HRA Review of All Proposed Policy Changes to the Submitted Core Strategy March 2013 Conservation of Habitats and Species Regulations 2010

PART A: The Proposal

Policy changes to the B&NES Submitted Core Strategy, including policies to provide an additional 1,870 houses across 8 different locations/areas.

Type of application: Core Strategy - Policy change
Application site: Map Attached as Appendix C to the supporting document (Core Strategy Key Diagram – see identified development locations)
Brief description of proposal: Various policy changes involving rewording and deletions or additions to text, but also to provide strategic housing locations with capacity for an additional 1,870 houses as follows:

Land adjoining Odd Down	300
Extension to MoD, Ensleigh	120
Land adjoining Weston	300
Land adjoining East Keynsham	250
Land adjoining South West Keynsham	200
Land at Whitchurch	200
Somer Valley	300
Rural Areas	200

European site name(s):
Bath & Bradford on Avon Bats (SAC)
Mells Valley (SAC)
North Somerset and Mendip Bats (SAC)
Chew Valley Lake (SPA**)**

Introduction
These Core Strategy Policy changes have been considered under Conservation of Habitats and Species Regulations 2010. In particular, the policy changes are examined with regards to their impact on the “special interest features” of the Bath and Bradford on Avon Bats Special Area of Conservation (SAC), the Mells Valley SAC, the North Somerset and Mendip Bats SAC, and the Chew Valley Lake SPA. The policy change “must be compliant with the legal obligation to maintain in 'favourable condition' the conservation objectives of these Natura 2000 sites (SACs and SPAs)”.

As the competent authority, B&NES is required to carry out this initial assessment and if a likely significant effect is identified, to then continue on with investigating the potential effects more fully in the form of 'Appropriate Assessment'. Ultimately the policy change must be compliant with the legal obligation to maintain in 'favourable condition' the bat conservation objectives of the SACs, and the Special bird assemblage interest of the SPA. An essential attribute to the SAC

Conservation objectives are the flight lines and foraging areas for bats in surrounding habitat. Most pertinently, in the case of Greater Horseshoe Bat (Rhinolophus ferrumequinum), flight lines must be free of any unnatural night-time illumination, and good foraging habitat should ideally be retained within at least the 5km sustenance zones of each SAC**.**

Part B: The European Sites (Natura 2000) potentially affected

Bath and Bradford-on-Avon Bats Special Area of Conservation (SAC)

Component Sites of Special Scientific Interest (SSSIs): Combe Down and Bathampton Down Mines; Winsley Mines; Box Mine; Browns Folly

Conservation Objectives

The conservation objectives for the European interest on the SSSI are:
to maintain*, in favourable condition, the habitats for the population of:
* Greater Horseshoe Bat (Rhinolophus ferrumequinum) (all component SSSIs)
* Lesser Horseshoe Bat (Rhinolophus hipposideros) (all component SSSIs)
* Bechstein's Bat (Myotis bechsteinii) (Box Mine SSSI)
*maintenance implies restoration if the feature is not currently in favourable condition.

Mells Valley Special Area of Conservation (SAC)

Component Sites of Special Scientific Interest (SSSIs) Old Ironstone Works SSSI, Mells; St Dunstan's Well Catchment SSSI and Vallis Vale SSSI

Conservation Objectives

The conservation objectives for the European interest on the SSSI are:
to maintain*, in favourable condition, the habitats for the population of:
Greater Horseshoe Bat *(Rhinolophus ferrumequinum*) (all component SSSIs)
*maintenance implies restoration if the feature is not currently in favourable condition.
Site Name & Designation:

North Somerset and Mendip Bats Special Area of Conservation (SAC)

Component Sites of Special Scientific Interest (SSSIs): Banwell Ochre Caves, Brockley Hall Stables, Compton Martin Ochre Mine, King's Wood and Urchin Wood, The Cheddar Complex and Wookey Hole.

Conservation Objectives

The conservation objectives for the European interest on the SSSI are:
to maintain*, in favourable condition, the habitats for the population of:
* Greater horseshoe bat (*Rhinolophus ferrumequinum*)
* Lesser horseshoe bat (*Rhinolophus hipposideros*)
* maintenance implies restoration if the feature is not currently in favourable condition.

Chew Valley Lake (SPA)

Conservation Objectives

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive

LIST OF SENSITIVE INTEREST FEATURES

Bath & Bradford on Avon Bats SAC

The site is designated under Article 4(4) of the Habitats Directive as it hosts the following species listed in annex 2:-

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

Greater Horseshoe Bat (GHB) *Rhinolophus ferrumequinum*

This site in southern England includes the hibernation sites associated with 15% of the UK Greater Horseshoe bat population and is selected on the basis of the importance of this exceptionally large over-wintering population.

Bechstein's Bat *Myotis bechsteinii*

Small numbers of Bechstein's bats have been recorded hibernating in abandoned mines in this area, though maternity sites remain unknown.

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

Lesser Horseshoe Bat *Rhinolophus hipposideros*

The Bath & Bradford on Avon SAC site comprises an extensive network of caves, mines and manmade tunnels which are used by bats for hibernation, mating and as a staging post prior to dispersal. The stone mines have been identified as a hibernation site for Lesser Horseshoe bats.

Mells Valley SAC

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

Greater horseshoe bat *Rhinolophus ferrumequinum*

Mells Valley in southern England is selected on the basis of the size of its exceptional breeding population. It contains the maternity site associated with a population comprising about 12% of the UK Greater Horseshoe Bat (“GHB”) *Rhinolophus ferrumequinum* population. A proportion of the population also hibernates at the site, though other hibernation sites remain unknown.

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

Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)

Caves not open to the public

North Somerset and Mendip Bats SAC

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

6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia)*
The Cheddar complex and Wookey Hole areas support a wide range of semi-natural habitats including semi-natural dry grasslands. The principal community present is CG2 *Festuca ovina - Avenula pratensis* grassland which occurs on rock ledges and on steep slopes with shallow limestone soil, especially in the dry valleys and gorges and on the south-facing scarp of the Mendips. The site is also important for the large number of rare plants which are associated with Carboniferous limestone habitats. These include dwarf mouse-ear *Cerastium pumilum*, Cheddar pink *Dianthus gratianopolitanus* and rock stonecrop Sedum f*orsterianum*, which occur on rocks, screes, cliffs and in open grassland. Transitions to and mosaics with limestone heath, calcareous screes, scrub and 9180 *Tilio-Acerion* forests are a particular feature of the Cheddar complex part of the site.
9180 *Tilio-Acerion* forests of slopes, screes and ravines * Priority feature
The main block of *Tilio-Acerion* forest at Kings and Urchin's Wood has developed over limestone which outcrops in parts of the site and forms a steep scarp to the south-east. Ash *Fraxinus excelsior* predominates in the canopy with small-leaved lime *Tilia cordata*, yew *Taxus baccata* and elm *Ulmus* spp., mostly formerly coppiced, but including some pollard limes. There is a rich ground flora including lily-of-the-valley *Convallaria majalis*, columbine *Aquilegia vulgaris*, angular Solomon's-seal *Polygonatum odoratum* and purple gromwell *Lithospermum purpureocaeruleum*.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site
8310 Caves not open to the public

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

1303 Lesser horseshoe bat *Rhinolophus hipposideros*
The limestone caves of the Mendips provide a range of important hibernation sites for lesser horseshoe bat Rhinolophus hipposideros and 1304 greater horseshoe bat *Rhinolophus ferrumequinum.*

1304 Greater horseshoe bat *Rhinolophus ferrumequinum*
This site in south-west England is selected on the basis of the size of population represented (3% of the UK greater horseshoe bat *Rhinolophus ferrumequinum* population) and its good conservation of structure and function, having both maternity and hibernation sites. This site contains an exceptionally good range of the sites used by the population, comprising two maternity sites in lowland north Somerset and a variety of cave and mine hibernation sites in the Mendip Hills.
Annex II species present as a qualifying feature, but not a primary reason for site selection

Features common to these bat SACs
The bats using the SACs rely on range of features and habitats outside the designated site boundaries.These include permanent grassland, scrub and woodland, linear features such as tree-lines, hedgerows, watercourses and

connecting habitats. These are important to bats as feeding corridors and commuting routes. Other roost sites are also important. Features that are significant in terms of their contribution to sustaining the bat population of a SAC are also subject to protection under the Habitats Directive.

The commuting range of GHB is typically 4km, can be up to 15km, and exceptionally can be much more.

Chew Valley Lake SPA

This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

Over winter;

Shoveler Anas clypeata, 503 individuals representing up to 1.3% of the wintering Northwestern/Central Europe population (5 year peak mean 1991/2 - 1995/6)

Is the proposal directly connected with or necessary to the management of the European site for nature conservation? No

PART C: SCREENING AND ASSESSING THE POLICY CHANGES TO THE SUBMITTED CORE STRATEGY

Four European sites are identified as needing further review and scrutiny in the context of the policy changes being considered:

1. Bath & Bradford on Avon Bats SAC
2. North Somerset and Mendip Bats SAC
3. Mells Valley SAC
4. Chew Valley Lake SPA

Sites 1-3 are each designated for their bat interest, in particular for their importance as hibernating and/or maternity roost sites for Horseshoe bats. These sites therefore require similar considerations and assessments. The following types of impact need to be considered for these sites:

- Loss and damage to roost sites
- Disturbance to bats
- Loss and damage of foraging habitats
- Loss and damage of flight lines

It is widely accepted that the presence of good foraging habitat within a 5km radius of main roost sites is critically important to greater horseshoe bats. In order to prevent harm to the integrity of Horseshoe bat SACs, development should not be directed close to these sites, and ideally not within undeveloped areas which are within 5km of bat SACs
Site 4 is a large artificial lake that provides an important wintering site for Shoveler duck. The following types of impact will need to be considered for this site:

- damage to habitat through reduction of water levels
- damage to habitat through changes to water quality
- Disturbance to birds

- Disruption/ fragmentation of flight lines

All the policy changes were screened for likely significant effects upon the 4 sites listed above, using the screening criteria developed for Natural England and with consideration of the types of impact listed above. The screening results are listed in Appendix 1

The majority of policy changes involve some rewording of strategic policies, resulting in no material change to the policy in the context of European sites. The majority of the policies affected are judged to fall into category A (no impact) or category E (Appropriate for lower tier assessment). Those falling within category E will require further detailed consideration and assessment as they are progressed and refined through the Place Making Plan.

The most significant policy changes involve the identification of new development locations and increased housing numbers. The detailed HRA process for these changes (as approved by Council on 4th March 2013) is provided in Appendix A of the supporting document. This concluded that whilst there was some potential for significant impacts to result from development at Odd Down, Ensleigh and Weston, the likelihood on any impacts occurring would depend upon the precise location; layout and design of development. This is not defined by the Core Strategy Policy Changes. This will be informed and influenced by lower tier policy documents, notably the Place Making Plan, which itself will be subject to the HRA process.

To provide clarity and direction for lower tier plans a series of site development requirements were identified for the sites of particular concern within the detailed HRA of these main changes. These requirements have been included within the new strategic policies within the Proposed Changes to the Submitted Core Strategy, and are designed to ensure that there is no likelihood of any significant effect on any of the European Site. This approach has been subject to preliminary consultation with Natural England, and results in the main policy changes being assessed as Catergory B (no significant impact).

In addition to the inclusion of development requirements within the policy changes the HRA process has also led to inclusion within the Proposed Changes to the Submitted Core Strategy a point of clarity with respect to impacts on European Sites:

“For clarity, development likely to have a significant effect on a European site either alone or in combination with other plans or projects, and which cannot be adequately mitigated, would not be in accordance with the development plan.”

Possible In combination effects

Major projects or plans that are active or which may come forward during the lifetime of this policy change, and which are relevant in terms of potential impacts and proximity to Natura 2000 sites are assessed as:

- Wiltshire Core Strategy :notably housing provision at Bradford on Avon
- West of England Joint Local Transport Plan 3, 2O11 -- 2O26 : notably the Greater Bristol Bus Network; Bath Transport Package, and longer term aspirations (Temple Cloud/Clutton Bypass; Whitchurch Bypass; Saltford Bypass)
- West of England Joint Waste Core Strategy March 2011; includes provision of

a residual waste treatment facility at the former Fuller's Earth Works, at the Fosseway, Bath

- HRA work for the Wiltshire Core Strategy resulted in recommendations for further guidance for developers in relation to developing in close proximity to SAC bats, and notes:

  'Wiltshire Council is developing guidance for development surrounding the Bath and Bradford Bats SAC and associated roost sites. This will include guidance for developers and planners, and a procedure to ensure that any likely significant effects upon the SAC are identified and assessed at the application stage. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy'.

  This will help to protect and sustain key SAC bat foraging areas and flight-lines and so no significant 'in-combination' effects are considered likely.

- The main elements of the West of England Joint Transport Plan were considered within the HRA of the B&NES Core Strategy Publication Document. It was noted that the Core Strategy includes an over-arching policy for the provision of infra-structure that requires protection of European Sites. This remains the case, and in parallel with the development requirements associated with this policy change, no 'in-combination' effects are considered likely.
- The west of England Joint Waste Core Strategy March 2011 includes provision of a residual waste treatment facility at the former Fuller's Earth Works, at the Fosseway, Bath, well within the Bath & Bradford on Avon SAC 5km sustenance zone. There are historic records of a Greater Horseshoe Bat Night Roost at this location and so impacts upon SAC bat foraging conditions are feasible. However, the Strategy includes development requirements at this location to ensure no adverse effects on the integrity of the SAC or bat species. No 'in combination' effects are therefore considered likely.
- The Electrification of the main line railway through B&NES is a major government initiative (largely with Permitted Developments rights within existing Network Rail's operational boundaries). If the railway corridor, either in whole or in part, is used by SAC bats for foraging or commuting, there is some potential for adverse impacts to result from any habitat clearance required. Some sections through B&NES are well wooded and could contribute to key flight lines or foraging areas. However, Core Strategy policy requirements for protection of the integrity of SAC sites, and the specific development requirements for the policy change, dictate that no adverse residual impacts on the integrity of the SAC are anticipated. No 'in-combination' effects are therefore considered likely.

Conclusion

On the basis of objective information available, and on the assumption that all development requirements are secured and properly implemented, the likelihood of a significant effect on the SACs identified is excluded in relation to these policy changes. This applies to the policy changes individually and 'in combination' with each other and with other plans.

This process was informed by discussions with Natural England and the Council ecologist.

Is the potential scale or magnitude of any effect likely to be significant?
a) Alone?
(explain conclusion, e.g. in relation to de minimus criteria) No
b) In combination with other
plans or projects?
(Explain conclusion and which plans/projects have been included, including those associated with other functions). No

Appendix 1

Appendix 1: Habitats Regulations Assessments - Broad Screening of likelihood of policy changes to result in negative effects upon any Natura 2000 sites

Natura 2000 sites within 15km of the District, only 4 were likley to be at any risk of negative impacts and so would warrant further review. These are: Bath & Bradford on Avon Bat SAC; Mells Valley SAC; Chew Valley SAC & the North Somerset and Mendip Hills SAC

			Whitchurch 200 dwellings		Odd Down 300 dwellings	
NATURA 2000 SITE NAME	QUALIFYING FEATURES	CONSERVATION OBJECTIVES SUMMARY	Scope for effects to occur	Reasons	Scope for effects to occur	Reasons
Bath & Bradford-on-Avon Bats SAC	**Annex II species that are a primary reason for selection of the site:** *Rhinolophus ferrumequinum* (Greater horseshoe bat) ***Myotis bechsteinii*** (Bechstein's bat) **Annex II species present as a qualifying feature, but not a primary reason for selection of this site:** *Rhinolophus hipposideros* (Lesser horseshoe bat)	CO's are by SSSI. COs relevant to the SAC: To maintain, in favourable condition, habitats for the population of Rhinolophus ferrumequinum (Greater horseshoe bat), Rhinolophus hipposideros (Lesser horseshoe bat) and Myotis bechsteinii (Bechstein's bat).	unlikley	distance from SAC	Likely	Proximity to SAC and position within 5km sustenance zone; and proximity and inclusion of optimum habitat features: potential impacts upon foraging grounds and flight lines.
Chew Valley SPA	Internationally important bird assemblage. This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species: Over winter: *Anas clypeata* (Shoveler)	No significant decrease in relation to water reference level. No significant displacement of birds attributable to human disturbance. No significant reduction in presence and abundance of food species including aquatic plants and aquatic invertebrates.	unlikley	distance from SPA	unlikely	Distance from SPA
Mells Valley SAC	**Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** Semi-natural dry grasslands and scrubland facie: on calcareous substrates (*Festuco-Brometalia)* Caves not open to the public **Annex II species that are a primary reason for selection of the site:** *Rhinolophus ferrumequinum* (Greater horseshoe bat)	CO's are by SSSI. COs relevant to the SAC: To maintain, in favourable condition, the Caves not open to the public and Semi-natural dry grasslands. And, to maintain, in favourable condition, habitats for the population of *Rhinolophus ferrumequinum* (Greater horseshoe bat).	unlikley	distance from SAC	possible	Position between Combe Down SAC componets & Mells Valley SAC 5Km sustenance zone : potential impacts upon important commuting routes.
North Somerset and mendip Bats SAC	Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Semi-natural dry grasslands and scrub facies on calcareous substrates (*Festuco-Brometalia*) *Tilio-Acerion* forests of slopes, screes and ravines **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** Caves not open to the public **Annex II species that are a primary reason for selection of the site:** *Rhinolophus ferrumequinum* (Greater horseshoe bat) *Rhinolophus hipposideros* (Lesser horseshoe bat)	CO's are by SSSI. COs relevant to the SAC: To maintain, in favourable condition, habitats for the population of Rhinolophus ferrumequinum (Greater horseshoe bat) and Rhinolophus hipposideros (Lesser horseshoe bat)	unlikley	distance from SAC	unlikely	distance from SAC

Ensleigh extension 120 dwellings		Weston 300 dwellings		South West Keynsham 200 dwellings		East of Keynsham 250 dwellings + employment space		Somer Valley 300 (no specified locations, but small sites up to 150, possibly greenfield)		Rural areas 200 (focussed on R1 villages)	
Scope for effects to occur	Reasons	Scope for effects to occur	Reasons	Scope for effects to occur	Reasons	Scope for effects to occur	Reasons	Scope for effects to occur	Reasons	Scope for effects to occur	Reasons
possible	Proximity to SAC and position within 5km sustenance zone; but lack of optimum habitat: limited potential impacts upon foraging grounds and flight lines.	Possible	Position within/adjacent to 5km sustenance zone; and inclusion and proximity to optimum habitat:potential impacts upon foraging grounds and flight lines.	unlikley	distance from SAC	unlikley	distance from SAC	possible	Position between Combe Down SAC componets & Mells Valley SAC 5Km sustenance zone : potential impacts upon important commuting routes.	possible	development witin rural areas could impact upon foraging grounds and flight lines
unlikley	Distance from SPA	unlikley	Distance from SPA	unlikley	distance from SPA	unlikley	distance from SPA	unlikley	distance from SPA	possible	development could affect water levels and flight paths of importance to shovelers
unlikley	Distance from SAC	unlikley	distance from SAC	unlikley	distance from SAC	unlikley	distance from SAC	possible	Position between Combe Down SAC componets & Mells Valley SAC 5Km sustenance zone : potential impacts upon important commuting routes.	possible	development witin rural areas could impact upon foraging grounds and flight lines
unlikely	Distance from SAC	unlikley	distance from SAC	unlikley	distance from SAC	unlikley	distance from SAC	unlikley	distance from SAC	possible	development witin rural areas could impact upon foraging grounds and flight lines

Bath and North East Somerset Policy Changes to the Submitted Core Strategy – assessment under the Habitat Regulations - supporting document.

Purpose of this report

This reports describes the background and findings of the Habitat Regulations Assessment that has been undertaken of the policy changes made to the submitted Core Strategy following suspension of the Core Strategy Examination in June 2012. The full technical report: HRA Review of Proposed Policy Changes to the Submitted Core Strategy (March 2013) is attached.

Habitat Regulations Assessment (HRA) is an iterative process, involving consultation and liaison with Natural England. HRA recommendations from different stages of the Core Strategy production have been incorporated into the final changes being reviewed here. Of significant note are a series of site development requirements which have been identified for the new housing areas now proposed, and inclusion of a point of clarity within the text of the Proposed Changes to the Submitted Core Strategy.

Background

The Core Strategy Examination was suspended in June 2012 to enable the Council to undertake further work to address the Inspector's preliminary conclusions (see document ID/28 and ID/30). Following this work the Council is proposing changes to the Submitted Core Strategy.

Habitat Regulations Assessment

Habitat Regulations Assessment (HRA) is essentially a process and tool defined by statute to prevent development plans or projects causing significant adverse effects to habitats and species of European importance.

Sites of European importance form part of a Europe wide network of sites known as Natura 2000. They provide ecological infrastructure for the protection of rare, endangered or vulnerable natural habitats and species of exceptional importance within the European Union. The network comprises Special Areas of Conservation (SACs), designated for their important habitats and species under the EC Habitats Directive 1992, and Special Protection Areas (SPAs) classified under the EC Birds Directive 1979.

There are 13 Natura 2000 sites within a 15km radius around the district.

Within England these sites are now protected through the The Conservation of Habitats and Species Regulations 2010. These replace the Conservation (Natural Habitats &c) Regulations 1992 which were amended a number of times. In particular,

the Regulations were amended in August 2007 to implement a judgement of the European Court of Justice. A principle requirement of this amendment was for Local Planning Authorities to assess the potential impacts of land use plans upon the conservation objectives of any European site that could be affected.

The purpose of HRA of land use plans is to ensure that the protection of European sites is a clear part of the planning process, and to ensure that development plans do not promote development that could contravene the Regulations. The majority of development associated with Core Strategies will require planning permission and in many instances project level HRA will be required. Nonetheless Core Strategies must demonstrate sufficient safeguards/measures to avoid potential risks down the line.

Local Context and approach to HRA

An important ambition for the Bath & North East Somerset Core Strategy is to achieve a strategy that will protect and enhance the natural environment, and avoid any reasonable likelihood of significant negative effects upon sites of European importance, either within, or adjacent to the district.

The HRA process is iterative and on-going, and should help inform and guide the production of planning policy documents to help prevent harm or damage to European sites. For the B&NES Core Strategy, a series HRAs have been used to help shape and guide emergence of the document from the Options stage through to the Draft Core Strategy (Publication Document).

An interim HRA of the Bath & North East Somerset Core Strategy Options Document was published in September 2009. This assessment comprised an initial screening and review of the European Sites likely to be affected by the options being considered; an initial assessment of likely impacts, and also included a series of recommendations to enable the Draft Core Strategy (Publications Document) to avoid any likely significant effects upon European sites. The interim HRA was included within the public consultation on Core Strategy Options and was subject to consultation with Natural England.

This process identified that of the 13 European sites within or in close proximity (15km zone) to the district, 3 were considered to be potentially at risk of any impacts from the type and extent of land-use change being considered. The recommendations made to avoid impacts to European sites were fed into the Draft Core Strategy (Publications Document).

The HRA process for the Draft Core Strategy (Publication Document) was completed in November 2010. The process was again iterative and a series of recommendations and requirements were made to help the strategy avoid the likelihood of policies resulting in a significant effect on any European site. These recommendations were accepted and changes were made to the Draft Core

Strategy for submission where appropriate. However, a number of policies were identified that had the potential to lead to negative impacts further 'down the line' when the sites for development were allocated. This led to the requirement/ recommendation that the future Place Making Plan Document would have a major role to play in the protection of European sites. This requirement was recognised and supported. On this basis the HRA concluded that the Draft Core Strategy (Publication Document) was not likely to result in any significant effects to any European site within or adjacent to the district, either alone or in combination with other plans or projects.

The Core Strategy was submitted for Examination in Public in May 2011. However, the examination was suspended in June 2012 to enable the Council to do further work to respond to the Inspector's preliminary conclusions (see ID/28 and ID/30). Policy changes to provide for additional housing have been made and other more minor changes are also required. The principal policy change required in the context of HRA is the provision for an additional 1870 houses across 8 different locations/areas.

The HRA process was then applied to this major policy change, looking at the possible impacts of the housing numbers and location proposed, and the likelihood of any significant effects upon any European site. This HRA is included in Appendix A. Key recommendations from this HRA included the need for specific site development requirements and the need of a point of clarity with the final Draft Core Strategy Text. These recommendations have been taken on board within the final policy changes considered here.

Methodology & findings

The HRA process draws upon a range of national guidance documents as detailed at the end of this report. The key stages to the process are:-

> Step 1: Evidence gathering and scoping of European sites that could be affected by the plan
>
> Step 2: Screening plan proposals for likely significant effect
>
> Step 3: Appropriate Assessment of any plan elements considered likely to effect the integrity of a European site, and plan modification where necessary.

The HRA required at this stage relates to policy changes being made to the Submitted Core Strategy that has already been subject to the iterative HRA process. The majority of the changes involve minor re-wording or the addition / deletion of clauses to policies, of no real consequence to impacts upon European sites. The important changes involve the identification of new housing areas at Bath, Keynsham and Whitchurch, involving change to the Green Belt boundaries; and increased housing numbers at un-specified locations within the Somer Valley and

Rural areas.

Step 1 was briefly re-visited to ensure site information was up to date and accurate, and this was supported by a 'peer group' review meeting of local authority ecologists and bat experts to review data sharing and knowledge of local SAC bats interests, and SAC bat movements.

Figure 1 shows the European sites within 15km of the district. Appendix B summarises the details of these sites, and provides a broad assessment of likely impacts. Four of these sites were identified as needing further review and scrutiny in the context of the policy changes being considered:

1. Bath & Bradford on Avon Bats SAC
2. North Somerset and Mendip Bats SAC
3. Mells Valley SAC
4. Chew Valley Lake SPA

Details of these sites and their special interest features are provided within the HRA Review of Proposed Policy Changes to the Submitted Core Strategy March 2013 attached.

Step 2 identified that the majority of policy changes, involving some rewording of strategic policies, are judged to fall into category A (no impact) or category E (Appropriate for lower teir assessment). Those falling in category A require no further action. Those falling within category E will require further detailed consideration and assessment as they are progressed and refined through the lower tier Place Making Plan.

The detailed HRA process for the most significant policy changes (as approved by Council on 4th March 2013) concludes that whilst there was some potential for significant impacts to result from development at Odd Down, Ensleigh and Weston, this could be avoided by inclusion of development requirements within the strategic policies, and through the requirement of Place Making plan to be subject to the HRA process. Detailed site requirements were therefore added into the policy changes, and these policies were then assessed as category B (no significant impact). No in-combination effects were identified.

To provide added clarity and certainty the changes to the Submitted Core Strategy also include the following addition to the text with the District Wide section:

"For clarity, development likely to have a significant effect on a European site either alone or in combination with other plans or projects, and which cannot be adequately mitigated, would not be in accordance with the development plan."

Conclusion

The combination of measures outlined above provides a robust approach for the Proposed policy changes to the submitted Core Strategy to avoid any likelihood of a significant adverse effect upon any European Site. Therefore the HRA does not progress to Step 3 of the HRA process, and concludes that the policy changes are not likely to result in a significant effect upon any European site either alone or in combination with other plans or projects.

Appendix A:

HRA of main policy changes to the Bath and North East Somerset Submitted Core Strategy Conservation of Habitats and Species Regulations 2010

HRA of main policy change to the Submitted Core Core Strategy Conservation of Habitats and Species Regulations 2010

PART A: The Proposal

Policy change to the B&NES Core Strategy to provide an additional 1,870 houses across 8 different locations/areas.

Type of application: Core Strategy – Policy change

Application site: Map Attached as Appendix C (Core Strategy Key Diagram – see identified development locations)

Brief description of proposal: To provide strategic housing sites with capacity for an additional 1,870 houses as follows:

Land adjoining Odd Down	300
Extension to MoD, Ensleigh	120
Land adjoining Weston	300
Land adjoining East Keynsham	250
Land adjoining South West Keynsham	200
Land at Whitchurch	200
Somer Valley	300
Rural Areas	200

European site name(s):

Bath & Bradford on Avon Bats (SAC)

Mells Valley (SAC)

North Somerset and Mendip Bats Special Area of Conservation (SAC)

Chew Valley Lake (SPA**)**

Introduction

This Core Strategy Policy change has been considered under The Conservation of Habitats and Species Regulations 2010. In particular, the policy change is examined with regards to its impact on the "special interest features" of the Bath and Bradford on Avon Bats Special Area of Conservation (SAC), the Mells Valley SAC, the North Somerset and Mendip Bats SAC, and the Chew Valley Lake SPA. The policy change "must be compliant with the legal obligation to maintain in 'favourable condition' the conservation objectives of these Natura 2000 sites (SACs and SPAs)".

As the competent authority, B&NES is required to carry out this initial assessment and if a likely significant effect is identified, to then continue on with investigating the potential effects more fully in the form of 'Appropriate Assessment'. Ultimately the policy change must be compliant with the legal obligation to maintain in 'favourable condition' the bat conservation objectives of the SACs, and the Special bird assemblage interest of the SPA. An essential attribute to the SAC Conservation objectives are the flight lines and foraging areas for bats in surrounding habitat. Most pertinently, in the case of Greater Horseshoe Bat (Rhinolophus ferrumequinum), flight lines must be free of any unnatural night-time illumination, and good foraging habitat should ideally be retained within at least the 5km sustenance zones of each SAC**.**

Part B: The European Sites (Natura 2000) potentially affected

1) Bath and Bradford-on-Avon Bats Special Area of Conservation (SAC)
Component Sites of Special Scientific Interest (SSSIs): Combe Down and Bathampton Down Mines; Winsley Mines; Box Mine; Browns Folly

Conservation Objectives

The conservation objectives for the European interest on the SSSI are:

to maintain*, in favourable condition, the habitats for the population of:

- Greater Horseshoe Bat (Rhinolophus ferrumequinum) (all component SSSIs)
- Lesser Horseshoe Bat (Rhinolophus hipposideros) (all component SSSIs)
- Bechstein's Bat (Myotis bechsteinii) (Box Mine SSSI)

*maintenance implies restoration if the feature is not currently in favourable condition.

2) Mells Valley Special Area of Conservation (SAC)
Component Sites of Special Scientific Interest (SSSIs) Old Ironstone Works SSSI, Mells; St Dunstan's Well Catchment SSSI and Vallis Vale SSSI

Conservation Objectives

The conservation objectives for the European interest on the SSSI are:

to maintain*, in favourable condition, the habitats for the population of:

Greater Horseshoe Bat *(Rhinolophus ferrumequinum*) (all component SSSIs)

*maintenance implies restoration if the feature is not currently in favourable condition.

Site Name & Designation:

3) North Somerset and Mendip Bats Special Area of Conservation (SAC) Component Sites of Special Scientific Interest (SSSIs): Banwell Ochre Caves, Brockley Hall Stables, Compton Martin Ochre Mine, King's Wood and Urchin Wood, The Cheddar Complex and Wookey Hole.

Conservation Objectives

The conservation objectives for the European interest on the SSSI are:

to maintain*, in favourable condition, the habitats for the population of:

- Greater horseshoe bat (*Rhinolophus ferrumequinum*)
- Lesser horseshoe bat (*Rhinolophus hipposideros*)

* maintenance implies restoration if the feature is not currently in favourable condition.

Chew Valley Lake (SPA)

Conservation Objectives

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive

LIST OF SENSITIVE INTEREST FEATURES

1) **Bath & Bradford on Avon Bats SAC**

The site is designated under Article 4(4) of the Habitats Directive as it hosts the following species listed in annex 2:-

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

Greater Horseshoe Bat (GHB) *Rhinolophus ferrumequinum*

This site in southern England includes the hibernation sites associated with 15% of the UK Greater Horseshoe bat population and is selected on the basis of the importance of this exceptionally large over-wintering population.

Bechstein's Bat *Myotis bechsteinii*

Small numbers of Bechstein's bats have been recorded hibernating in abandoned mines in this area, though maternity sites remain unknown.

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

Lesser Horseshoe Bat *Rhinolophus hipposideros*

The Bath & Bradford on Avon SAC site comprises an extensive network of caves, mines and manmade tunnels which are used by bats for hibernation, mating and as a staging post prior to dispersal. The stone mines have been identified as a hibernation site for Lesser Horseshoe bats.

2) **Mells Valley SAC**

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

Greater horseshoe bat *Rhinolophus ferrumequinum*

Mells Valley in southern England is selected on the basis of the size of its exceptional breeding population. It contains the maternity site associated with a population comprising about 12% of the UK Greater Horseshoe Bat ("GHB") *Rhinolophus ferrumequinum* population. A proportion of the population also hibernates at the site, though other hibernation sites remain unknown.

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

Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)

Caves not open to the public

3) North Somerset and Mendip Bats

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

6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia)*

The Cheddar complex and Wookey Hole areas support a wide range of semi-natural habitats including semi-natural dry grasslands. The principal community present is CG2 *Festuca ovina – Avenula pratensis* grassland which occurs on rock ledges and on steep slopes with shallow limestone soil, especially in the dry valleys and gorges and on the south-facing scarp of the Mendips. The site is also important for the large number of rare plants which are associated with Carboniferous limestone habitats. These include dwarf mouse-ear *Cerastium pumilum*, Cheddar pink *Dianthus gratianopolitanus* and rock stonecrop Sedum f*orsterianum*, which occur on rocks, screes, cliffs and in open grassland. Transitions to and mosaics with limestone heath, calcareous screes, scrub and 9180 *Tilio-Acerion* forests are a particular feature of the Cheddar complex part of the site.

9180 *Tilio-Acerion* forests of slopes, screes and ravines * Priority feature

The main block of *Tilio-Acerion* forest at Kings and Urchin's Wood has developed over limestone which outcrops in parts of the site and forms a steep scarp to the south-east. Ash *Fraxinus excelsior* predominates in the canopy with small-leaved lime *Tilia cordata*, yew *Taxus baccata* and elm *Ulmus* spp., mostly formerly coppiced, but including some pollard limes. There is a rich ground flora including lily-of-the-valley *Convallaria majalis*, columbine *Aquilegia vulgaris*, angular Solomon's-seal *Polygonatum odoratum* and purple gromwell *Lithospermum purpureocaeruleum*.

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

8310 Caves not open to the public

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

1303 Lesser horseshoe bat *Rhinolophus hipposideros*

The limestone caves of the Mendips provide a range of important hibernation sites for lesser horseshoe bat Rhinolophus hipposideros and 1304 greater horseshoe bat *Rhinolophus ferrumequinum.*

1304 Greater horseshoe bat *Rhinolophus ferrumequinum*

This site in south-west England is selected on the basis of the size of population represented (3% of the UK greater horseshoe bat *Rhinolophus ferrumequinum* population) and its good conservation of structure and function, having both maternity and hibernation sites. This site contains an exceptionally good range of the sites used by the population, comprising two maternity sites in lowland north Somerset and a variety of cave and mine hibernation sites in the Mendip Hills.

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

Features common to these bat SACs

The bats using the SACs rely on range of features and habitats outside the designated site boundaries.

These include permanent grassland, scrub and woodland, linear features such as tree-lines, hedgerows, watercourses and connecting habitats. These are important to bats as feeding corridors and commuting routes. Other roost sites are also important. Features that are significant in terms of their contribution to sustaining the bat population of a SAC are also subject to protection under the Habitats Directive.

The commuting range of GHB is typically 4km, can be up to 15km, and exceptionally can be much more.

4) Chew Valley Lake SPA

This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

Over winter;

Shoveler Anas clypeata, 503 individuals representing up to 1.3% of the wintering Northwestern/Central Europe population (5 year peak mean 1991/2 - 1995/6)

Is the proposal directly connected with or necessary to the management of the European site for nature conservation? No

PART C: Risk Assessment

Discussion and Assessment of likely effects and their significance

The policy change would result in 3 sizeable green field development locations (120-300units) around the northern and southern edges of Bath; 2 development locations to either the east or south west of Keynsham; 1 development location at Whitchurch (close to the south east edge of Bristol), together with more limited development, at as yet unspecified, sites within the Somer Valley area; and a number of smaller sites within the rural area associated with the villages meeting the criteria of Policy RA1 (currently Bishop Sutton, Temple Cloud, Timsbury and Clutton) and limited development at RA2 villages. The distribution of the main allocated locations proposed are shown on the map at Appendix C.

Broad screening of the likelihood of this policy change to result in negative effects upon any European sites is provided in Appendix 1. This identifies the possibility of impacts at land adjoining Odd Down, Ensleigh, Somer Valley and in the Rural areas. These locations therefore require further investigation and systematic assessments of likely impacts on the site specific features and attributes of the European sites likely to be affected provided in Appendix B.

None of the development locations or development areas would result in either direct or indirect impacts upon the physical aspects of the designated SAC components or the SPA site (see Appendix 2).

The only concern for the Bat SACs arises from the potential to damage or disturb important foraging grounds or flight lines. It is feasible that foraging areas and flight lines of importance to different SAC units could be adversely effected, either through direct habitat loss, or through disturbance and degradation of habitat quality (from increased urban fringe pressures including increased recreation pressures). The likelihood of these impacts vary with the location and scale of development being proposed, and are considered greatest for the Weston and Odd Down locations.

Given that the likelihood of any these impacts occurring would depend upon the precise location; layout and design of development, and that this is not defined by the Core Strategy Policy Changes, measures can be included to prevent this outcome through the identification of development site requirements. These would inform and influence lower tier policy documents, notably the Place Making Plan, which itself will be subject to the HRA process.

Land adjoining Odd Down

The Odd Down location was subject to quite detailed HRA scrutiny when the location was being considered for an urban extension for upwards of 800 housing units (at the Core Strategy Spatial Options stage). Detailed bat foraging studies were undertaken around the site which identified that the southern tree belt within the site

represents an important SAC bat foraging feature and flight line. The main developable area of the location was not found to be of significance to SAC bats. Impacts of lighting and urban fringe pressures were of concern.

This previous HRA screening work concluded that the specific site allocation SWB Option 2 (Odd Down/Southstoke): “could result in a likely significant effect to the Bath and Bradford Bat SAC. It may be possible to modify the Options and or include mitigation measures within the Publication document to avoid this outcome”

This location is now being considered for 300 homes, to be located within the main plateau area. It is considered that with specific development requirements a significant impact upon the integrity of the Bat SACs is not likely.

Development requirements:

Retention, buffering and management of the southern tree belt to retain foraging and flight line function at the southern edge of the site. Controlled light levels to support bat use of the tree belt, including zones of no artificial light adjacent to the protected tree belt, and limited luminecence of 0.1lux of ecological features retained or created within the site. Provision of high quality open space within the development or as a buffer to existing high quality foraging habitat to the south of the site. This to be designed to minimise urban fringe pressures on existing land-use practice to the south.

Land adjoining Weston

The Weston area has not been subject to any previous HRA work or detailed bat surveys. The area has been subject to a walk over survey / habitat assessment of SAC bat interests (Ransome 2013). This review provides an overall bat habitat assessment, and indicates some key features and areas considered most likely to be of importance to SAC bats. The walk over also suggests some areas considered much less likely to be used by foraging horseshoe bats, of low sensitivity for SAC bat interests, particularly given the distance of the location from known roost sites. Given no direct habitat loss or impacts to the SAC site, it is concluded that some development would be feasible without adversely affecting the integrity of the SAC, subject to specific development requirements.

Development requirements:

Avoidance and adequate protection of habitat features of importance to bat foraging and commuting through an ecological site master plan. Detailed survey work to be undertaken prior to master-planning the site to determine key flight lines across the

site and key foraging areas within or adjacent to the site. Key flight lines and foraging areas will be retained, enhanced and buffered within the master plan, and measures will include restrictive lighting as appropriate.

Ensleigh

The Ensleigh location is not characterised with significant areas of good SAC bat foraging habitat or flight lines likely to be of importance. However, it lies adjacent to potentially good SAC bat habitat, to the north. Increased recreational pressures could result in a decline of foraging habitat quality off-site, particularly if the development results in the in-sensitive displacement of existing sport facilities. Given the small number of housing units proposed here, these impacts are likely to be small. Nonetheless measures would be required to manage recreational pressures through the provision of on- site open space, and well located alternative sports provision, through well designed green infra-structure and site master planning. The site does include some linear features which may warrant retention, or replacement.

Development requirements: *retain existing linear habitat features on site; provide well planned open space and GI to absorb increased recreational pressures***.**

Somer Valley

No specific development locations are proposed within the Somer Valley, but the area is identified to accommodate an additional housing 300 units. The area is sensitive in relation the Bath & Bradford and Mells Valley SAC sites, due to bat movements between the two SACs. Damage or disruption to key flight lines could be significant. However, it would be feasible to avoid or minimise such impacts through the retention and protection of linear features and dark corridors. It is considered that such an approach could be achieved through site design requirements, with clear requirements to deliver Habitat Regulation objectives through an appropriate Place Making Plan Policy.

Development requirements: *Avoidance and adequate protection of habitat features of importance to bat foraging and commuting through ecological site master plans. Detailed survey work will be undertaken prior to master-planning sites to determine key flight lines across the sites and key foraging areas within or adjacent to the sites. Key flight lines and foraging areas will be retained, enhanced and buffered within the master plan, and measures will include restrictive lighting as appropriate.*

This would need to feed into the Place Making Development Plan.

Rural Areas

Development within the Rural Area will be primarily focussed on villages meeting the RA1 criteria, with some limited development in RA2 villages. The RA1 villages are currently Clutton; Timsbury; Temple Cloud & Bishop Sutton (Note: Batheaston and Saltford currently meet the Policy RA1 criteria but development of around 50

dwellings at these villages is not relied upon in the Core Strategy as it would probably require a change to the Green Belt boundary for which exceptional circumstances would be needed) . Of these only Bishop Sutton is located with the 5km sustenance zones of a bat SAC. Bishop Sutton is also in close proximity to Chew Valley Lake SPA, being located on its eastern side. Development at Bishop Sutton could potentially result in increased recreational pressures and disturbance to the over wintering birds, and loss or degradation of SAC bat foraging areas or flight lines.

The RA2 villages are Camerton; Compton Martin, East Harptree, Farrington Gurney; Hallatrow, Hinton Blewett, Ubley and West Harptee. Of these Compton Martin; East Harptree, West Harptree, Ubley and Hinton Blewett are all within the 5km sustenance zone of the North Somerset and Mendips SAC, and are in close proximity to Chew Valley Lake SPA. Development at these locations could potentially result in increased recreational pressures and disturbance to the over wintering birds at the SPA, and loss or degradation of SAC bat foraging areas or flight lines.

However, the scale of additional housing proposed in both the RA1 and RA2 villages is small, and seeks to avoid significant green field development in more unsustainable locations. It is considered that potential impacts could be mitigated through the provision of new or improved recreational opportunities away from sensitive areas of Chew Valley Lake, and through development requirements designed to avoid damage or loss of important SAC bat habitat.

Place Making Plan Policy requirement: *All development within B&NES, and specifically, all new housing proposals, must clearly demonstrate how site design proposals will help to maintain the integrity of Natura 2000 sites. For SAC sites this to include the protection and enhancement of important bat foraging areas and flight lines.*

Possible In combination effects

Major projects or plans that are active or which may come forward during the lifetime of this policy change, and which are relevant in terms of potential impacts and proximity to Natura 2000 sites are assessed as :

- Wiltshire Core Strategy : notably housing provision at Bradford on Avon
- West of England Joint Local Transport Plan 3, 2O11 — 2O26 : notably the Greater Bristol Bus Network; Bath Transport Package, and longer term aspirations (Temple Cloud/Clutton Bypass; Whitchurch Bypass; Saltford Bypass)

- West of England Joint Waste Core Strategy March 2011; includes provision of a residual waste treatment facility at the former Fuller's Earth Works, at the Fosseway, Bath
- Electrification of the Railway – main railway line through B&NES

1) HRA work for the Wiltshire Core Strategy resulted in recommendations for further guidance for developers in relation to developing in close proximity to SAC bats, and notes:

   'Wiltshire Council is developing guidance for development surrounding the Bath and Bradford Bats SAC and associated roost sites. This will include guidance for developers and planners, and a procedure to ensure that any likely significant effects upon the SAC are identified and assessed at the application stage. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy'.

This will help to protect and sustain key SAC bat foraging areas and flight-lines and so no significant 'in-combination' effects are considered likely.

1. The main elements of the West of England Joint Transport Plan were considered within the HRA of the B&NES Core Strategy Publication Document. It was noted that the Core Strategy includes an over-arching policy for the provision of infra-structure that requires protection of European Sites. This remains the case, and in parallel with the development requirements associated with this policy change, no 'in-combination' effects are considered likely.

2) The west of England Joint Waste Core Strategy March 2011 includes provision of a residual waste treatment facility at the former Fuller's Earth Works, at the Fosseway, Bath, well within the Bath & Bradford on Avon SAC 5km sustenance zone. There are historic records of a Greater Horseshoe Bat Night Roost at this location and so impacts upon SAC bat foraging conditions are feasible. However, the Strategy includes development requirements at this location to ensure no adverse effects on the integrity of the SAC or bat species. No 'in-combination' effects are therefore considered likely.

3) The Electrification of the main line railway through B&NES is a major government initiative (largely with Permitted Developments rights within existing Network Rail's operational boundaries). If the railway corridor, either in whole or in part, is used by SAC bats for foraging or commuting, there is

some potential for adverse impacts to result from any habitat clearance required. Some sections through B&NES are well wooded and could contribute to key flight lines or foraging areas. However, Core Strategy policy requirements for protection of the integrity of SAC sites, and the specific development requirements for the policy change, dictate that no adverse impacts on the integrity of the SAC are anticipated. No 'in-combination' effects are therefore considered likely.

Conclusions and final recommendations

Whilst there is some potential for significant impacts to result from development at Odd Down, Ensleigh and Weston, the likelihood on any impacts occurring would depend upon the precise location; layout and design of development. This is not defined by the Core Strategy Policy Changes. This will be informed and influenced by lower tier policy documents, notably the Place Making Plan, which itself will be subject to the HRA process. Therefore a series of development requirements are recommended for each of the sensitive areas, to avoid significant effects. In addition it is recommended that the Proposed Changes to the Submitted Core Strategy include the following point of clarification:

"For clarity, development likely to have a significant effect on a European site either alone or in combination with other plans or projects, and which cannot be adequately mitigated, would not be in accordance with the development plan."

On the basis of objective information available, and on the assumption that all development requirements and text changes are secured and properly implemented, the likelihood of a significant effect on the SACs identified is excluded in relation to this policy change

This applies to the implementation of the policy change individually and 'in combination' with other plans.

This process was informed by discussions with Natural England and the Council ecologist.

Is the potential scale or magnitude of any effect likely to be significant?

a) Alone?

(explain conclusion, e.g. in relation to de minimus criteria) **No**

b) In combination with other

plans or projects?

(Explain conclusion and which plans/projects have been included, including those associated with other functions). No

Appendix B: Details of European Sites within or adjacent to Bath & North East Somerset

Figure 1: map showing European Sites within 15km of the District.

Appendix B: Habitats Regulations - Broad Scoping					
NATURA 2000 SITE NAME	**QUALIFYING FEATURES**	**CONSERVATION OBJECTIVES SUMMARY**	**Vulnerabilities**	**Scope for effects to occur**	**Reasons/Comments**
Avon Gorge Woodlands SAC	**Annex I Habitats that are a primary reason for selection:** *Tilio-Acerion* forests of slopes, screes and ravines **Annex I Habitats present as a qualifying feature, but not a primary reason for selection of this site:** Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*)	CO's are by SSSI. COs relevant to the SAC: To maintain, in favourable condition, the *Tilio-Acerion* forests of slopes, screes and ravines; Semi-natural dry grasslands and scrubland facies on calcareous substrates.	Air quality - this site suffers from traffic generated road pollution. APIS report suggest site already exceeds the critical load for woodlands. Any increase in traffic generation could have an effect on this site. Habitat damage & disturbance from increased recreational pressures.	Not likely	Possible air pollution issue if Core Strategy generates traffic movements along the Portway. Polluting effects feasible due to configuration of gorge and road. Likelihood of significant increased traffic movements along the Portway considered low.
Bath & Bradford-on-Avon Bats SAC	**Annex II species that are a primary reason for selection of the site:** *Rhinolophus ferrumequinum* (Greater horseshoe bat) ***Myotis bechsteinii*** (Bechstein's bat) **Annex II species present as a qualifying feature, but not a primary reason for selection of this site:** *Rhinolophus hipposideros* (Lesser horseshoe bat)	CO's are by SSSI. COs relevant to the SAC: To maintain, in favourable condition, habitats for the population of *Rhinolophus ferrumequinum* (Greater horseshoe bat), *Rhinolophus hipposideros* (Lesser horseshoe bat) and *Myotis bechsteinii* (Bechstein's bat).	Potential for loss of foraging areas due to development; increased habitat disturbance & deterioration from urban impacts -noise, light pollution, domestic pets, increased recreational pressures. Horseshoe bats need suitable feeding areas close to their roosts (GHB typically forage 3-5km from roost & generally <1km in Spring & autumn; LHB forage v. close to roosts, in summer 2-3km) but ,will forage 9km+ from roosts at times. Their foraging requires permanent pasture grazed by stock, and a network of hedges and other linear features. Expansion of urban fringe areas could reduce livestock farming and adversely affect foraging habitat	likely	Possible impacts upon bat foraging grounds
Chew Valley SPA	Internationally important bird assemblage. This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species: Over winter: *Anas clypeata* (Shoveler)	No significant decrease in relation to water reference level. No significant displacement of birds attributable to human disturbance. No significant reduction in presence and abundance of food species including aquatic plants and aquatic invertebrates.	The lake is the main source of drinking water for the District with the exception of Bath, and is also a key recreational site (trout fishing, sailing and walking). The site is owned and managed by Bristol Water Plc, who implement a nature conservation strategy for the site, including a zoning scheme for the lake to safeguard wildlife. Potential for increase in visitors to the site and increased pressure on the quiet refuge area, and increases in water consumption.Shoveler numbers, and those of the other ducks, tend to be higher in years when there is significant late summer drawdown of water at Chew Valley Lake. The Draft Bristol Water Plan takes account of forecast growth to plan water supply for the next 25years.	possible	Possible issues related to wind turbines if migratory routes affected, and increased water consumption

NATURA 2000 SITE NAME	QUALIFYING FEATURES	CONSERVATION OBJECTIVES SUMMARY	Vulnerabilities	Scope for effects to occur	Reasons/Comments
Mells Valley SAC	**Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** Semi-natural dry grasslands and scrubland facie: on calcareous substrates (*Festuco-Brometalia)* Caves not open to the public **Annex II species that are a primary reason for selection of the site:** *Rhinolophus ferrumequinum* (Greater horseshoe bat)	CO's are by SSSI. COs relevant to the SAC: To maintain, in favourable condition, the Caves not open to the public and Semi-natural dry grasslands. And, to maintain, in favourable condition, habitats for the population of *Rhinolophus ferrumequinum* (Greater horseshoe bat).	Potential for loss of foraging areas due to development; increased habitat disturbance & deterioration from urban impacts -noise, light pollution, domestic pets, increased recreational pressures. Greater Horseshoe bats need suitable feeding areas close to their roosts (GHB typically forage 3-5km from roost & generally <1km in Spring & autumn) but ,will forage 9km+ from roosts at times. Their foraging requires permanent pasture grazed by stock, and a network of hedges and other linear features. Expansion of urban fringe areas could reduce livestock farming and adversely affect foraging habitat. Grassland & cave habitat vulnerable to increased recreational pressures and grassland vulnerable to increased. Vulnerable to air pollution from increased nitrogen deposition and acidic dust deposition.	possible	No direct impacts to SAC habitats and indirect impacts through air pollution and recreational pressures not likely to be significant. Greater Horseshoe Bats from Mells are known to forage within B&NES (Bob Corns pes com 2009), also Geof Belington's report identified a link between the BBA SAC bats and the Mells SAC. Further information needed to assess likelihood of any knock on effects.
Mendip Limestone Grasslands SAC	**Annex I habitats that are a primary reason for the selection of the site:** Semi-natural dry grasslands and scrub facies on calcareous substrates (*Festuco-Brometalia*) **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:** European dry heaths *Tilio-Acerion* forests of slopes, screes and ravines Caves not open to the public **Annex II species present as a qualifying feature, but not a primary reason for selection of this site:** *Rhinolophus ferrumequinum* (Greater horseshoe bat)	CO's are by SASSY. COs relevant to the SAC: To maintain, in favourable condition, the Tilio-Acerion forests of slopes, screes and ravines; Caves not open to the public; European dry heaths and Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco brometalia). And, to maintain, in favourable condition, habitats for the population of Rhinolophus ferrumequinum (Greater horseshoe bat). *Rhinolophus hipposideros* (Lesser horseshoe bat) are also included in the COs.	Habitat disturbance and degradation from increased recreational pressure and dog walking, and would be vulnerable to a reduction in live stock farming thats sustains the habitat. Vulnerable to air pollution from increased nitrogen deposition and acidic dust deposition.	no	Significant distance (approx 9km) from B&NES - no direct or indirect effects anticipated
Mendip Woodlands SAC	**Annex I habitats that are a primary reason for the selection of the site:** *Tilio-Acerion* forests of slopes, screes and ravines	CO's are by SASSY. COs relevant to the SAC: To maintain, in favourable condition, the *Tilio-Acerion* forests of slopes, screes and ravines.		no	Significant distance from B&NES - no indirect effects anticipated - potential for air pollution issues from road traffic generation discounted due to opportunities for dispersal of pollutants.

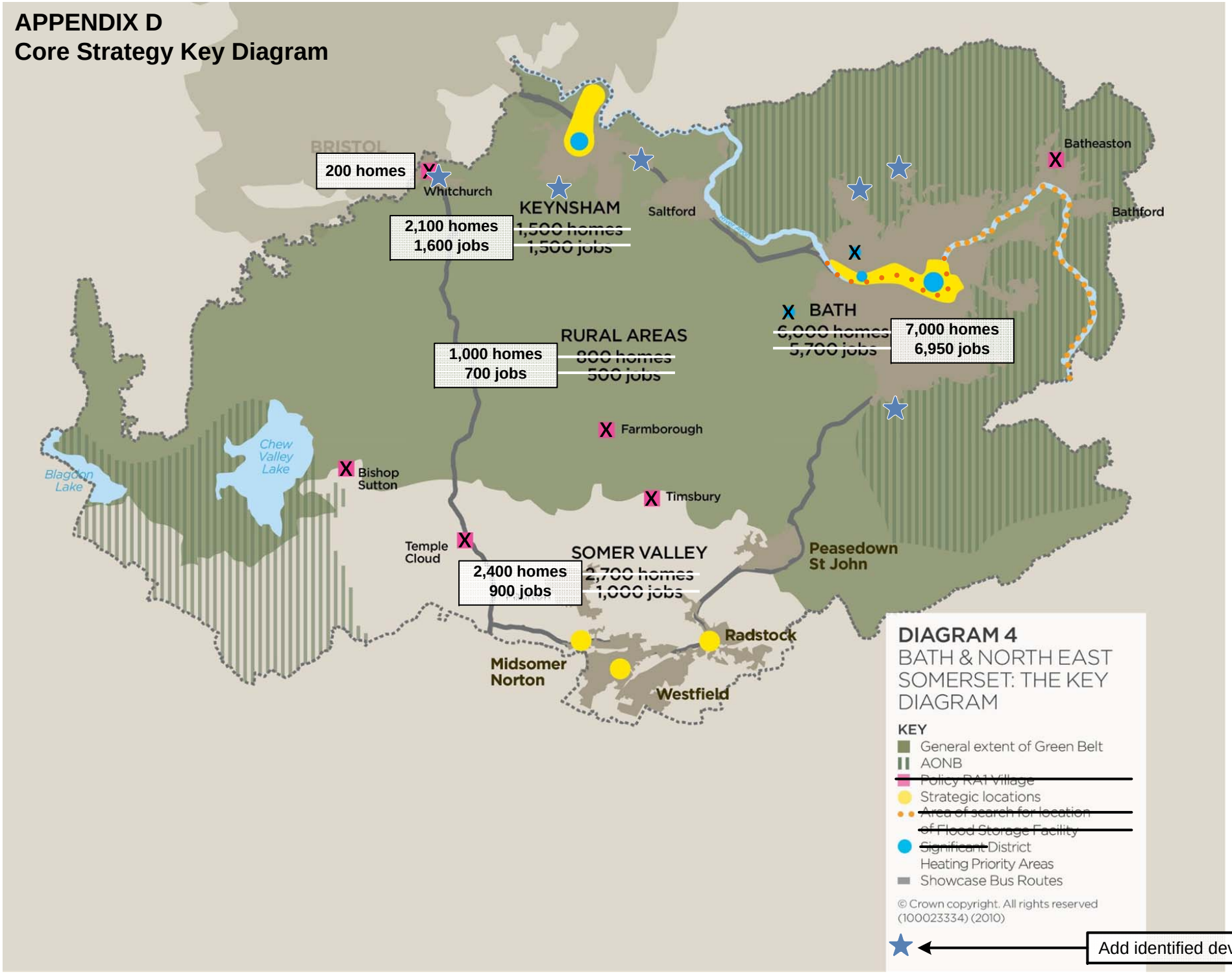
NATURA 2000 SITE NAME	QUALIFYING FEATURES	CONSERVATION OBJECTIVES SUMMARY	Vulnerabilities	Scope for effects to occur	Reasons/Comments
North Somerset and Mendip Bats SAC	**Annex I habitats that are a primary reason for the selection of the site:**	CO's are by SASSY. COs relevant to the SAC relate to Annex II species: To maintain, in favourable condition, habitats for the population of *Rhinolophus ferrumequinum* (Greater horseshoe bat) and *Rhinolophus hipposideros* (Lesser horseshoe bat).	Potential for loss of foraging areas due to development; increased habitat disturbance & deterioration from urban impacts -noise, light pollution, domestic pets, increased recreational pressures. Horseshoe bats need suitable feeding areas close to their roosts (GHB typically forage 3-5km from roost & generally <1km in Spring & autumn; LHB forage v. close to roosts, in summer 2-3km) but ,will forage 9km+ from roosts at times. Their foraging requires permanent pasture grazed by stock, and a network of hedges and other linear features. Expansion of urban fringe		
	Semi-natural dry grasslands and scrub facies on calcareous substrates (*Festuco-Brometalia*)				
	Tilio-Acerion forests of slopes, screes and ravines				
	Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:				
	Caves not open to the public				
	Annex II species that are a primary reason for selection of the site:				
	Rhinolophus ferrumequinum (Greater horseshoe bat)				
	Rhinolophus hipposideros (Lesser horseshoe bat)			possible	Possible impacts upon bat foraging grounds
River Usk / Afon Wysg SAC	**Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:**		Vulnerable to riparian habitat degradation from increased recreational pressures, reduced farming viability, and vulnerable to increased water abstraction.		
	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation				
	Annex II species that are a primary reason for selection of the site:				
	Petromyzon marinus (Sea lamprey)				
	Lampetra planeri (Brook lamprey)				
	Lampetra fluviatilis (River lamprey)				
	Alosa fallax (Twaite shad)				
	Salmo salar (Atlantic salmon)				
	Cottus gobio (Bullhead)				
	Lutra lutra (Otter)				
	Annex II species present as a qualifying feature, but not a primary reason for selection of this site:				
	Alosa alosa (Allis shad)			no	Significant distance from B&NES - no direct or indirect effects anticipated

NATURA 2000 SITE NAME	QUALIFYING FEATURES	CONSERVATION OBJECTIVES SUMMARY	Vulnerabilities	Scope for effects to occur	Reasons/Comments
River Wye / Afon Gwy SAC	**Annex I habitats that are a primary reason for the selection of the site:**	CO's are by SASSY. **These are dated 2001 and should be used with caution.** COs relevant to the SAC: To maintain, in favourable condition, floating formations of water crowfoot (*Ranunulus)* of plain and sub-mountainous rivers. Also populations of atlantic salmon *(Salmo salar),* allis shad *(Alosa alosa),* twaite shad *(Alosa fallax),* bullhead *(Cottus gobio),* brook lamprey *(Lampetra planeri),* river lamprey *(Lampetra fluviatilis),* sea lamprey *(Petromyzon marinu* s*),* white-clawed crayfish *(Austropotamobius pallipes).* Also the river adjoining land as habitat for populations of otter *(Lutra lutra).* ***Also contact CCW.***	Vulnerable to increased water abstraction and recreational pressures.		
	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation				
	Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:				
	Transition mires and quaking bogs				
	Annex II species that are a primary reason for selection of the site:				
	Austropotamobius pallipes (White-clawed crayfish (or Atlantic stream) crayfish)				
	Petromyzon marinus (Sea lamprey)				
	Lampetra planeri (Brook lamprey)				
	Lampetra fluviatilis (River lamprey)				
	Alosa fallax (Twaite shad)				
	Salmo salar (Atlantic salmon)				
	Cottus gobio (Bullhead)				
	Lutra lutra (Otter)				
	Annex II species present as a qualifying feature, but not a primary reason for selection of this site:				
	Alosa alosa (Allis shad)			no	Significant distance from B&NES - no indirect effects anticipated
Severn Estuary cSAC, SPA and Ramsar	**cSAC**	**cSAC & Ramsar**: **Note CO tables are to be completed in 2009**. To maintain, in favourable condition estuaries subtidal sandbanks; intertidal mudflats and sandflats; Atlantic salt meadows; reefs. Also, to maintain in favourable condition, River lamprey (*Lampetra fluviatilis)* , sea lamprey (*Petromyzon marinus*) and Twaite shad (*Allosa fallax*).	Habitats vulnerable to increased recreational pressures; habitat degradation from domestic & industrial pollution,& development; Habitat loss from Port expansion & other development.		
	Annex I habitats that are a primary reason for the selection of the site:				
	Estuaries				
	Mudflats abd sandflats not covered by seawater at low tide				
	Atlantic salt meadows				
	Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:				
	Sandbanks slightly covered by sea water all the time				
	Reefs				
	Annex II species that are a primary reason for selection of the site:				
	Petromyzon marinus (Sea lamprey)				
	Lampetra fluviatilis (River lamprey)				
	Alosa fallax (Twaite shad)				

	SPA	**SPA & Ramsar:** To maintain, in favourable condition, habitats for and the population of Berwick's swan and populations of regularly occurring migratory species including shelduck, dunlin, redshank, European white-fronted goose. And to maintain, in favourable condition habitat for and the assemblage of wintering waterfowl.			
	This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:				
	Over winter:				
	Cygnus columbianus bewickii (Bewick's swan)				
	Internationally important bird assemblage. This site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:				
	On passage:				
	Charadrius hiaticula (Ringed plover)				
	Over winter:				
	Numenius arquata (Curlew)				
	Calidris alpina alpina (Dunlin)				
	Anas acuta (Pintail)				
	Tringa totanus (Redshank)				
	Tadorna tadorna (Shelduck)				
	Ramsar	**See above (there are no individual COs for the Ramsar designation.**			
	Assemblage qualification: A wetland of international importance.				
	The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl				
	Criterion 1: Presence of *Annex I* features listed above for cSAC.				
	Criterion 3 : Unusual estuarine communities.				
	Criterion 4 : Run of migratory fish between sea and river via estuary.				
	Criterion 5/6 : Bird assemblages and species of international importance.				
	Criterion 8 : Diverse fish populations, important feeding, nursery ground and migration route.			no	Significant distance from B&NES - no indirect effects anticipated

NATURA 2000 SITE NAME	QUALIFYING FEATURES	CONSERVATION OBJECTIVES SUMMARY	Vulnerabilities	Scope for effects to occur	Reasons/Comments
Wye Valley & Forest of Dean Bat Sites SAC	**Annex II species that are a primary reason for selection of the site:** *Rhinolophus ferrumequinum* (Greater horseshoe bat) *Rhinolophus hipposideros* (Lesser horseshoe bat)	CO's are by SASSY. COs relevant to the SAC: To maintain, in favourable condition, habitats for the population of *Rhinolophus ferrumequinum* (Greater horseshoe bat), and *Rhinolophus hipposideros* (Lesser horseshoe bat). **Also contact CCW.**	Vulnerable to loss of foraging areas and roost disturbance due to increased development pressures; Expansion of urban fringe areas could reduce livestock farming and adversely affect foraging habitat.	no	Significant distance from B&NES - no indirect effects anticipated
Wye Valley Woodlands SAC	**Annex I habitats that are a primary reason for the selection of the site:** *Aspergo-fagetum* beech forests *Tilio-acerion* forests of slopes, screes and ravines *Taxus baccata* woods **Annex II species present as a qualifying feature, but not a primary reason for selection of this site:** *Rhinolophus hipposideros* (Lesser horseshoe bat)	CO's are by SASSY. COs relevant to the SAC: to maintain *Tilio-acerion* forests of slopes, screes and ravines; *Asperulo-Fagetum* beech forests and *Taxus baccata* woods in a favourable condition. And, to maintain in favourable condition habitats for the population of Lesser Horseshoe Bat (*Rhinolopus hipposiderous*). ***Also contact CCW.***	main vulnerability lack of and inappropriate management; potential increase in recreational pressures and habitat disturbance	no	Significant distance from B&NES - no indirect effects anticipated
Somerset Levels & Moors SPA and Ramsar	**This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:** Over winter: *Cygnus columbianus bewickii* (Bewick's swan) ***Pluvialis apricaria*** (Golden plover) **This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:** Over winter: *Anas clypeata* (Shoveler) *Anas crecca* (Teal) *Anas penelope* (Wigeon) **Ramsar** **Assemblage qualification: A wetland of international importance.** The area qualifies under **Article 4.2** of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl	**CO's have not been requested as part of the West of England Joint Waste Core Strategy HARD.**	habitat loss and degradation from increased development, increased recreational pressures and any reduction in sympathetic farming activities; water abstraction; sea level change.	no	Significant distance from B&NES - no indirect effects anticipated

APPENDIX D
Core Strategy Key Diagram



Nature 2000 Sites within and adjacent to B&NES

Sites within 15km zone

Compiled by KR on 28 October 2010 Scale 1:453124

Bath & North East Somerset Council
Trimbridge House
Trim Street
Bath BA1 2DP
Tel 01225 477000