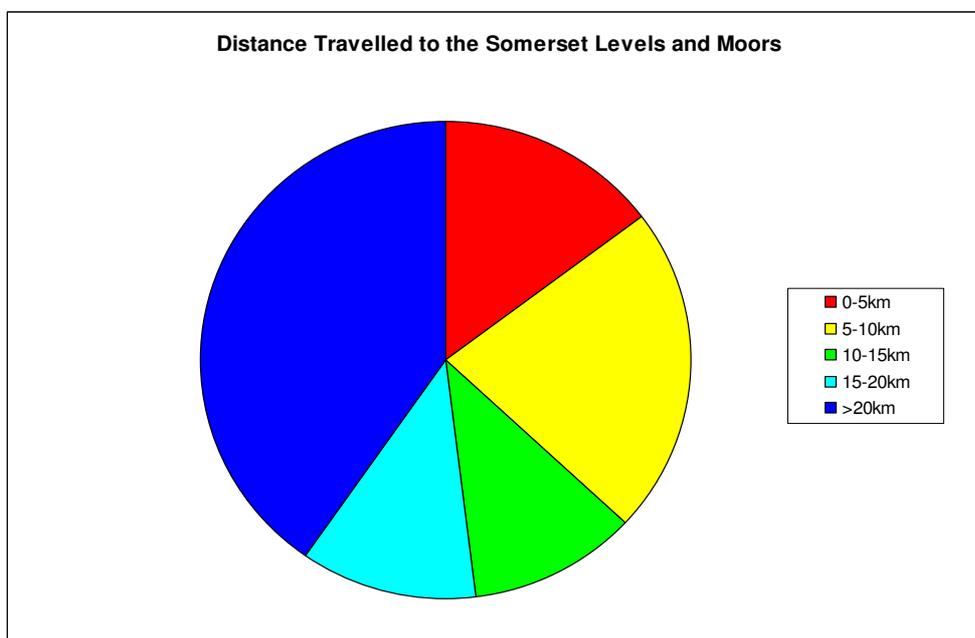


Figure 5.2 illustrates the distances travelled by visitors to the Somerset Levels and Moors designated sites.

Figure 5.2 Distances travelled by visitors



The responses showed that, on average, 40% of visitors had travelled a distance of more than 20km whilst 22% of visitors had travelled between 5km and 10km each way. Visitors travelling shorter distances are likely to be doing so for walking, particularly dog walking, and recreation whilst those travelling further are more likely to be doing so specifically to pursue ornithological interests.

The Somerset Levels and Moors are used predominantly by bird watchers and walkers. Bird watching was the most popular activity as recorded by surveys at Ashcott Corner and Greylake Bridge. Ashcott Corner is a well-known site for the significant flocks of starlings which gather there, and as a result draws in visitors from all across the UK. This is reflected in the long distances travelled by the notable proportion of people visiting the site.

The distances travelled to the Somerset Levels and Moors varied for each of the individual sites surveyed, although a pattern (perhaps to be expected) that emerged showed that people travelling for recreation (walking and, to a lesser extent, dog walking) travelled smaller distances (i.e. the Levels and Moors are a convenient local site for walking and dog walking) than those visiting specifically to watch birds.

5.1.3 Results of visitor surveys for individual sites

Figures 5.3 and **5.4** illustrate the reasons those surveyed gave for visiting the individual Somerset Levels and Moors sites and how far they had travelled to get there, respectively. Visitors were interviewed on various days between December 2009 and February 2010 at different locations. Pie charts show the break down of results for each individual site identified. The size of the pie charts provides a relative indication of the total number of visitors to each site.

Figure 5.3 Results of visitor surveys – why do people visit the Somerset Levels and Moors? Map centred on NW South Somerset to include the extent of the Somerset Levels and Moors designated sites.

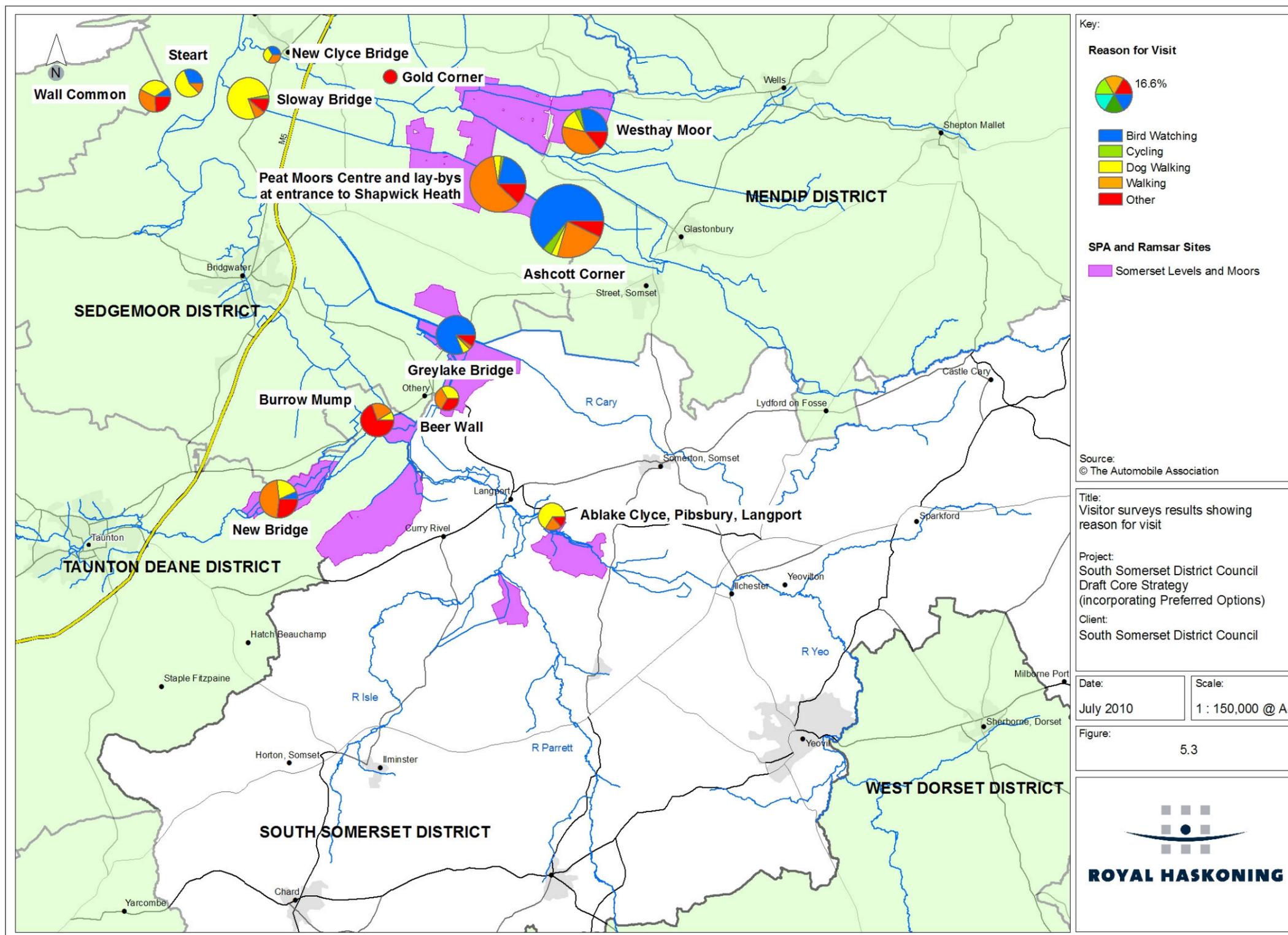
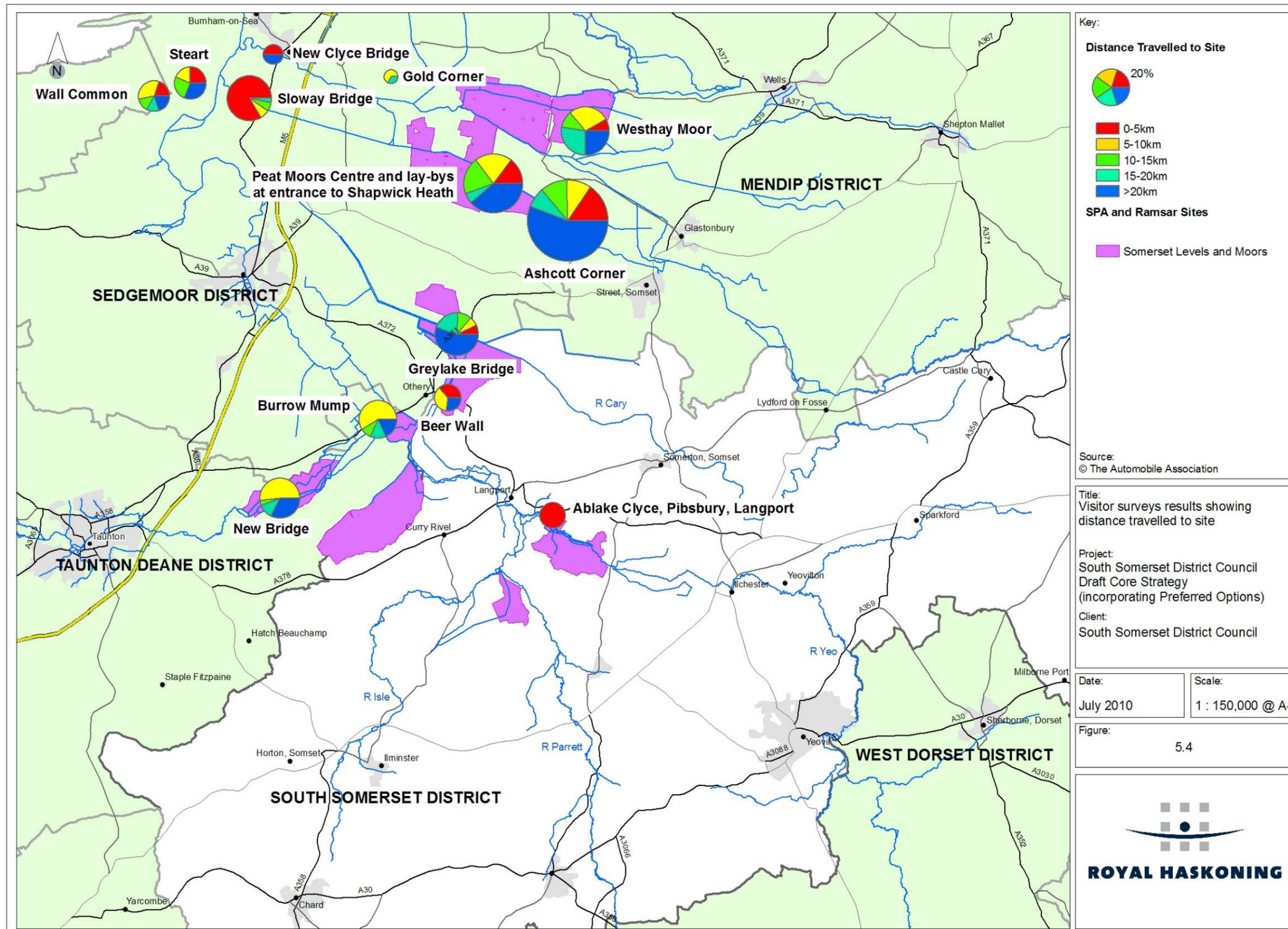


Figure 5.4 Results of visitor surveys showing the distance travelled by visitors to the sites. Again, the map is centred on NW South Somerset to include the extent of the Somerset Levels and Moors designated sites.



5.2 Reduced Water Quality and Impacts upon Invertebrate Species

5.2.1 Invertebrates and water quality in the Somerset Levels and Moors

Pollution poses a significant threat to biodiversity in both flowing and standing waters in the UK. Throughout English lowlands, an extensive problem is over-enrichment of water with plant nutrients including nitrogen and phosphorus (eutrophication), from both diffuse and point sources.

Being a sizeable area of lowland wetland, the Somerset Levels and Moors are sensitive to reductions in water quality. The floodplains of the Rivers Axe, Brue, Parrett and Tone make up much of the site. A large network of ditches (also known as rhynes), drains and rivers run through the area. Within this network of waterways is an extensive assemblage of aquatic invertebrates, particularly beetles. Of the invertebrate species found, 17 are featured in the British Red Data Book (BRDB), and are a qualifying feature of the site's Ramsar designation (the BRDBs, published by the Joint Nature Conservation Committee, are lists of species whose continued existence is deemed threatened). **Table 5.2** shows the BRDB invertebrate species that are found within the Somerset Levels and Moors. For the purposes of this assessment, and without definitive information otherwise, it is presumed that all species are found at all sites unless the text below states otherwise.

Table 5.2 Invertebrate species of conservation importance as designated in the Ramsar citation and also appearing in the BRDB, that are known to be present within the Somerset Levels and Moors.

SPECIES		Distribution or abundance in SLM	Habitat
Common name	Latin name		
Diving beetle	<i>Hydaticus transversalis</i>	Widespread and frequent though nationally rare.	Ditches
Great diving beetle	<i>Dytiscus dimidiatus</i>	Local	Ditches
Lesser silver diving beetle	<i>Hydrocaris caraboides</i>	Restricted to peat moors	Well vegetated ditches overlying peat
Great silver diving beetle	<i>Hydrophilus piceus</i>	Widespread in Somerset but mainly on the peat moors	Ditches overlying peat with much vegetation
Water Beetle	<i>Limnebius aluta</i>	Very local	Ditches overlying peat and ponds
Soldier beetle	<i>Cantharis fusca</i>	Widespread in damp meadows.	Fens, wet woodland. River and field margins
Weevil	<i>Bagous nodulosus</i>	Confined as a British species to Somerset. Little known about its distribution	Submerged vegetation in ditches
Leaf beetle	<i>Oulema erichsoni</i>	Very local, only on the peat moors. Somerset has the only known extant population in Britain	Fens or peat moors including recently worked out peat pits
Rove beetle	<i>Paederus caligatus</i>	Very local	Damp mud by freshwater
Diving beetle	<i>Laccornis oblongus</i>	Very local and scarce on the Moors	Densely vegetated peaty ditches

SPECIES		Distribution or abundance in SLM	Habitat
Common name	Latin name		
Soldier fly	<i>Odontomyia angulata</i>	Restricted to three sites on the Moors. Recorded late 1940s, early 1950s	Fens and shallow ponds
	<i>Odontomyia ornata</i>	Regular and locally frequent	Ditches on peat with floating cover and rich submergent vegetation
Hoverfly	<i>Lejops vittata</i>	Locally frequent	Brackish ditches. Associated with <i>Scirpus maritimus</i>
Marsh fly	<i>Pteromicra leucopeza</i>	One certain locality, Westhay Moor	Wetlands. Ponds and swamps with dense shading
Freshwater mussel	<i>Valvata macrostoma</i>	Relatively common on the North Somerset Levels.	Ditches
Large marsh grasshopper	<i>Stethophyma grossum</i>	Very rare and localised. May be extinct	Fens, rhyne and ditch banks

Table 5.3 is a summary of water quality data taken at a number of sites within, in proximity to, or along watercourses which pass through, the Levels and Moors. Biological quality of the watercourses in the majority of cases is good, although nitrate and particularly phosphate levels are in most cases high. Excess levels of nitrate can result in algal growth and ultimately lead to eutrophication of a watercourse.

Table 5.3 Water quality data for seven locations in and around the Somerset Levels and Moors. Data provided by the Environment Agency (Letters A-F indicate 'very good' to 'very bad' and 1-6 indicate 'very low levels' to 'very high levels'. The locations 1-7 are marked in **Figure 3.1**).

Location	River/ Watercourse	Chemistry	Biology	Nitrates	Phosphates
1 - Henley	Cary	C	B	5	5
2 - Somerton Randle	Cary	C	B	5	5
3 - West of Langport	Parrett	C	A	4	5
4 - Langport	Parrett	C	A	4	5
5 - Northover, Little Load	Yeo	B	B	4	5
6 - West of Martock	Lam Brook	C	C	6	6
7 - South-east of Fivehead	Fivehead	C	A	3	4

Below is a detailed consideration of the current site condition for the four component SSSIs that make up the internationally-designated sites being considered within this assessment.

Wet Moor

The component SSSIs that make up the Somerset Levels and Moors are themselves subdivided into units which allow individual assessments of each of these units, in terms of the condition of that area and other factors. Wet Moor SSSI was shown to be in an overall favourable condition following the most recent site assessment (all by Natural England) in 2009, see **Table 5.4**:

Table 5.4 Condition summary for units at Wet Moor, Somerset Levels and Moors

Favourable	42%
Favourable recovering	39%
Unfavourable no change	19%
Unfavourable declining	0%

The site is primarily comprised of lowland grazing grassland and an extensive network of ditch habitats. The site lies largely to the south of the River Yeo. The ditches and banksides support a diverse invertebrate community including the Hairy Dragonfly *Brachytron pratense*, the Variable Damselfly *Coenagrion pulchellum* and the rare water beetle *Hydrophilus piceus* (Ramsar qualifying species and British Red Data Book species). Several other notable water beetles and the terrestrial beetles *Donacia dentata* and *Anisosticta 19-punctata* have also been found.

The current 'unfavourable' classification has arisen due largely to inappropriate water level management and water pollution due to drainage, and fertiliser run-off, neither of which are related to, or are expected to be impacted by, the policies assessed in this report.

Wet Moor is situated on the River Yeo downstream of Yeovil, where the most extensive development is expected under the draft Core Strategy incorporating preferred options. Downstream of Yeovilton, Yeovil and Ilchester, any excessive discharges arising from proposed new developments in Yeovil could adversely impact this site, primarily as Yeovil has the largest allocation of new homes in the district.

King's Sedge Moor

Most recently assessed, in June 2010, King's Sedge Moor – comprised largely of wet grassland, and sitting on the southern bank of the River Cary - is in 'unfavourable' condition overall, see **Table 5.5** below. The reason for the largely unfavourable condition of the site is attributed to the presence of pollutants in the form of fertiliser run-off and from other agricultural practices. Furthermore, water level management appears to be contributing to the level in many ditches being too low. Most of the ditches within King's Sedge Moor are subject to water level control.

Small field ditches and banksides, which feature on sites in the Levels and Moors such as King's Sedge Moor, feature rich invertebrate communities including rare soldier flies *Odontomyia ornata*, the hover fly *Lejops vittata* and water beetle *Hydrophilus piceus*.

Table 5.5 Condition summary for units at King's Sedge Moor, Somerset Levels and Moors

Favourable	27%
Favourable recovering	0%
Unfavourable no change	73%
Unfavourable declining	0%

King's Sedge Moor is downstream of Somerton. Somerton is allocated 219 new homes in the draft Core Strategy incorporating preferred options, from which future effluent will, post-treatment, flow into the River Cary. Castle Cary, in north-east Somerset, has 238 homes assigned although the sewage treatment works appears to flow into the River Cam initially, itself a tributary of the River Yeo.

West Moor

A rich invertebrate fauna, with a number of nationally and locally rare species is associated with the botanical diversity of the ditches in West Moor. This fauna includes the rare soldier fly *Odontomyia ornata* and the notable water beetle *Hydaticus transversalis*. West Moor is also the only known site in Somerset for the nationally rare weevil *Bagous nodulosus*.

Most recently assessed in March 2009, West Moor is deemed to be in a favourable condition almost in its entirety (see **Table 5.6**). It is located at the confluence of the Rivers Isle and Parrett, and is downstream of proposed developments at Martock (96 homes) by 3km, South Petherton (145 homes) by 4km, Ilminster (191 homes) by 16km and Chard (1,863 homes) by 24km (all downstream distances approximate).

Table 5.6 Condition summary for units at West Moor, Somerset Levels and Moors

Favourable	97%
Favourable recovering	3%
Unfavourable no change	0%
Unfavourable declining	0%

West Sedge Moor

West Sedge Moor comprises multiple small, low lying fields and meadows separated by narrow water-filled ditches. A rich invertebrate fauna is present including scarce water beetles and dragonflies. The site is located downstream of Langport on the River Parrett with the northern extremity of the site adjoining the river and the vast majority of the site extending away from the river to the south-west.

Almost all of the component SSSI units are in a favourable condition, with only one assessed as 'unfavourable, no change' – see **Table 5.7**. The site lies downstream of Ilchester, Yeovil, Crewkerne, South Petherton, Martock, Chard and Ilminster.

Table 5.7 Condition summary for units at West Sedge Moor, Somerset Levels and Moors

Favourable	99%
Favourable recovering	0%
Unfavourable no change	1%
Unfavourable declining	0%

South Lake Moor

South Lake Moor lies alongside and to the west of the River Parrett between West Sedge Moor and King's Sedge Moor. It comprises lowland grazing marsh and grassland and can be deliberately flooded if necessary during winter by means of sluice on the bank of the Parrett. A notable number of aquatic and bankside vascular plant species have been found at the site. Winter flooding of the moor can result in significant numbers of wildfowl visiting the site including species for which the Somerset Levels and Moors are designated.

Table 5.8 Condition summary for units at South Lake Moor, Somerset Levels and Moors

Favourable	99%
Favourable recovering	0%
Unfavourable no change	1%
Unfavourable declining	0%

As with West Sedge Moor, South Lake Moor is in a favourable condition across almost its total extent, with a little under 1.5% of the total area deemed 'unfavourable no change'. The section deemed unfavourable is so designated due to water pollution and the run-off from agricultural practices.

In almost all cases, water level management has shown to be critical in maintaining integrity of many of the component SSSIs, and on initial investigation appears to be of greater importance/more of a threat to site integrity, than issues related to water quality.

5.2.2 Draft Core Strategy incorporating preferred options policies and water quality impacts

The large increase in residential developments in the District will clearly result in a greater throughput for the existing sewage treatment works (STWs). Consultation with Wessex Water has been undertaken concerning the predicted increase in flows expected to arise from these new developments. Wessex Water provided estimates on the future flow capacity of sewage treatment works (STWs) up to and including 2015, within South Somerset District (see **Appendix C**). The data indicated that there is sufficient capacity within all the STWs in the District to cope with the additional developments laid out within the draft Core Strategy incorporating preferred options; a reflection of those specified in the Regional Spatial Strategy (RSS). The abolition of the RSS in July 2010 has resulted in a downwards revision of these figures with 8,200 new dwellings (see Policy SS3) planned for the greater Yeovil area instead of the originally proposed 11,400. This should, therefore, lead to a greater 'margin' in the figures provided by Wessex Water, as the amount of material discharged from the STWs is less than originally expected.

Sewage treatment works have consents (agreed with regulatory authorities such as the Environment Agency) for the amount of water that they can discharge to watercourses. This is expressed in terms of percentage against the DWF or Dry Water Flow which is the minimum flow-rate expected for any particular watercourse; i.e. in high summer or following extended periods of little or no rainfall. Thus the consent given to water

treatment companies is against the DWF to ensure that even when river flow rates are low, the impact of effluent is kept below a specified threshold.

Wessex Water provided figures that showed the current effluent outflow rates from relevant STWs against their consented limits. It is important to stress that these figures show current outputs, and not future ones assuming the full suite of Core Strategy policies, and the housing targets therein, are delivered. However, Wessex Water also provided an assessment of the impacts of these new developments, and whether DWF consented limits would be at risk. Martock and Somerton STWs are close to their consented limits at 90% and 89% respectively. However, proposed development at these sites has been considered and is not expected to result in consented limits being exceeded.

Wessex Water does not expect that any of the STWs will exceed their consented output limits between 2010 and 2015. Whilst this does not reflect the plan period of the draft Core Strategy incorporating preferred options (up to 2026), it does take into account the full allocation of properties for each settlement. In addition, works undertaken on their facilities in the future would need to be compliant with the Habitats Regulations and Water Framework Directive targets set out within the River Basin Management Plan.

5.3 **Bird Disturbance and Impact upon Flyways of Developments and/or Renewable Energy Projects**

Although policy EQ1 now contains text specifically addressing the potential adverse impacts of renewable energy (specifically wind turbine) projects, relevant discussion from the draft HRA is retained here to inform implementation of the policy.

Two primary impacts upon birds arise due to wind farm or wind turbine developments. The first links to direct disturbance from the placing of a wind turbine in proximity to habitat used by birds. The second arises when the wind farms form a physical barrier to a route that would otherwise be taken by a bird travelling to a different site, to food or on migration. The effect of birds altering their migration flyways or local flight paths to avoid a wind farm is a form of displacement. This effect is an issue due to the possibility of increased energy expenditure when birds have to fly further and the potential disruption of linkages between distant feeding, roosting, moulting and breeding areas.

The effect that displacement has on birds depends on species, type of bird movement, flight height, distance to turbines, the layout and operational status of turbines, time of day and wind force and direction, and can be highly variable, ranging from a slight 'check' in flight direction, height or speed, through to significant diversions which may reduce the numbers of birds using areas beyond the wind farm.

Studies of bird movements in response to offshore developments have recorded wildfowl taking avoiding actions from a variety of distances, ranging from 100m and 3,000m from turbines (Christensen *et al.* 2004). However, such effects are not universal; for example, a study has shown that large numbers of birds regularly fly through a wind farm (Everaert *et al.* 2002).

Onshore, disturbance distances of up to 800m have been recorded for wintering waterfowl (Pedersen and Poulsen 1991). However, there is again variability in this distance as studies have shown white-fronted geese *Anser albifrons* within 600m of the

turbines at a wind farm and displacement of pink-footed geese *Anser brachyrhynchus* up to only 100m – 200m from turbines at a wind farm in Denmark (Drewit and Langston, 2006).

Large birds with poor manoeuvrability (such as swans and geese) are generally at greater risk of collision with structures (Brown et al. 1992) and species that habitually fly at dawn and dusk or at night are perhaps less likely to detect and avoid turbines (Larsen and Clausen 2002). Swans, geese, ducks and waders are all considered to be species sensitive to wind farms. Ducks and waders are sensitive to wind turbines as a barrier to movement (Langston and Pullan, 2003).

Birds that are already on migration, however, cannot avoid poor weather conditions, and will be more vulnerable if forced by low cloud to descend to a lower altitude or land. Strong headwinds also affect collision rates and migrating birds in particular tend to fly lower when flying into the wind (Richardson 2000).

A review of the literature by Drewit and Langston (2006) suggests that none of the barrier effects identified so far have significant impacts on populations. However, there are circumstances where the barrier effect might lead indirectly to population level impacts; for example where a wind farm effectively blocks a regularly used flight line between nesting and foraging areas, or where several wind farms interact cumulatively to create an extensive barrier which could lead to diversions of many tens of kilometres, thereby incurring increased energy costs.

Also, displacement may occur during both the construction and operational phases of wind farms, and may be caused by the presence of the turbines themselves through visual, noise and vibration impacts, or as a result of vehicle and personnel movements related to site maintenance.

Drewit and Langston (2006) recommend that where at all possible, developers should avoid areas supporting the following:

- a high density of wintering or migratory waterfowl and waders where important habitats might be affected by disturbance or where there is potential for significant collision mortality; and
- breeding, wintering or migrating populations of less abundant species, particularly those of conservation concern, which may be sensitive to increased mortality as a result of collision.

5.4 Summary

Having considered current impacts and available information, policies determined as having the potential for significant effect are considered in following section, which presents the Appropriate Assessment.

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6 THE APPROPRIATE ASSESSMENT

In this section, those policies that were identified in **Section 4** as having a Likely Significant Effect on the Somerset Levels and Moors are assessed in greater detail. This assessment is undertaken for the impact of the policy on its own; disregarding the impact other policies may have on outcomes arising from them. The assessment builds upon the information presented in **Section 5** to conclude whether a particular policy will have an adverse effect on site integrity.

6.1 Policy SS3 District-wide Housing Provision and Policy SS4 Delivering New Housing Growth

These two policies are dealt with collectively because the potential impact(s) that could arise as a result of their adoption are the same. Policy SS3 supports a high level strategy to deliver a total of 16,600 homes across South Somerset District, whereas policy SS4 details allocations for towns and smaller settlements across the district.

Policy SS3 will enable South Somerset District to deliver its housing allocation over the plan period April 2006 to March 2026 inclusive. A total of 8,400 dwellings will be made across market towns and rural centres, district wide, whilst an additional 8,200 dwellings are planned for Yeovil.

Policy SS4 sets the overall provision and framework for all new housing development across South Somerset District within the current plan period 2006-2026, including those set out in separate policies YV2 and CV1. This provision of new homes will be made through infilling and redevelopment within already developed areas, use of greenfield sites, conversions of existing buildings and development in other areas. The total allocation of new homes for the District stands at 16,600, with the vast majority of these, some 8,200, allocated for Yeovil and the immediate vicinity. This figure includes the allocation of new dwellings as part of the Yeovil Eco-town extension, as detailed in **Section 6.1**. The total allocation for Yeovil and its periphery will result in approximately 20,000 new residents (note that this is not in addition to those detailed in Policy YV2 (see **Section 6.2**)) for the town.

In addition, the allocation for other settlements is detailed in a settlement hierarchy with smaller towns such as Crewkerne, Ilminster and Wincanton being allocated 1028, 531 and 1053 dwellings respectively (these are total numbers of dwellings over the 20 year plan period). The settlements of Somerton, Castle Cary, Bruton, Ilchester, Langport, Martock, Milbourne Port, South Petherton and Stoke sub Hamdon are allocated homes on an individual basis, with a further 1199 homes for smaller rural settlements that are not specified within the policy.

In **Section 5.1**, the results of visitor surveys taken at the Somerset Levels and Moors are outlined. The survey results illustrated that a variety of activities were being undertaken, including dog walking and bird watching. A number of people visited parts of the Somerset Levels and Moors from outside the district specifically in the pursuance of ornithological interests. Whilst the site is a popular destination for local residents, consultation with Natural England (who are responsible for management of the Somerset Levels and Moors) revealed that levels of recreational disturbance throughout the site are currently low. This is due to the fact that large areas of the site are relatively inaccessible and that the vast majority of users stick to defined paths and walking

routes. Unless new residents in Yeovil and other larger settlements have a particular interest in visiting the Levels and Moors (i.e. due to ornithological interest), new residents are not expected to be visiting the site in any significant numbers. Additionally, bird species are not concentrated in areas where visitors tend to be due to a lack of suitable habitat. The number of new residents in South Somerset District is not expected to result in adverse impacts through increased recreational disturbance.

This large increase in residential development will put pressure on the current water treatment works in the District. During consultation, Wessex Water concluded that no exceedance of consented limits is expected from the additional housing capacity set out in the draft Core Strategy incorporating preferred options. The downward-revised housing figures following abolition of the Regional Spatial Strategy should increase the margin between effluent outflow and the maximum consented outflow increasing, with associated benefits to water quality in rivers throughout the district.

Therefore this analysis concludes that policies SS3 and SS4 will not result in an adverse impact on the integrity of the Somerset Levels and Moors SPA or Ramsar designated sites.

6.2 Policy YV2 Yeovil Urban Extension

Policy YV2 details the proposed Yeovil Urban Extension project. A total of 3,700 new dwellings are proposed as part of this development, as well as approximately 23 hectares of new employment land. Provision for secondary and primary schools is proposed. Additionally, new community and transport infrastructure is proposed. The extension will be built to an Eco-town standard as laid out in the Eco-town Planning Policy Statement (PPS). 3,800 new dwellings can be expected to contribute in the region of 9,000 new residents, a sizeable increase from the 41,871 (Yeovil urban district) recorded by the 2001 census. **Figure 3.1** shows the location of Yeovil relative to the Somerset Levels and Moors designated sites. The preferred location for the development is to the south of Yeovil in the Barwick and Keyford area.

This development will be taking place within the greater Yeovil urban area, and therefore is not in close proximity to the designated sites. However, the key issue with this policy concerns the additional number of people who will be living in the area, and the knock-on effect this could have as more people visit sites of interest (such as the Somerset Levels and Moors) throughout the District.

The numbers of new residents in South Somerset District is not expected to result in adverse impacts through increased recreational disturbance, for the same reasons as detailed in **Section 6.1**.

The development proposed under Policy YV2 is therefore not expected to result in adverse impacts upon the Somerset Levels and Moors in terms of recreational disturbance.

This increase in residential development will put pressure on the current water treatment works in the District. Yeovil lies upstream of the Levels and Moors on the River Yeo. Consultation has been undertaken with Wessex Water to reveal the predicted increases in flows arising from this proposed development. Wessex Water provided figures up to and including 2015 which concluded that they do not expect any of the sewage

treatment works to exceed their maximum permitted outflows over the 2010-2015 period.

It can be concluded that the implementation of this policy, both in terms of reduced water quality and an increase in recreational disturbance, will not result in adverse impacts on the integrity of the Somerset Levels and Moors SPA or Ramsar designated sites.

6.3 Policy CV1 Chard Growth Area

Policy CV1 facilitates the provision of new housing and associated development in the town of Chard in the south-western corner of South Somerset District. In the region of 3,200 homes are proposed plus 19 hectares of new employment land, two new primary schools as well as new community infrastructure. It is important to clarify that the policy details housing development beyond the current plan period (up to 2026) as well as within it. A breakdown of the figures presented in policy CV2 (Chard Phasing) reveals that just fewer than 2,200 new homes are proposed within the current plan period, and therefore it is these against which the Appropriate Assessment must be performed. This proposed development would lead to around 5,300 new residents for Chard and its periphery, a notable increase on top of the 11,727 residents recorded in Chard parish in the 2001 Census.

Chard is approximately 20 miles south of the Somerset Levels and Moors. As detailed in **Section 6.1**, recreational disturbance is not deemed to be a problem on the Somerset Levels and Moors. Walkers and dog walkers will continue to travel to the sites from relatively short distances away, and bird watchers will continue to travel from greater distances.

Wessex Water's assessment of the additional outflow for the Chard STW concluded that the Dry Water Flow will not be exceeded with the proposed development in and around the town (see **Appendix C**).

It is therefore possible to conclude that the introduction of Policy CV1 will not result in an adverse impact on the integrity of the Somerset Levels and Moors SPA or Ramsar designated sites.

6.4 Conclusions of the Alone Assessment

Following completion of the appropriate assessment it has been possible to conclude that adoption of the specified policies will not result in an adverse impact upon site integrity.

6.5 The draft Core Strategy incorporating preferred options – Assessment at the Plan Level

As discussed in **Section 4**, four policies were identified as having an alone potential adverse impact on the Somerset Levels and Moors and carried through to the alone assessment stage.

Completion of the Appropriate Assessment has enabled a conclusion of 'No Likely Significant Effect' to be made for the final policy suite. It is not anticipated that adoption of the policies reviewed will result in any adverse impacts upon site integrity for the Somerset Levels and Moors designated sites.

7 MITIGATION OF IMPACTS

Within the draft HRA, assessing the draft Core Strategy policies (incorporating preferred options), four policies were deemed to have the potential adverse effect on integrity as they were presented. Measures to mitigate those impacts were therefore suggested. This involved a combination of avoidance and reduction measures, and suggested amendments to policy text to enable a conclusion of either no LSE, or no adverse effect on integrity.

Typically, this involved the strengthening of the wording in the carried forward policies so that the policies specifically stated that associated development would not be permitted if the potential for adverse impacts upon Site integrity could not be ruled out. Where these could not be adopted, 'reduction measures' were suggested to limit or reduce the potential for adverse impacts. In all cases appropriate mitigation was incorporated into the final policy suite upon which this report is based. Thus the four policies in question were not progressed to the Appropriate Assessment stage this time around as there was no longer potential for Likely Significant Impact.

Within this final HRA of the consultation draft Core Strategy incorporating preferred options, it has been concluded that although four policies required detailed consideration (**Section 6**), none have the potential to result in adverse impacts upon the integrity of the Somerset Levels and Moors designated sites. Therefore, no mitigation measures are required.

8 IN-COMBINATION ASSESSMENT

As well as assessing the impacts of the policies within the draft Core Strategy incorporating preferred options individually, and at the plan level, as addressed in **Section 6**, it is important to consider the combined effects of the strategy with other plans and projects which could also affect the sites. *'Where an in-combination is necessary ... it is the plans and projects, which are likely to contribute to an increased likelihood or significance of the effects of the subject project that need to be combined'* (Tyldesley and Hoskin 2008: B.2.5). In the context of this assessment this includes relevant plans from neighbouring authorities.

Various plans and strategies were identified at the Stage 1 as having a potential compounding or interacting effect on possible threats to site integrity. In particular they are relevant where they relate to any increase in residential development or encourage increased visitation to International Sites. For the purposes of the assessing in-combination effects, other plans and strategies have been considered at face value, i.e. assuming no mitigation, prevention or avoidance has been applied.

The sections below provide the results of an assessment of other plans, and identify which areas have the potential to act in combination with the South Somerset District draft Core Strategy incorporating preferred options.

8.1 Other Plans and Strategies

Draft Regional Spatial Strategy for the South West – incorporating the Secretary of States Proposed Changes – for consultation 2008

This is the higher-level statutory development plan for the whole of the South-West region. It sets out the strategic scale and location of development to 2026. The Regional Spatial Strategy (RSS) outlines that a substantial growth in population is expected and that infrastructure improvements will be necessary in relation to this growth. It proposes housing, transport, business and industrial development throughout the south west.

The RSS was revoked in July 2010 and as a result, there will naturally be no in-combination impacts with the South Somerset District Council draft Core Strategy incorporating preferred options.

Responding to Climate Change in Somerset

This document details how the county of Somerset will tackle the causes and effects of climate change. Implementation of a climate change action plan will enable the County Council to provide effective leadership, advice and encouragement to stakeholders and communities in tackling the causes and effects of climate change across the County. Climate change must be taken into account when implementing the core strategies.

No in-combination impacts have been identified as a result of the implementation of this policy. This is primarily because the policy details how Somerset will respond to the challenges of climate change, and does not set out any policies that could have an impact upon the designated sites, either alone or in-combination or with those set out in the South Somerset draft Core Strategy incorporating preferred options document.

Core Strategy documents

The impacts of development in any given Local Authority area cannot be fully considered or rectified in isolation from neighbouring authorities and their developments. Core Strategies provide an overarching policy framework for the Local Development Framework. They establish the vision, objectives and policies for how a district sees itself progressing by 2026.

Mendip, West Somerset, Taunton Deane and North Somerset District Councils are in the process of preparing Core Strategy documents. They are still under development and are not in a condition to be assessed. However, it is anticipated that there could be some in-combination impacts which will require assessment as part of their development. However, the Sedgemoor District Council Proposed Submission Core Strategy document has been subject to a HRA (Royal Haskoning, 2010), with the key findings summarised below.

Sedgemoor District Council Core Strategy proposed submission draft

The HRA of the Sedgemoor District Council Proposed Submission Core Strategy assessed the impact of policies on the Severn Estuary and Somerset Levels and Moors sites. The assessment concluded that three policies could have an adverse effect on the integrity of the International Sites. However, mitigation and policy amendments were recommended (as they were in the case of South Somerset) which would negate these potential impacts on the sites. Therefore it is considered that there will be no in-combination impacts with policies proposed as part of the South Somerset Core Strategy.

Somerset Minerals Local Plan 2004-2011

The Somerset Minerals Local Plan sets out the broad land use framework for future mineral development in Somerset. It will be replaced by the Somerset Minerals Core Strategy post-2011.

The plan sets out the detailed environmental and other criteria against which the county judges all applications for mineral extraction or quarrying. The proposed re-routing Public Rights of Way (Policy M16) could result in in-combination impacts to the Somerset Levels and Moors sites through disturbance impacts associated with increased levels of visitation.

Additionally, the proposed peat extraction policy (M40) at the Somerset Levels and Moors could result in in-combination impacts with the South Somerset District Core Strategy; potentially resulting in increased disturbance to bird species and, potentially, water quality-related impacts on Ramsar-designated invertebrates.

Somerset Rights of Way Improvement Plan 2006

The Somerset Rights of Way Improvement Plan, prepared by Somerset County Council, sets out the context of the existing public rights of way network in the county and the

results of a consultation to determine the best ways of improving the networks to meet the current and future needs of users.

The plan seeks to maintain the existing network of rights of way, whilst aiming to improve access throughout the county by adding to the network. Improved public access particularly close to or through the designated sites has the potential for in-combination impacts with the core strategies, particularly in relation to disturbance to bird species. However, such a plan offers the opportunity to better manage visitor pressures away from the sensitive areas. No significant in-combination effect is currently anticipated. Future iterations of this plan offer the opportunity for Somerset County Council to limit the impact of visitors on International Sites in the area. It is recommended that South Somerset District Council work with the county council to encourage this.

Somerset Local Transport Plan 2006 -2011

Local Transport Plans (LTPs) are aimed at tackling congestion and reducing pollution, improving accessibility and safety, and are used by central government to determine borrowing approvals for funding transport schemes for the next five years. The final Somerset 'Local Transport Plan 2006-2011 (LTP 2)' was submitted to central government in March 2006.

The LTP outlines specific plans for controlling pollution and any air or water quality impacts related to growth are likely to be minimised. It also recognises a range of quality of life indicators that must be incorporated into regional transport policy including sustainable communities, conservation of biodiversity, quality of public spaces and landscapes and community safety. One of the key aims of the LTP is 'to champion Somerset's economy whilst maintaining and enhancing the character and diversity of its environment'.

With the Somerset Levels and Moors sites, particularly those in South Somerset, not being in close proximity to urban areas and also being, on the whole, not in close proximity to major highways, the LTP is not expected to have any in-combination impacts. Additionally, an objective of the LTP is to reduce the growth of congestion and pollution. The LTP also seeks to encourage the use of cycling routes and to also improve and maintain existing routes.

Catchment Area Management Strategies (CAMS)

Catchment Area Management Strategies (CAMS) are produced by the Environment Agency to indicate the balance of abstraction and river health on a catchment basis. There is one CAMS which is of relevance to the South Somerset District Council draft Core Strategy incorporating preferred options; the River Parrett CAMS (Environment Agency, 2006). The River Parrett CAMS includes a geographical area covering not only the Parrett, but also its tributaries including the River Yeo, Cam, Isle and Cary as well as the Somerset Levels and Moors. However, the River Parrett CAMS explains that '*[the] most significant issue was not being able to include the internationally recognised Somerset Levels and Moors in our calculations.*' This is because water does not naturally flow through the site; rather it is controlled and the methodology employed was unable to accommodate this. It is intended that the next CAMS will take full account of

the Levels and Moors. Under the Habitats Regulations, the Environment Agency must assess the effects of existing abstraction licences and any new applications to ensure they are not, or will not, impact the integrity of any International Sites.

With abstraction being subject to HRA and the known importance of the International Sites, it is not expected that the Parrett CAMS will have any in-combination impacts with the South Somerset District Council draft Core Strategy incorporating preferred options.

8.2 Conclusion

It is not expected that the majority of the strategies, policies and plans detailed in this section will result in in-combination effects with the South Somerset draft Core Strategy incorporating preferred options.

North Somerset, West Somerset, Mendip and Taunton Deane core strategies are being developed currently, and will be subject to revision, refinement and HRA themselves. The nature of the potential impacts are unclear at this stage, and it is considered that they could in any case be avoided through clear protection being integrated into the final policy suites. We recommend that South Somerset District Council (through this document if necessary) highlight this potential for in-combination effects. Such impacts are however considered to be additive and as such should be mitigated within the plans themselves. Any residual impacts are not considered likely to have an adverse effect on Site integrity.

Somerset Minerals Local Plan contains a policy (Policy M3) which indicates that proposals for mineral development which are likely to harm the integrity of a European Site, proposed European Site or a Ramsar Site will not be permitted unless there are imperative reasons of overriding public interest for which there are no suitable alternative solutions. It is considered that this offers sufficient protection within that plan that the potential in-combination impact is not significant.

9 CONCLUSION AND NEXT STEPS

9.1 Conclusions of the HRA Process

Following this assessment of the South Somerset District Council draft Core Strategy incorporating preferred options, that is being offered for public consultation, it can be concluded that there will be no adverse effect on the integrity of the Somerset Levels and Moors International Sites from the policies either alone or in-combination with other plans and policies.

9.2 Further Activities and Recommendations

Following rigorous assessment we consider that South Somerset District Council, as the competent authority under the Habitats Regulations, can conclude that any effects of the draft Core Strategy incorporating preferred options policies will have no adverse effect upon the integrity of the Somerset Levels and Moors SPA and Ramsar designated sites.

In adopting a precautionary approach to enabling future development and recognising the existing limited information relating to visitor behaviour and impact, we recommend that South Somerset District Council commit to discussions with Natural England and other relevant Local Authorities (including Somerset County Council, the RSPB and the Environment Agency) into visitor level monitoring and further surveying at International Sites within the district. A monitoring programme would enable early identification of any unforeseen future pressures and targeted actions could be determined and implemented.

Early implementation of this programme will enable pre-development baseline information to be collated. Over time it will be possible to assess the impact, if any, of future development on visitation and behaviour.

Consultation with interested parties, and in particular advice from Natural England, should be sought to ensure appropriate design of the monitoring strategy and to ensure the programme's ambitions are met.

Monitoring for any renewable energy developments should include a minimum 12-month field survey to determine the baseline numbers of birds present during an annual cycle. This survey should provide data on bird distribution and movements, including observations of bird numbers, intensity of movements, altitude and orientation of flight during different weather conditions and tidal cycles. For species that show significant annual variation in numbers and distribution it may be necessary to undertake at least two years' baseline survey. Studies should also include an area around the wind farm which might be subject to displacement (up to at least 800m from the outer turbines) and the potential for and barrier effects.

Post-construction monitoring is essential in order to test the effectiveness of such mitigation measures and research is needed to provide more information on specific impacts and novel mitigation measures that might reduce impacts.

9.2.1 Further recommendations for policies scoped out at the LSE stage

We consider that one policy from the draft Core Strategy incorporating preferred options, has scope for strengthening or amendment that would benefit the completed document, as described below. Although this policy is not expected to result in LSE, this comment is included in the hope that it contributes to an overall more robust, adopted South Somerset District Core Strategy.

Policy EP7 - New tourism proposals

Recommendation:

This new policy outlines guidance for new tourism proposals within the district. The policy does state that new tourism proposals must not harm the district's environmental assets, but could be further strengthened to make specific reference to internationally designated sites.

An additional recommendation, and one which does not concern one of the current policies, relates to the Somerset Rights of Way Improvement Plan 2006. The Plan, as highlighted in the in-combination assessment (**Section 8**) does offer opportunities to enable the better management of visitors and the disturbance impacts that visitors have on the species in the Ramsar and SPA. As the Rights of Way Improvement Plan undergoes iterations, these opportunities should be maximised through working together with Somerset County Council. For example, the re-routing or diversion of paths, siting of new paths that take full account of the attributes of the International Sites, and provision of fencing, signage and information boards could help in minimising the risks of recreational disturbance and could also provide visitors with a better understanding of issues associated with the Site.

9.3 Next Steps

This document represents the assessment of policies contained within the South Somerset District Council draft Core Strategy incorporating preferred options that is being offered for public consultation in October 2010.

We anticipate that these findings of the HRA will remain robust unless material changes are made as a result of the public consultation, and subsequent Examination in Public, of this policy suite. Where material changes are required, we recommend that a re-assessment of the findings of this report is carried out to confirm that its conclusions remain valid and that the draft Core Strategy incorporating preferred options for adoption remains compliant with the Habitats Regulations.

10 REFERENCES

Brown, MJ, Linton, E and Rees, EC (1992) *Causes of mortality among wild swans in Britain*. *Wildfowl* 43: 70–79.

Chown D (2002). *Assessment of the Potential for Disturbance to Winter Waterfowl at Moorlinch SSSI, with Emphasis on the Raised Water Level Area*.

Christensen, TK, Hounisen, JP, Clausager, I and Petersen, IK (2004). *Visual and Radar Observations of Birds in Relation to Collision Risk at the Horns Rev. Offshore Wind Farm. Annual status report 2003. Report commissioned by Elsam Engineering A/S 2003*. NERI Report. Rønde, Denmark: National Environmental. Research Institute.

Department for Communities and Local Government (DCLG) (2006). *Planning for the Protection of European Sites: Appropriate Assessment - Guidance for Regional Spatial Strategies and Local Development Documents*. Available from: <http://www.communities.gov.uk/archived/publications/planningandbuilding/planning2>. Accessed on 25.06.10.

Drewitt AL and Langston RHW (2006). *Assessing the impacts of wind farms on birds*. *Ibis*, 148, 29–42.

English Nature (1997). *Somerset Levels and Moors Natural Area – A nature conservation profile*. English Nature (Somerset Team) July 1997.

English Nature (2005). *Dogs, Access and Nature Conservation*.

English Nature (2006). *The Assessment of Regional Spatial Strategies under the Provisions of the Habitats Regulations – Draft Guidance*.

Environment Agency (2006). *Getting the balance right – the Parrett Catchment Abstraction Management Strategy*.

Everaert, J, Devos, K and Kuijken, E (2001). *Wind Turbines and Birds in Flanders (Belgium): Preliminary Study Results in a European Context*. Instituut Voor Natuurbehoud. Report R.2002.03. Brussels B.76pp. Brussels, Belgium: Institut voor Natuurbehoud.

JNCC 2010(a). *Joint Nature Conservation Committee - Natura 2000 standard data form – the Somerset Levels and Moors Special Protection Area (SPA)*. Available at URL: <http://www.jncc.gov.uk/pdf/SPA/UK9010031.pdf>. Accessed on 15/06/2010.

JNCC 2010(b). *Joint Nature Conservation Committee - Information sheet on Ramsar wetlands*. Available at URL: <http://www.jncc.gov.uk/pdf/RIS/UK11064.pdf> Accessed on 15/06/2010.

Langston, RHW. and Pullan, JD (2003). *Windfarms and birds: an analysis of the effects of wind farms on birds, and guidance on environmental assessment criteria and site selection issues.* Report by BirdLife International to the Council of Europe, Bern Convention on the Conservation of European Wildlife and Natural Habitats. (RSPB/BirdLife in the UK).

Larsen, JK and Clausen, P (2002) *Potential wind park impacts on whooper swans in winter: the risk of collision.* *Waterbirds* 25: 327–330.

Pedersen, MB and Poulsen, E (1991) *Impact of a 90 m/2MW wind turbine on birds. Avian responses to the implementation of the Tjaereborg wind turbine at the Danish Wadden Sea.* *Danske Vildtunderogelser Haeft 47.* Rønde, Denmark: Danmarks Miljøundersøgelser.

Richardson, WJ (2000) *Bird Migration and Wind Turbines: Migration Timing, Flight Behaviour, and Collision Risk.* *Proceedings of National Avian-Wind Power Planning Meeting II*, 132–140.

Royal Haskoning (2009). *Stage 1 Scoping Report for Somerset Authorities Core Strategies: Somerset Levels and Moors and Severn Estuary (Bridgwater Bay) Natura 2000 sites.* Report for Somerset County Council.

Royal Haskoning (2010). *Sedgemoor District Council Core Strategy Habitat Regulations Assessment Volume 1 - HRA for the Somerset Levels and Moors and Severn Estuary International Sites*

Tyldesley D. and Hoskin R. (2008). *Assessing projects under the Habitats Directive: guidance for competent authorities.* Report to the Countryside Council for Wales, Bangor.

APPENDIX A

Detailed Assessment Tables

South Somerset District Council

Final Report to accompany South Somerset District Council's draft Core Strategy incorporating preferred options, October 2010

Policy SS3 – District-wide housing provision; and Policy SS4 - Delivering new housing growth

Designated sites		
Site	Designation	Key features
Somerset Levels and Moors	Ramsar	<p>Ramsar Criterion 2 The site supports 17 species of British Red Data Book invertebrates</p> <p>Ramsar Criterion 5 The site supports assemblages of waterfowl of international importance</p> <p>Ramsar Criterion 6 The site supports species/populations occurring at levels of international importance</p>
Somerset Levels and Moors	SPA	<p>Annex I birds and regularly occurring migratory birds: common teal <i>Anas crecca</i>, Bewick's swan <i>Cygnus columbianus bewickii</i>, golden plover <i>Pluvialis apricaria</i> and northern lapwing <i>Vanellus vanellus</i>.</p> <p>Article 4.1 Qualification. Over winter the area regularly supports: Bewick's swan, golden plover</p> <p>Article 4.2. Qualification. Over winter the area regularly supports: common teal and northern lapwing</p> <p>Article 4.2 Qualification. An internationally important assemblage of birds Over winter the area regularly supports 73,014 wildfowl</p>

Somerset Levels and Moors Ramsar									
Ramsar Site Feature	Sensitivity	Conservation Target	Potential effect of policy	Implications for integrity (without action)	Preventative measures	Mitigation	Compensation	Impact on integrity	
Site supports 17 species of British Red Data Book invertebrates	The Somerset Levels and Moors is one of the largest and richest areas of traditionally managed wet grassland and fen habitats in lowland UK. The network of rhynes and ditches support an outstanding assemblage of aquatic invertebrates, particularly beetles.	Monitor the invertebrate assemblage on a 6 yearly cycle using defined invertebrate sampling methods.	Reduced water quality arising from increased effluent outflow from upstream water treatment works, with adverse impacts on invertebrates	N/A	N/A	N/A	N/A	No adverse impact upon integrity	
Assemblages of waterfowl of international importance	97,155 waterfowl (5 year peak mean 1998/99-2002/03)	Maintain population within acceptable limits. Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Where the limits of natural fluctuations are not known, maintain the population above 50%	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity	
Bewick's swan	112 individuals, representing an average of 1.3% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on known natural fluctuations of	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity	

		the population on the site, maintain the population at or above the minimum for the site.						
Eurasian teal	21,231 individuals, representing an average of 5.3% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable).	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Northern lapwing	36,580 individuals, representing an average of 1% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable).	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Potential effect of policy on the site	A reduction in water quality leading to adverse impacts on Red Data Book invertebrates and increasing incidence of recreational disturbance as a growing local population results in increased visitation to the site, and subsequent disturbance to over wintering birds.							
Implications for the integrity of the site:		Preventative measures:			Mitigation:		Compensation	
Consultation with Wessex Water concluded that as proposed developments will not result in exceedance of consented outflow limits, it is not expected that water quality will be reduced owing to them. Analysis of visitor figures led to conclusion that a growing population in the District will not lead to disturbance to bird species.		N/A			N/A		N/A	

SPA Site Feature	Somerset Levels and Moors Special Protection Area							
Sub Feature(s)	Sensitivity	Conservation Target	Potential effect of policy	Implications for integrity (without action)	Preventative measures	Mitigation	Compensation	Impact on integrity
Eurasian teal	3.3% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss	Recreational disturbance to designated bird	N/A	N/A	N/A	N/A	No adverse impact upon integrity

		of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	species					
Bewick's swan	2.7% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Golden plover	1.2% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Northern lapwing	0.5% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity

		unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.						
Assemblages of waterfowl of international importance	73,014 waterfowl (5 year peak mean 01/04/98). Sites are sensitive and vulnerable to conversion of grassland to arable, land drainage, increased applications of inorganic fertilisers and silage cutting	Maintain population within acceptable limits. Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Where the limits of natural fluctuations are not known, maintain the population above 50%	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Potential effect of policy on the site	Increasing incidence of recreational disturbance as a growing local population results in increased visitation to the site, and subsequent disturbance to over wintering birds and their habitats.							
Implications for the integrity of the site:	Preventative measures:		Mitigation:			Compensation		
Analysis of visitor figures led to conclusion that a growing population in the District will not lead to disturbance to bird species. People visiting the site for recreation (walking, dog walking) were tending to travel shorter distances than those visiting to specifically to birdwatch, who, by their nature, would not be expected to disturb the wildlife they had come to observe. Furthermore, the designated species are present on the site overwinter, when far fewer people can be expected out on the Levels and Moors.	N/A		N/A			N/A		

Overall Summary			
Potential / likely effect of policy	Recreational disturbance to designated bird species, and adverse impacts upon Red Data Book invertebrates owing to reduced water quality.		
Implications for the integrity of the site:	Preventative measures:	Mitigation:	Compensation
No adverse impacts.	N/A	N/A	N/A

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Policy YV2 – Yeovil Urban Extension

Designated sites		
Site	Designation	Key features
Somerset Levels and Moors	Ramsar	<p>Ramsar Criterion 2 The site supports 17 species of British Red Data Book invertebrates</p> <p>Ramsar Criterion 5 The site supports assemblages of waterfowl of international importance</p> <p>Ramsar Criterion 6 The site supports species/populations occurring at levels of international importance</p>
	SPA	<p>Annex I birds and regularly occurring migratory birds: common teal <i>Anas crecca</i>, Bewick's swan <i>Cygnus columbianus bewickii</i>, golden plover <i>Pluvialis apricaria</i> and northern lapwing <i>Vanellus vanellus</i>.</p> <p>Article 4.1 Qualification. Over winter the area regularly supports: Bewick's swan, golden plover</p> <p>Article 4.2. Qualification. Over winter the area regularly supports: common teal and northern lapwing</p> <p>Article 4.2 Qualification. An internationally important assemblage of birds Over winter the area regularly supports 73,014 wildfowl</p>

Ramsar Site Feature		Somerset Levels and Moors Ramsar						
Sub Feature(s)	Sensitivity	Conservation Target	Potential effect of policy	Implications for integrity (without action)	Preventative measures	Mitigation	Compensation	Impact on integrity
Site supports 17 species of British Red Data Book invertebrates	The Somerset Levels and Moors is one of the largest and richest areas of traditionally managed wet grassland and fen habitats in lowland UK. The network of rhynes and ditches support an outstanding assemblage of aquatic invertebrates, particularly beetles.	Monitor the invertebrate assemblage on a 6 yearly cycle using defined invertebrate sampling methods.	Reduced water quality arising from increased effluent outflow from upstream water treatment works, with adverse impacts on invertebrates	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Assemblages of waterfowl of international importance	97,155 waterfowl (5 year peak mean 1998/99-2002/03)	Maintain population within acceptable limits. Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Where the limits of natural fluctuations are not known, maintain the population above 50%	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Bewick's swan	112 individuals, representing an average of 1.3% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on known natural fluctuations of	Recreational disturbance to Designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity

		the population on the site, maintain the population at or above the minimum for the site.						
Eurasian teal	21,231 individuals, representing an average of 5.3% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable).	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Northern lapwing	36,580 individuals, representing an average of 1% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable).	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Potential effect of policy on the site	A reduction in water quality leading to adverse impacts on Red Data Book invertebrates and increasing incidence of recreational disturbance as a growing local population results in increased visitation to the site, and subsequent disturbance to over wintering birds.							
Implications for the integrity of the site:	Preventative measures:			Mitigation:		Compensation		
Consultation with Wessex Water concluded that as proposed developments will not result in exceedance of consented outflow limits, it is not expected that water quality will be reduced owing to them. Analysis of visitor figures led to conclusion that a growing population in the District will not lead to disturbance to bird species.	N/A			N/A		N/A		

SPA Site Feature	Somerset Levels and Moors Special Protection Area							
Sub Feature(s)	Sensitivity	Conservation Target	Potential effect of policy	Implications for integrity (without action)	Preventative measures	Mitigation	Compensation	Impact on integrity
Eurasian teal	3.3% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Bewick's swan	2.7% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Golden plover	1.2% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity

		the population in the site, maintain the population at or above the minimum for the site.						
Northern lapwing	0.5% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Assemblages of waterfowl of international importance	73,014 waterfowl (5 year peak mean 01/04/98). Sites are sensitive and vulnerable to conversion of grassland to arable, land drainage, increased applications of inorganic fertilisers and silage cutting	Maintain population within acceptable limits. Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Where the limits of natural fluctuations are not known, maintain the population above 50%	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Potential effect of policy on the site	Increasing incidence of recreational disturbance as a growing local population results in increased visitation to the site, and subsequent disturbance to over wintering birds and their habitats.							
Implications for the integrity of the site:		Preventative measures:		Mitigation:		Compensation		

<p>Analysis of visitor figures led to conclusion that a growing population in the District will not lead to disturbance to bird species. People visiting the site for recreation (walking, dog walking) were tending to travel shorter distances than those visiting to specifically to birdwatch, who, by their nature, would not be expected to disturb the wildlife they had come to observe. Furthermore, the designated species are present on the site overwinter, when far fewer people can be expected out on the Levels and Moors.</p>	N/A	N/A	N/A
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Overall Summary			
Potential / likely effect of policy	Recreational disturbance to designated bird species, and adverse impacts upon Red Data Book invertebrates owing to reduced water quality.		
Implications for the integrity of the site:	Preventative measures:	Mitigation:	Compensation
No adverse impacts on site integrity	N/A	N/A	N/A

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Policy CV1 – Chard Growth Area

Designated sites		
Site	Designation	Key features
Somerset Levels and Moors	Ramsar	<p>Ramsar Criterion 2 The site supports 17 species of British Red Data Book invertebrates</p> <p>Ramsar Criterion 5 The site supports assemblages of waterfowl of international importance</p> <p>Ramsar Criterion 6 The site supports species/populations occurring at levels of international importance</p>
Somerset Levels and Moors	SPA	<p>Annex I birds and regularly occurring migratory birds: common teal <i>Anas crecca</i>, Bewick's swan <i>Cygnus columbianus bewickii</i>, golden plover <i>Pluvialis apricaria</i> and northern lapwing <i>Vanellus vanellus</i>.</p> <p>Article 4.1 Qualification. Over winter the area regularly supports: Bewick's swan, golden plover</p> <p>Article 4.2. Qualification. Over winter the area regularly supports: common teal and northern lapwing</p> <p>Article 4.2 Qualification. An internationally important assemblage of birds Over winter the area regularly supports 73,014 wildfowl</p>

Ramsar Site Feature		Somerset Levels and Moors Ramsar						
Sub Feature(s)	Sensitivity	Conservation Target	Potential effect of policy	Implications for integrity (without action)	Preventative measures	Mitigation	Compensation	Impact on integrity
Site supports 17 species of British Red Data Book invertebrates	The Somerset Levels and Moors is one of the largest and richest areas of traditionally managed wet grassland and fen habitats in lowland UK. The network of rhynes and ditches support an outstanding assemblage of aquatic invertebrates, particularly beetles.	Monitor the invertebrate assemblage on a 6 yearly cycle using defined invertebrate sampling methods.	Reduced water quality arising from increased effluent outflow from upstream water treatment works, with adverse impacts on invertebrates	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Assemblages of waterfowl of international importance	97,155 waterfowl (5 year peak mean 1998/99-2002/03)	Maintain population within acceptable limits. Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Where the limits of natural fluctuations are not known, maintain the population above 50%	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Bewick's swan	112 individuals, representing an average of 1.3% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on known natural fluctuations of	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity

		the population on the site, maintain the population at or above the minimum for the site.						
Eurasian teal	21,231 individuals, representing an average of 5.3% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable).	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Northern lapwing	36,580 individuals, representing an average of 1% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable).	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Potential effect of policy on the site	A reduction in water quality leading to adverse impacts on Red Data Book invertebrates and increasing incidence of recreational disturbance as a growing local population results in increased visitation to the site, and subsequent disturbance to over wintering birds.							
Implications for the integrity of the site:		Preventative measures:		Mitigation:		Compensation		
Consultation with Wessex Water concluded that as proposed developments will not result in exceedance of consented outflow limits, it is not expected that water quality will be reduced owing to them. Analysis of visitor figures led to conclusion that a growing population in the District will not lead to disturbance to bird species.		N/A		N/A		N/A		

SPA Site Feature	Somerset Levels and Moors Special Protection Area							
Sub Feature(s)	Sensitivity	Conservation Target	Potential effect of policy	Implications for integrity (without action)	Preventative measures	Mitigation	Compensation	Impact on integrity
Eurasian teal	3.3% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Bewick's swan	2.7% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Golden plover	1.2% of the GB population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity

		the population in the site, maintain the population at or above the minimum for the site.						
Northern lapwing	0.5% of the population	Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Assemblages of waterfowl of international importance	73,014 waterfowl (5 year peak mean 01/04/98). Sites are sensitive and vulnerable to conversion of grassland to arable, land drainage, increased applications of inorganic fertilisers and silage cutting	Maintain population within acceptable limits. Maintain the area of habitats used by wintering birds within acceptable limits (loss of 5% or more are unacceptable). Where the limits of natural fluctuations are not known, maintain the population above 50%	Recreational disturbance to designated bird species	N/A	N/A	N/A	N/A	No adverse impact upon integrity
Potential effect of policy on the site	Increasing incidence of recreational disturbance as a growing local population results in increased visitation to the site, and subsequent disturbance to over wintering birds and their habitats.							
Implications for the integrity of the site:		Preventative measures:	Mitigation:			Compensation		

<p>Analysis of visitor figures led to conclusion that a growing population in the District will not lead to disturbance to bird species. People visiting the site for recreation (walking, dog walking) were tending to travel shorter distances than those visiting to specifically to birdwatch, who, by their nature, would not be expected to disturb the wildlife they had come to observe. Furthermore, the designated species are present on the site overwinter, when far fewer people can be expected out on the Levels and Moors.</p>	N/A	N/A	N/A
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Overall Summary			
Potential / likely effect of policy	Recreational disturbance to designated bird species, and adverse impacts upon Red Data Book invertebrates owing to reduced water quality.		
Implications for the integrity of the site:	Preventative measures:	Mitigation:	Compensation
No adverse impacts.	N/A	N/A	N/A

APPENDIX B

Impacts of the draft Core Strategy incorporating preferred options

Policy	Impact	
	Increased recreational disturbance to birds (Somerset Levels and Moors)	Increased impacts upon invertebrates owing to reduced water quality
SS3 District-wide housing provision	X	X
SS4 Delivering new housing growth	X	X
CV1 Chard growth area	X	X
YV2 Yeovil urban extension	X	X

Key	Test of Likely Significant Effect (Section 4)	No Likely Significant Effect	O
		Potential or Likely Significant Effect	X
	'Appropriate Assessment' (Section 6)	No adverse effect on integrity	
		Adverse effect on integrity	

APPENDIX C

Wessex Water Sewage Treatment Works information

Settlement	Category	Total Housing Commitment at Autumn 2009 (includes)	Residual additional Housing Provision (Additional to existing commitment)	Total residential development 2006 - 2026	STW serving settlement	Abstraction/water supply point	Available capacity for development within consent (yes/no/current headroom)	Consented DWF m3/d	%age of Consented DWF	Works p.e.	
Chard	B	1,863	328	2,191	Chard STW	Wimbleball/Clatworthy & Pole Rue	Yes	5,079	57%	29,575	No exceedence expected during 2010 -2015
Castle Cary / Ansford	B	238	262	500	Castle Cary STW	Mere & Brixton Deverill & Codford	Yes	909	76%	3,500	No exceedence expected during 2010 -2015
Crewkerne	B	928	100	1,028	Crewkerne STW	Sutton Bingham & Wimbleball/Clatworthy & Mere & Brixton Deverill & Codford	Yes	2,481	42%	6,902	No exceedence expected during 2010 -2015
Ilminster	B	191	340	531	Ilminster STW	Wimbleball/Clatworthy & Pole Rue	Yes	2,500	64%	7,105	No exceedence expected during 2010 -2015
Wincanton	B	703	350	1,053	Wincanton STW	Mere & Brixton Deverill & Codford	Yes	1,800	66%	6,775	No exceedence expected during 2010 -2015
Somerton	B	219	281	500	Somerton STW	Wimbleball/Clatworthy	Yes	2,000	89%	7,583	No exceedence expected during 2010 -2015
Langport/ Huish Episcopi	C	182	118	300	Langport STW	Wimbleball/Clatworthy	Yes	1,922	79%	8,796	No exceedence expected during 2010 -2015
Ilchester	C	1	150	151	Ilchester STW	Sutton Bingham & Wimbleball/Clatworthy & Mere & Brixton Deverill & Codford	Yes	450	77%	2,122	No exceedence expected during 2010 -2015
South Petherton	C	145	0	145	South Petherton STW	Sutton Bingham & Wimbleball/Clatworthy & Mere & Brixton Deverill & Codford	Yes	1,747	77%	5,491	No exceedence expected during 2010 -2015
Martock	C	96	150	246	Martock STW	Wimbleball/Clatworthy	Yes	2,229	90%	9,068	No exceedence expected during 2010 -2015
Bruton	C	97	120	217	Bruton STW	Mere & Brixton Deverill & Codford & Pitcombe	Yes	800	47%	2,433	No exceedence expected during 2010 -2015
Milborne Port	C	199	100	299	Milborne Port STW	Lake	Yes	1,350	57%	3,895	No exceedence expected during 2010 -2015
Stoke	C	5	50	55		Sutton Bingham & Wimbleball/Clatworthy & Mere & Brixton Deverill & Codford	Yes				
Rural settlements	n/a	1199	0	1,199		Sutton Bingham & Wimbleball/Clatworthy & Mere & Brixton Deverill & Codford	Yes				
Yeovil central		5000		5,000	Yeovil STW	Sutton Bingham & Wimbleball/Clatworthy & Mere & Brixton Deverill & Codford	Yes	14,305	64%	55,150	No exceedence expected during 2010 -2015
Yeovil ecotown (southern extension)		6400		6,400	Yeovil STW	Sutton Bingham & Wimbleball/Clatworthy & Mere & Brixton Deverill & Codford	Yes	14,305	64%	55,150	No exceedence expected during 2010 -2015
				0							

Note that data has not been provided for the Stoke and rural settlements sites. Given the small scale of proposed development at Stoke and the widely spread allocation of homes to rural settlements throughout the district, their impact is not considered to be significant.

APPENDIX D

Appraisal of draft Core Strategy incorporating preferred options as assessed in the draft HRA (July 2010)

Appraisal of draft Core Strategy policies including preferred options

Table AD - 1 Assessment of draft policies

Key	
Potential for adverse effect	-
No adverse effect	o
Potential positive effect, at the plan level	+

<p>Policy SS1 – Settlement Hierarchy</p> <p>This policy sets out where provision for new housing in South Somerset District is going to be made. It is an over-arching policy that alone is not a commitment to the undertaking of a scheme of works and therefore a conclusion of no Likely Significant Effect has been made.</p>	o
<p>Policy SS2 – Development in rural settlements</p> <p>The inferred small scale of the development detailed in this policy within rural settlements across the district is not expected to have any impacts on the Somerset Levels and Moors international sites. Therefore our analysis concludes no Likely Significant Effect.</p>	o
<p>Policy SS3 – Phasing & cumulative impact</p> <p>The policy specifies that any developments in the district must be commensurate with proposed infrastructure enhancements, i.e. the planned infrastructure must be appropriate to support the scale of any new development. New infrastructure will be secured through planning obligations, the majority of which will be focussed on the main urban settlements in the district. This policy will not have a Likely Significant Effect upon the international sites.</p>	o
<p>Policy SS4 – Planning obligations</p> <p>Detailing the types of planning obligation that South Somerset District Council will require, this policy should lead to improvements in community infrastructure such as green spaces, facilitating enhancements to biodiversity and a reduction in CO₂ emissions. No Likely Significant Effect is expected, with positive impacts (though not directly upon the international sites), as outlined above, having the potential to arise from its implementation.</p>	o
<p>Policy SS5 - Viability</p> <p>A conclusion of No Likely Significant Effect was made following analysis of this policy. The policy is guiding South Somerset District Councils approach to seeking developer contributions, depending upon the nature and scale of new developments.</p>	o

<p>Policy TV1 – Yeovil urban Extension</p> <p>The Yeovil extension makes provision for 3,700 new dwellings, 23 hectares of new employment land and a new school to the south or east of the town. Whilst being developed to an eco-town standard, the substantial increase in population that can be expected (circa 9,000), combined with Yeovil’s relative proximity to the designated sites (approximately 12 miles), means that there is potential for Likely Significant Effect arising from this policy, primarily due to increasing visitor pressure and associated disturbance to species.</p>	-
<p>Policy TV2 – Yeovil urban village</p> <p>This is a small scale development in the centre of Yeovil to include around 400 new dwellings and additional retail and leisure provision. Given the relative small scale of the development, no Likely Significant Effect is expected.</p>	○
<p>Policy TV 3 – Chard growth area</p> <p>Over 3,200 dwellings, of which around 2,200 will be delivered in the core strategy plan period up to 2026, new retail provision, leisure facilities and schools are proposed for Chard in this policy that has the potential for Likely Significant Effects through increased visitor and disturbance pressure and/or water quality impacts (as Chard is upstream of the designated sites on the River Isle). Chard is approximately 20 miles by road from the Somerset Levels and Moors.</p>	-
<p>Policy TV 4 – Chard phasing</p> <p>This policy details the timescales within which the housing provision (as specified in policy TV3) will be delivered. Concerned with timescales rather than the actual development of new dwellings, we conclude that there is no Likely Significant Effect arising from this policy, subject to other provisions contained within the policy suite (e.g. Policy SS3).</p>	○
<p>Policy TV 5 – Chard obligations</p> <p>There will be no Likely Significant Effect arising from the adoption or implementation of this policy as it deals with developer contributions for developments in the Chard area.</p>	○
<p>Policy HG1 – Delivering new housing growth</p> <p>A substantial development of new homes, of which 8,200 will be located in and around Yeovil (this <u>includes</u> those specified in Policy TV1). The significant increase in population associated with these developments up to 2026 may result in a Likely Significant Effect upon the designated sites primarily through increased visitation and recreational disturbance from a growing population. Water quality issues may also arise due to increased effluent treatment and outflow.</p>	-

<p>Policy HG2 – Strategic housing sites</p> <p>This policy details the safeguarding of a number of strategic sites for future residential development, but within the current plan period. With actual delivery of housing figures being covered by other dedicated policies, the safeguarding of the sites detailed in this policy for future development will result in no Likely Significant Effect.</p>	○
<p>Policy HG3 – Provision of affordable housing</p> <p>Policy HG3 is designed to ensure that the appropriate provision is made for affordable homes throughout the district. No Likely Significant Effect is expected to arise resulting from its adoption or implementation, as the numbers of homes (i.e. an element that <i>does</i> have the potential for LSE) proposed are covered in preceding policies.</p>	○
<p>Policy HG4 – Achieving a mix of market housing</p> <p>This policy defines the required mix of housing types to be provided as part of the developments that have been detailed in policies HG1, TV4, TV1 and TV3. With development/construction of the homes covered under the policies above, the actual types of properties built will not result in any Likely Significant Effect upon the designated sites.</p>	○
<p>Policy HG5 – Housing density</p> <p>Setting out the requirements for housing density for the developments specified in previous policies, no Likely Significant Effect is expected arising from the introduction of this policy.</p>	○
<p>Policy HG6 – Use of previously developed land for new housing development</p> <p>This policy details the Council's desire for no less than 30% of new dwellings to be sited on land that has previously been developed. There will be no Likely Significant Effect arising as a result of its implementation.</p>	○
<p>Policy HG7 – Gypsies, travellers and travelling showpeople</p> <p>Policy HG3 aims to ensure that the accommodation of Gypsies and other travelling groups are provided in appropriate locations. We have concluded no Likely Significant Effect for this policy as the policy contains wording sufficient to ensure that the Levels and Moors designated sites are safeguarded.</p>	○
<p>Policy HG 8 – Replacement dwellings and extensions in the countryside</p> <p>This policy is concerned with replacing existing developments in rural areas and extensions to existing buildings. This infers very small scale, localised development from which no Likely Significant Effect is expected.</p>	○

<p>Policy HG9 – Housing for agricultural & related workers</p> <p>This policy will ensure that new accommodation provided for full-time workers in agriculture, forestry, horticulture, and related disciplines meets a range of South Somerset District Council requirements. Our analysis raised points that require clarification before a conclusion of no LSE can be reached. As these sites will be in rural areas, it potentially places them in close proximity to the Levels and Moors designated sites. Furthermore, there is no limit specified to the size of developments. A conclusion of Likely Significant Effect for this policy has been made.</p>	-
<p>Policy HG10 – Removal of agricultural and other occupancy conditions</p> <p>Policy HG10 details how South Somerset District Council will ensure that permission to remove restrictive occupancy conditions (ensuring provision of homes to those people who are employed in agriculture, forestry or similar) will only be provided subject to a strict set of criteria. No Likely Significant Effect is anticipated.</p>	○
<p>Policy EP1 – Delivering new employment land</p> <p>Whilst the majority of these sites are located upstream of the Somerset Levels and Moors designated sites, the scale of proposed developments and their distances from the designated sites, means it is unlikely that an LSE will arise as a result of this policy's implementation. 1.5ha of land is proposed for development at Langport or Huish Episcopi, immediately adjacent to the Levels and Moors. However, at 1.5ha in total, no Likely Significant Effect is anticipated.</p>	○
<p>Policy EP2 – Strategic employment sites</p> <p>Policy EP2 details the location of strategic employment sites throughout the district within the current plan period. Given that none of the sites specified are in close proximity to the designated site, no Likely Significant Effect is anticipated.</p>	○
<p>Policy EP3 – Office development</p> <p>Policy EP3 will ensure that new office developments are located appropriately, and specifically that they should be within existing town centres. Where this is not possible, other potential sites are detailed in order of preference with those near city centres having priority. Given that these developments are unlikely to be substantial in size, and that they will be located in, or in proximity to, town centres, no Likely Significant Effect is concluded (particularly given additional protection afforded by policies such as EQ3).</p>	○
<p>Policy EP4 – Safeguarding employment land</p> <p>This policy details how the District Council intend to safeguard land for employment. This is primarily focused on previously used land with changes of use not being permitted unless the proposal delivers environmental enhancement or improvements. No Likely Significant Effects are anticipated.</p>	○

<p>Policy EP5 – Conversion or re-use of buildings in the countryside</p> <p>This policy will not result in a Likely Significant Effect on the designated sites – the nature of works associated with this policy will be small scale and highly localised. The policy includes wording specifying that consideration is necessary for wildlife and habitats.</p>	○
<p>Policy EP6 – New build live/work units</p> <p>No Likely Significant Effect is expected to arise from the adoption of this policy although it would benefit from clarification to ensure the wider readership is clear about exactly what the policy is detailing.</p>	○
<p>Policy EP7 – Expansion of existing businesses in the countryside</p> <p>This policy concerns the expansion of existing businesses in rural areas. It specifies that there is to be ‘no impact on the countryside with regard to scale, character and appearance of new buildings...’. No Likely Significant Impact is anticipated given the small and localised nature of the works.</p>	○
<p>Policy EP8 – Farm diversification</p> <p>The wording of this policy needs to be modified if it is not to have the potential for LSE on the designated sites. Our assessment determined Likely Significant Effect due to the proximity of farms to the designated sites and the types of diversification, potentially ranging from a B&B to a golf course or quad-biking centre.</p>	-
<p>Policy EP9 – Retail hierarchy</p> <p>This policy concerns the Councils aspirations for retail facilities provided in town centres; no Likely Significant Effect is anticipated.</p>	○
<p>Policy EP10 – Presumption against major new regional shopping facilities</p> <p>This policy states that new ‘major’ shopping facilities will not be permitted within the district other than in Yeovil town centre. No Likely Significant Effect is expected to arise from the policy’s introduction.</p>	○
<p>Policy EP11 – Retail vitality and viability</p> <p>This policy is again focused on town centres and will not have a Likely Significant Effect on the designated sites.</p>	○
<p>Policy EP12 – Protection of retail frontages</p> <p>Outlining the importance of retail units in defined shopping frontages not being transferred to non-retail use, no Likely Significant Effect upon the designated sites is anticipated from the introduction/adoption of this policy.</p>	○
<p>Policy EP13 – Comparison floorspace in Yeovil</p> <p>This policy guides the net increase in floorspace arising from new goods retail developments guided under separate policies. No Likely Significant Effect is anticipated.</p>	○

<p>Policy EP14 – District & local centres</p> <p>Ensuring that the proposed developments within Chard and Yeovil are in scale and keeping with the towns, this policy is not expected to result in a Likely Significant Effect.</p>	○
<p>Policy EP15 – Protection & provision of local shops, community facilities and services</p> <p>This policy is designed to ensure that key local shops and facilities of importance to surrounding communities are maintained and not adversely impacted by proposed developments. No Likely Significant Effect upon the designated sites is anticipated.</p>	○
<p>Policy TA1 – Generic district-wide modal shift</p> <p>This policy covers the ways in which South Somerset District Council intend to enable modal shift; i.e. reducing the numbers of drive-alone vehicles and enabling wider uptake of alternatives such as walking, cycling, public transport use and car sharing. The policy should bring about benefits through a reduction in traffic and associated emissions of greenhouse gases, and may lead to people travelling to the sites by alternative modes of transport. Our analysis concluded that the policy will have no Likely Significant Effect on the designated sites.</p>	○
<p>Policy TA2 – Modal shift for Yeovil</p> <p>Similar to policy TA1 in its aims, this policy is specific to Yeovil and outlines District Council plans for reducing the level of single-occupancy vehicles and enabling wider uptake of more sustainable alternatives such as walking, car-sharing and cycling. Minimum standards for new developments are included to indicate what will be expected as a minimum; i.e. provision of bus shelters and cycling infrastructure. Expected to bring about beneficial impacts in the local area (i.e. in terms of noise reduction, road safety, emissions reduction and an improvement in quality of life), No Likely Significant Effect upon the Levels and Moors is anticipated arising from its implementation.</p>	○
<p>Policy TA3 – Modal shift for Yeovil eco-town</p> <p>Similar to policy TA1 and TA2 in its aims, this policy is specific to the proposed Eco-town development on the edge of Yeovil. No Likely Significant Effect is anticipated arising from its implementation.</p>	○
<p>Policy TA4 – Modal shift for Chard</p> <p>Similar to policy TA1 and TA2 in its aims, this policy is specific to Chard. No Likely Significant Effect is anticipated arising from its implementation.</p>	○
<p>Policy TA5 – Travel plans</p> <p>Policy TA5 details the requirement for all development sites to provide travel plans to minimise traffic generation arising from the development and enabling modal shift to alternatives such as car sharing, public transport and cycling. No Likely Significant Effect is anticipated.</p>	○

<p>Policy TA6 – Transport impact of new development</p> <p>Focusing on limiting the impacts arising from increasing road traffic at new developments and maximising the opportunities for more sustainable modes of transport, this policy is not anticipated to have a Likely Significant Effect upon the designated sites.</p>	○
<p>Policy TA7 – Parking standards</p> <p>This policy, which specifies the parking standards for new developments (residential and commercial), is not anticipated to have any impact upon the designated sites. Therefore, no Likely Significant Effect is concluded.</p>	○
<p>Policy HW1 – Green infrastructure and standards</p> <p>Policy HW1 details the provision of Green Infrastructure that is expected over the plan period. It is not anticipated that there will be any Likely Significant Effect arising from this policy. It will bring a number of potential benefits to biodiversity through the creation of green spaces and wildlife corridors locally. This in turn may result in fewer people travelling further afield (i.e. to the Levels and Moors) for recreation and other reasons, with subsequent benefits upon the habitats and species that live there.</p>	+
<p>Policy HW2 – Indoor sports provision</p> <p>Ensuring that the provision of indoor sporting facilities across South Somerset District is satisfactory, there will be no Likely Significant Effect arising from this policy.</p>	○
<p>Policy HW3 – Provision of outdoor playing space and amenity space in new development</p> <p>Policy HW3 is designed to ensure that new developments provide a satisfactory level of playing and amenity space – it is not anticipated that the policy will result in a Likely Significant Effect on the designated sites.</p> <p>Furthermore, providing green spaces for recreational purposes may lead to benefits for the designated sites as people may feel that have sufficient green space locally, or in the vicinity of their homes, and therefore may not need to travel to the Somerset Levels and Moors for recreation.</p>	+
<p>Policy HW4 – Protection of play spaces & youth provision</p> <p>Ensuring that there will be no loss in formal play areas, this policy is not expected to result in a Likely Significant Effect.</p>	○

<p>Policy EQ1 – Addressing climate change in South Somerset</p> <p>This policy is designed to address climate change in South Somerset and the introduction of renewable sources of energy features in it. It has been assessed as Likely Significant Effect. The policy currently specifies that ‘renewables will be permitted only where there are no <u>unacceptable</u> adverse effects.....to biodiversity interest’. In light of potential impacts upon birds and the designated sites, any adverse impact should be considered unacceptable. However, what constitutes ‘unacceptable’ is not defined therefore this policy is taken forward to the appropriate assessment stage given due to potential adverse impacts upon bird species owing to the presence of wind turbines.</p>	-
<p>Policy EQ2 – Design</p> <p>This policy is designed to ensure that the design of new developments contributes to the character and distinctiveness of the district. No Likely Significant Effect is anticipated.</p>	○
<p>Policy EQ3 – Biodiversity</p> <p>This policy is designed to ensure that all new developments take full account of the potential impacts upon biodiversity and limit them wherever possible. It is not expected to result in Likely Significant Effect upon the designated sites.</p>	○
<p>Policy EQ4 – Equine development</p> <p>This policy will apply principally to rural areas and therefore potentially to sites in proximity to the Levels and Moors designated sites. Likely Significant Effect has been determined as the policy does not specify that adverse impacts on sites of international conservation must be avoided. Equine developments could potentially be substantial in size and if in close proximity to the designated sites could result in adverse impacts.</p>	-

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