Winchester Local Development Framework Habitat Regulations Assessment (HRA) Report

HRA (AA) of Pre-Submission Core Strategy

December 2011

prepared by

enfusion

HABITATS REGULATIONS ASSESSMENT (APPROPRIATE ASSESSMENT) REPORT

Winchester City Council Core Strategy - Pre-Submission

Prepared for: Winchester City Council

date:	December 2011	
prepared for:	Winchester City Council	
prepared by:	Alastair Peattie	Enfusion
quality assurance:	Barbara Carroll	Enfusion

enfusion
environmental planning and management for sustainability

Treenwood House
Rowden Lane
Bradford on Avon
BA15 2AU
t: 01225 867112
www.enfusion.co.uk

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APPENDICES

EXECUTIVE SUMMARY

0.1 Habitats Regulations Assessment (HRA) of spatial development plans is a requirement of the Habitats Directive (92/43/EEC) as set out in the Conservation of Habitats and Species Regulations 2010 (as amended 2011). This report details the Habitats Regulations Assessment for the Winchester Core Strategy (Pre-Submission). It sets out the method, findings and conclusions of the Screening and Appropriate Assessment (AA) stages of the HRA process.

0.2 The first stage of the HRA process (screening) considered the likely significant effects at the following European sites within the influence the plan:

- Butser Hill SAC
- Chichester and Langstone Harbours SPA/ Ramsar
- East Hampshire Hangers SAC
- Emer Bog SAC
- Mottisfont Bats SAC
- New Forest SAC/ SPA/ Ramsar
- Portsmouth Harbour SPA/ Ramsar
- River Itchen SAC
- Solent Maritime SAC
- Solent and Isle of Wight Lagoons SAC
- Solent and Southampton Water SPA/ Ramsar

0.3 Three of the European sites (Butser Hill SAC, East Hampshire Hangers SAC and Emer Bog SAC) were screened out of the assessment, given the location and sensitivities of the sites in relation to the location of development proposed in the Core Strategy. The screening concluded that the effects of the Plan were uncertain with regard to seven of the remaining European sites as a result of changes to air quality, water levels, water quality and levels of disturbance. It also concluded that the effects of the Core Strategy on four of the European sites were uncertain as a result of the loss and fragmentation of important supporting habitats. Based on the precautionary approach these issues were progressed through to the AA stage to be examined in more detail.

0.4 The AA considered the potential for the Core Strategy alone to have adverse effects on the integrity of the River Itchen SAC, Solent Maritime SAC and Solent and Southampton Water SPA/ Ramsar through reduced air quality, water levels and water quality, increased disturbance and the loss and fragmentation of supporting habitats. The potential for adverse effects alone predominantly arises as a result of the proposed location of development, which is in close proximity to the three European sites. The assessment noted that the impacts of individual developments are carefully regulated through development controls/ site management measures, including the requirement for project level HRA. The AA concluded that these measures along with

mitigation provided by Pre-Submission Policies and further recommendations provided by the AA would ensure that the Core Strategy alone will not have adverse effects on the integrity of the European sites.

0.5 The AA also considered the potential for the Core Strategy to have adverse in combination effects - with development proposed in surrounding areas - on seven of the identified European sites through reduced air quality, water levels and quality and increased disturbance. Given a lack of available evidence and ongoing studies, the AA was unable to conclude with certainty that the Core Strategy would not have adverse effects on the integrity of the identified European sites as a result of these issues. To strengthen the mitigation already proposed in the Plan the AA recommended a number of policy safeguards to help provide effective plan level mitigation that will contribute to minimising the impacts of proposed development on air quality, water levels and water quality. Recommendations included:

- the monitoring of air quality at key locations within or close to the proposed strategic sites;
- additional policy wording that supports the findings of the Solent Bird Disturbance and Mitigation Project and ensure any proposed strategic avoidance and/or mitigation measures are adopted;
- the requirement for any proposal on land at North Whiteley to incorporate suitable areas for dog walking;
- the requirement for sustainable water strategies to accompany all proposals for strategic developments; and
- seeking the incorporation of higher water efficiency measures in developments where suitable, in particular for strategic sites.

0.6 The assessment also considered the potential for the Core Strategy to have adverse in combination effects on the eight of the European sites through the loss and fragmentation of supporting habitats. The AA concluded that the potential impacts of proposed development on supporting habitats would most appropriately be addressed at the project level. Project level HRA would provide a detailed site level analysis of the importance of the site to the designated features, and provide suitable mitigation measures to reduce the adverse effects of the proposed development. The AA recommended additional policy wording to strengthen the protection of important supporting habitats within the Core Strategy.

0.7 Provided that the recommendations of the AA are incorporated, it is considered that the Core Strategy will contain effective strategic plan level mitigation to address the issues identified through the HRA process, as far as is possible within the remit of a planning document. The plan should, however be seen in conjunction with the need for wider measures (e.g. effective European site management and coordinated regional approaches to air quality). The findings of this plan level HRA do not obviate the need to undertake HRA for lower level, project scale/ implementation plans where there is potential for

a significant effect on one or more European Sites. Accordingly, this AA should be used to inform any future assessment work. It should also be revisited in the light of any significant changes to the Core Strategy and/ or if any further information becomes available.

0.8 These findings are subject to consultation comments and advice from NE and wider stakeholders.

0.9 In addition to the ongoing, statutory consultation undertaken with Natural England this HRA (AA) Report is available for wider public view and comment. Consultation on this HRA Report will take place in parallel with consultation on the Pre-Submission Core Strategy. The consultation period is from 25 January 2012 to 12 March 2012. All responses should be sent to:

Head of Strategic Planning
Winchester City Council
City Offices
Colebrook Street
Winchester
Hampshire
SO23 9LJ

Tel : 01962 840 222
Email : LDF@winchester.gov.uk

1.0 INTRODUCTION

1.1 Winchester City Council is currently preparing its Core Strategy for the District. The Core Strategy is one of three key documents to be prepared as part of the Local Development Framework (LDF). When adopted, the Core Strategy will provide the planning framework (vision, objectives, spatial development strategy and core policies for spatial planning) that guides development in the City and surrounding District over the period to 2031.

1.2 Enfusion Ltd was commissioned to carry out Habitats Regulations Assessment (HRA) of the Winchester Core Strategy DPD on behalf of the Council in their role as the competent authority. At the same time Enfusion was also commissioned to undertaken Sustainability Appraisal (incorporating Strategic Environmental Assessment [SEA]) of the Core Strategy and this work has been undertaken in parallel, with the two processes informing each other as appropriate.

Background

1.3 The HRA process for the Core Strategy began in 2008, when an HRA Screening Interim Report (Feb 2008) was produced to outline the processes and information gathered up to that point. The interim report informed the development of the HRA Screening for the Core Strategy Preferred Options. The findings of this screening process were reported in:

- Consultation Draft HRA Screening of Preferred Options (May 2009).

1.4 The Screening Report was subject to consultation advice from the statutory nature conservation body, i.e. Natural England (NE). The published document can be viewed at the Winchester City Council website as part of the Core Strategy evidence base: http://www.winchester.gov.uk/EnvironmentAndPlanning/Planning/General.asp?id=SX9452-A784BDF2&cat=6550

Purpose and Structure of Report

1.5 This report takes forward and updates the findings of the previous Screening Report (May, 2009). It assesses the new policies detailed in the Pre-Submission Core Strategy to determine whether predicted impacts arising from those policies, in implementation, have the potential to affect European sites. The report then progresses to the Appropriate Assessment (AA) stage to determine if the impacts identified through the updated Screening will have adverse effects on the integrity of European sites.

1.6 Following this introductory section the report is organised into four further sections:

- **Section 2** summarises the requirement for HRA and the background to the Winchester Core Strategy.
- **Section 3** outlines the Screening process and the findings of the screening assessment.
- **Section 4** outlines the AA process and the findings of the assessment, including avoidance and mitigation measures.
- **Section 5** summarises the findings of the HRA and sets out the next steps, including consultation arrangements.

2.0 HABITATS REGULATIONS ASSESSMENT (HRA) & THE PLAN

Requirement for Habitats Regulations Assessment

2.1 The Conservation of Habitats and Species Regulations 2010 (as amended 2011) [the Habitats Regulations] require that HRA is applied to all statutory land use plans in England and Wales. The aim of the HRA process is to assess the potential effects arising from a plan against the conservation objectives of any site designated for its nature conservation importance.

2.2 The Habitats Regulations transpose the requirements of the European Directive (92/43/EEC) on the Conservation of Natural Habitats and Wild Flora and Fauna [the Habitats Directive] which aims to protect habitats and species of European nature conservation importance. The Directive establishes a network of internationally important sites designated for their ecological status. These are referred to as Natura 2000 sites or European Sites, and comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) which are designated under European Directive (2009/147/EC) on the conservation of wild birds [the Birds Directive]. In addition, Government guidance also requires that Ramsar sites (which support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance [Ramsar Convention]) are included within the HRA process as required by the Regulations.

2.3 The process of HRA is based on the precautionary principle and evidence should be presented to allow a determination of whether the impacts of a land-use plan, when considered in combination with the effects of other plans and projects against the conservation objectives of a European Site; would adversely affect the integrity of that site. Where effects are considered uncertain, the potential for adverse impacts should be assumed.

Guidance and Good Practice

2.4 The application of HRA to Local Development Documents is an emerging field and has been informed by a number of key guidance and practice documents. Draft guidance for HRA 'Planning for the Protection of European Sites: Appropriate Assessment', was published by the Government (DCLG, 2006) and is based on the European Commission's (2001) guidance for the Appropriate Assessment of Plans. The DCLG guidance recommends three main stages to the HRA process:

- **Stage 1**: Screening for Likely Significant Effect
- **Stage 2:** Appropriate Assessment, Ascertaining Effects on Integrity
- **Stage 3**: Mitigations Measures and Alternatives Assessment.

2.5 If alternative solutions or avoidance/ mitigation measures to remove adverse effects on site integrity cannot be delivered then current guidance recommends an additional stage to consider Imperative Reasons of Overriding Public Interest (IROPI) for why the plan should proceed. For the HRA of land use plans IROPI is only likely to be justified in a very limited set of circumstances and must be accompanied by agreed, deliverable compensation measures for the habitats and species affected. For this reason the IROPI stage is not detailed further in this report.

2.6 More recently NE has produced additional, detailed guidance on the HRA of Local Development Documents (Tyldesley, 2009) that complements the DCLG guidance, and builds on assessment experience and relevant court rulings. The guidance: sets out criteria to assist with the screening process; addresses the management of uncertainty in the assessment process; and importantly outlines that for the HRA of plans; ' … what is expected is as rigorous an assessment as can reasonably be undertaken in accordance with the requirements of the Regulations …'.

2.7 The approach taken for the HRA of the Core Strategy follows the method set out in formal guidance documents and has additionally been informed by recent good practice examples. The key stages of the HRA process overall, and the specific tasks undertaken for each stage are set out in **Table 1**.

Table 1: Habitats Regulations Assessment: Key Stages

Stages	Habitats Regulations Assessment
Stage 1: Screening for Likely significant Effects	1. Identify European sites in and around the plan area.
	2. Examine the conservation objectives of each interest feature of the European site(s) potentially affected.
	3. Analyse the policy/ plan and the changes to environmental conditions that may occur as a result of the plan. Consider the extent of the effects on European sites (magnitude, duration, location) based on best available information.
	4. Examine other plans and programmes that could contribute (cumulatively) to identified impacts/ effects.
	5. Produce screening assessment based on evidence gathered and consult statutory nature conservation body on findings.
	6. If effects are judged likely or uncertainty exists – the precautionary principle applies proceed to **Stage 2.**
Stage 2: Appropriate Assessment	1. Agree scope and method of Appropriate Assessment with statutory nature conservation body.
	2. Collate all relevant information and evaluate potential impacts on site(s) in light of conservation objectives.
Stage 3: Mitigation Measures and Alternatives Assessment	1. Consider how effect on integrity of site(s) could be avoided by changes to plan and the consideration of alternatives (e.g. an alternative policy/ spatial location). Develop mitigation measures (including timescale and mechanisms for delivery).
	2. Prepare HRA/ AA report and consult statutory body.
	3. Finalise HRA/AA report in line with statutory advice to accompany plan for wider consultation.

The Winchester Core Strategy

2.8 The Winchester Core Strategy sets out the broad strategic planning framework for the future of the Winchester District up to 2031, it is the lead LDF document and all other documents prepared under the LDF will have to conform to it. The Pre-Submission Core Strategy focuses new development within the urban areas of Winchester Town and the South Hampshire Urban Area. These areas will accommodate the bulk of the District's requirement for 11,000 new dwellings and associated economic and community development during the plan period. Approximately 7,5000 of this total will be within major developments at North Winchester (2,000), West of Waterlooville (2,500) and North Whiteley (3,000).

2.9 More locally focussed development will occur in the Market Towns and Rural Area reflecting the needs and requirements of those communities and to ensure that they offer a range of services and facilities and sustainable opportunities for change, consistent with their scale and function. The emphasis of the spatial strategy is to follow a sequential approach to development by establishing the capacity of previously developed land first before allocating sites outside existing settlement boundaries through future development plan documents or Neighbourhood Plans.

Overview of the Plan Area

2.10 **Figure 1** illustrates the main features of the Plan area including strategic allocations.

Figure 1: Key Diagram

Winchester District Local Plan Part 1 - Joint Core Strategy

3.0 HRA STAGE 1: SCREENING

3.1 As detailed in Section 2, Table 1, HRA typically involves a number of stages. This section of the report sets out our approach and findings for Stage 1, HRA Screening for the Winchester Pre-Submission Core Strategy. The aim of the screening stage is to assess in broad terms whether the policies and proposals set out in the plan are likely to have a significant effect on a European site(s), and whether in the light of available avoidance and mitigation measures, an Appropriate Assessment (AA) is necessary.

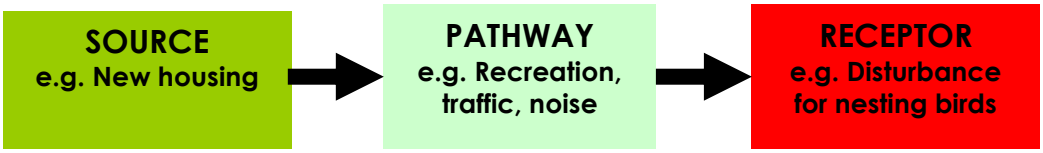
3.2 It was noted in Section 1 (para 1.3- 1.4) that HRA Screening of Preferred Option policies was first undertaken in 2009. Natural England's response to the Screening Report produced for the Preferred Options indicated that the scope and the overall conclusions of the HRA were appropriate (see **Appendix 4**). However, in the light of the changes made to the Core Strategy since Preferred Options; all the screening tasks (**Table 1**) have been revisited for the Plan. The completed tasks are described in detail below.

Scope of HRA

3.3 Plans such as the Core Strategy can have spatial implications that extend beyond the intended plan boundaries. In particular, it is recognised that when considering the potential for effects on European sites, distance in itself is not a definitive guide to the likelihood or severity of an impact. Other factors such as inaccessibility/ remoteness, the prevailing wind direction, river flow direction, and ground water flow direction will all have a bearing on the relative distance at which an impact can occur. This means that a plan directing development some distance away from a European Site could still have effects on the site and therefore, needs to be considered as part of the HRA screening.

3.4 Therefore, rather than rely on distance alone, a more effective mechanism for considering the scope of the HRA is to use a 'source-pathway-receptor' model (see **Figure 2**) which focuses on whether there is a pathway by which impacts from the plan can affect the identified sensitivities/ vulnerabilities of European site(s)' environmental conditions.

Figure 2: Source, Pathway, Receptor Model



3.5 Using this approach the following sites that lie both within and outside the plan, were scoped into the HRA Screening for the Pre-Submission Core Strategy.

Table 2: European Sites within HRA Scope	
European Site	**Designation**
European Sites within Plan Area	
River Itchen	SAC
Solent Maritime	SAC
Solent and Southampton Water	SPA/ Ramsar
European Sites outside Plan Area	
Butser Hill	SAC
Chichester and Langstone Harbours	SPA/ Ramsar
East Hampshire Hangers	SAC
Emer Bog	SAC
Mottisfont Bats	SAC
New Forest	SAC/ SPA/ Ramsar
Portsmouth Harbour	SPA/ Ramsar
Solent and Isle of Wight Lagoons	SAC

3.6 Detailed descriptions including conservation objectives and the specific vulnerabilities for each site are provided in **Appendix 1**.

Effects of the Plan

3.7 The emphasis of the Core Strategy is on jobs and economic prosperity and a key element of the plan is the delivery across the plan area of 11,000 new homes over the life of the plan (to 2031). Housing, employment and infrastructure development has the potential to generate a range of environmental impacts which can, (depending on their nature, magnitude, location and duration), have effects on European sites. A summary of the types of impacts and effects that can arise from these types of development is provided in **Figure 3**.

Figure 3: Housing, Employment and Infrastructure Development: Summary of Impacts and Effects on European Sites	
Effects on European Sites	**Impact Types**
Habitat (& species) fragmentation and loss	▪ Direct land take, removal of green/ connecting corridors/ supporting habitat, changes to sediment patterns (rivers and coastal locations) ▪ Introduction of invasive species (predation)
Disturbance	▪ Increased recreational activity (population increase) ▪ Noise and light pollution (from development and increased traffic)
Changes to hydrological regime/ water levels	▪ Increased abstraction levels (new housing) ▪ Increased hard standing non-permeable surfaces/ accelerated run-off ▪ Laying pipes/ cables (surface & ground) ▪ Topography alteration ▪ Changing volume of discharge
Changes to	▪ Increase in run-off/ pollutants from non-permeable

Figure 3: Housing, Employment and Infrastructure Development: Summary of Impacts and Effects on European Sites	
Effects on European Sites	**Impact Types**
water quality	surfaces (roads, built areas) ▪ Increased air pollution (eutrophication) (traffic, housing) ▪ Increased volume of discharges (consented)
Changes in air quality	▪ Increased traffic movements ▪ Increased emissions from buildings

3.8 The first stage in the Screening process is to consider whether the policies and allocations proposed in the plan, have the potential to lead to likely significant effects (LSE), such as those identified in **Figure 3**, on the European sites scoped into the assessment. In order to do this the policies and allocations were screened and categorised according to their potential effects. The approach taken was in accordance with Natural England guidance which details four main categories (supported by more detailed sub categories) of potential effect, as summarised in **Figure 4**.

Figure 4: Categorising the Potential Effects of the Plan (Tyldesley, 2009)	
Category A	Elements of the plan that would have **no negative effect** on a European site.
Category B	Elements of the plan/ options that could have an effect, but the likelihood is that there would be **no significant negative effect** on a European site with alone or in combination with other elements of the same plan, or other plans or projects.
Category C	Elements of the plan/options that could or would be **likely to have a significant effect alone** and will require the plan to be subject to an appropriate assessment before the plan may be adopted
Category D	Elements of the plan/ options that would be likely to have **a significant effect in combination** with other elements of the same plan, or other plans or projects and will require the plan to be subject to an appropriate assessment before the plan may be adopted

3.9 Proposals falling with categories A and B are considered not to have an effect on a European site and can be eliminated from the assessment procedure. Proposals falling within category C and Category D require further analysis, including the consideration of in combinations effects to determine whether they should be included in the next stage of the HRA process.

Pre-Submission Policy Screening

3.10 **Appendix 3** details the results of the HRA screening process for the Pre-Submission Core Strategy Policies. The key findings are summarised below.

Effects Summary - the plan alone

3.11 The Pre-Submission policies which were considered to potentially lead to significant effects alone on European sites are listed in **Table 3**.

Table 3: Pre-Submission Policies with potential for LSEs alone	
Pre-Submission policies screened in to the assessment process	**Assessment Category**
Spatial Planning Objectives	C2
Policy DS1 Development Strategy and Principles	C2
Policy WT1 Development Strategy for Winchester Town	C2
Policy WT2 Strategic Housing Allocation - Barton Farm	C2
Policy SH1 Development Strategy for South Hampshire Urban Areas	C2
Policy SH3 Strategic Housing Allocation - North Whiteley	C2
Policy MTRA 2 Market Towns and Larger Villages	C2
Policy CP1 Housing Provision	C2

3.12 The Spatial Planning Objectives and Policy DS1 make provision for a type and/ or quantity of development but the effects are uncertain because the detailed location of the development is proposed in other policies. Policies WT1, WT2, MTRA 2, CP1, SH1 & SH3 make provision for a type and quantity of development in locations that have potential for indirect likely significant effects on European sites alone. The potential impacts arising from proposed development and the nature and significance of effects on European sites requires further consideration.

Effects Summary - the plan in combination

3.13 Other plans, programme and projects that are being prepared and/ or implemented in the area have the potential to have significant effects on European sites. Effects from different plans may interact leading to a cumulative, significant effect overall for the area's biodiversity interests. It is a key requirement of the Habitats Regulations that effects identified through the plan screening are considered for their potential in combination effects. Guidance recommends that the in combination assessment is undertaken in a targeted way, to ensure that the assessment is most effective, by focusing on those plans most likely to interact with the plan under consideration.

3.14 The plans and programmes listed below have formed the basis of the in combination test for this policy screening. This list is not exhaustive and represents the most relevant current plans (further details are provided in **Appendix 2**).

- South East River Basin Management Plan
- The Test and Itchen Catchment Abstraction Management Strategy
- The East Hampshire Catchment Abstraction Management Strategy

- The Arun and Western Streams Catchment Abstraction Management Strategy.
- Portsmouth Water - Water Resource Management Plan
- Southern Water - Water Resource Management Plan
- Thames Water - Water Resource Management Plan
- Hampshire County Council Local Transport Plan 2011 - 2031
- Hampshire, Portsmouth, Southampton and New Forest National Park Minerals and Waste Core Strategy
- Basingstoke and Dean Borough Council Core Strategy
- East Hampshire District Council Core Strategy
- Eastleigh Borough Council Draft Local Plan
- Fareham Borough Council Core Strategy
- Gosport Borough Council draft Core Strategy
- Havant Borough Council Core Strategy
- New Forest District Council Core Strategy
- New Forest National Park Authority National Park Management Plan
- New Forest National Park Authority Core Strategy and Development Management Policies DPD
- Portsmouth Plan
- Southampton City Council Core Strategy
- Test Valley Borough Council Core Strategy
- Isle of Wight Council Core Strategy

3.15 The Screening identified that the policies listed in **Table 4** make provision for a type and quantity of development that could potentially lead to significant effects on European sites when considered in combination with other plans and projects.

Table 4: Pre-Submission Policies with potential for LSEs in combination

Pre-Submission policies screened in to the assessment process	Assessment Category
Spatial Planning Objectives	D2
Policy DS1 Development Strategy and Principles	D2
Policy WT1 Development Strategy for Winchester Town	D2
Policy WT2 Strategic Housing Allocation - Barton Farm	D2
Policy SH1 Development Strategy for South Hampshire Urban Areas	D2
Policy SH2 Strategic Housing Allocation - West of Waterlooville	D2
Policy SH3 Strategic Housing Allocation - North Whiteley	D2
Policy MTRA 2 Market Towns and Larger Villages	D2
Policy CP1 Housing Provision	D2

Screening Assessment

3.16 HRA screening good practice combines both a **plan** and a **site** focus. The policy screening removes from consideration, those elements of the **plan** unlikely to have effects on European sites. The remaining plan elements (summarised above) can then be considered in more detail

for their impacts on European sites. The **site** focus considers the impacts and potential effects identified through the policy screening, in the light of the environmental conditions necessary to maintain site integrity for the European sites scoped into the assessment (**Table 2**).

3.17 **Table 5** considers the potential impacts (**Figure 4**) arising from the Pre-Submission Core Strategy (**Appendix 3**) against the sensitivities and conservation objectives of the identified European sites (**Appendix 1**) to determine if there is the potential for likely significant effects.

Key		
Likely Significant Effect	✓	Further Appropriate Assessment required
No Likely Significant Effect	X	No further Appropriate Assessment required as no pathways identified
Significant Effect Uncertain	?	Precautionary approach taken and further Appropriate Assessment required

Table 5: HRA Screening Summary

European sites	**Potential Likely Significant Effects**							
	Habitat (& species) Loss & Fragmentation		**Disturbance**		**Water Levels & Quality**		**Air Quality**	
	A[1]	**IC[2]**	**A**	**IC**	**A**	**IC**	**A**	**IC**
Butser Hill SAC	X	X	X	X	X	X	X	X
Chichester and Langstone Harbours SPA/ Ramsar	X	X	X	?	X	?	X	?
East Hampshire Hangers SAC	X	X	X	X	X	X	X	X
Emer Bog SAC	X	X	X	X	X	X	X	X
Mottisfont Bats SAC	X	?	X	X	X	X	X	X
New Forest SAC/ SPA/ Ramsar	X	X	X	?	X	?	X	?
Portsmouth Harbour SPA/ Ramsar	X	X	X	?	X	?	X	?
River Itchen SAC	?	?	?	?	?	?	?	?
Solent Maritime SAC	?	?	?	?	?	?	?	?

[1] AA required alone?
[2] AA required in combination?

Solent and Isle of Wight Lagoons SAC	×	×	×	?	×	?	×	?
Solent and Southampton Water SPA/ Ramsar	?	?	?	?	?	?	?	?

3.18 Similar to the findings of the HRA Screening Report (May 2009) for the Preferred Options, the screening of the Pre-Submission Policies found that there is not likely to be significant effects on three[3] of the European sites scoped into the assessment, given the location of proposed development and sensitivities of the sites. A further justification for screening these sites out of the HRA was provided in Appendix 4 of the HRA Screening Report (May 2009). NE was consulted and agreed with the findings of the HRA Screening for the Preferred Options.

3.19 The Pre-Submission Core Strategy does not propose any development within or adjacent to any of the identified European sites so will not lead to the direct loss or fragmentation of designated habitats. However, there is potential for the loss and fragmentation of important supporting habitat for River Itchen SAC; Solent Maritime SAC and Solent and Southampton Water SPA/ Ramsar as a result of proposed development both alone and in combination. There is also the potential for development proposed in the Core Strategy to act in combination with other plans, programmes and projects to have likely significant effects on Mottisfont Bats SAC through the loss and fragmentation of supporting habitats. This issue will be considered in more detail through AA.

3.20 The screening assessed that there is the potential for the Core Strategy both alone and in combination to have likely significant effects on the River Itchen SAC; Solent Maritime SAC and Solent and Southampton Water SPA/ Ramsar as a result of increased disturbance and reduced water levels and quality. There is also the potential for likely significant effects on four[4] other European sites through increased disturbance and reduced water levels and quality as a result of development proposed in the Core Strategy acting in combination with other plans, programmes and projects. The effects of increased disturbance and reduced water levels and quality on the integrity of the identified European sites will be considered in more detail through AA.

3.21 The screening assessment identified uncertainty with regard to the potential for the Core Strategy to have significant effects both alone and in combination on the River Itchen SAC; Solent Maritime SAC and Solent and Southampton Water SPA/ Ramsar as a result of changes to air quality. This was also the case for the potential in combination effects of reduced air quality on four[5] other European sites. Based on

[3] Butser Hill SAC; East Hampshire Hangers SAC and Emer Bog SAC.
[4] Chichester and Langstone Harbours SPA/ Ramsar; New Forest SAC/ SPA/ Ramsar; Portsmouth Harbour SPA/ Ramsar and Solent and Isle of Wight Lagoons SAC
[5] Ibid.

the precautionary approach this issue will be considered in more detail through AA.

Screening Conclusions

3.22 The screening concluded the Pre-Submission Policies have the potential for likely significant effects on the following European sites:

- Chichester and Langstone Harbours SPA/ Ramsar
- Mottisfont Bats SAC
- New Forest SAC/ SPA/ Ramsar
- Portsmouth Harbour SPA/ Ramsar
- River Itchen SAC
- Solent Maritime SAC
- Solent and Isle of Wight Lagoons SAC
- Solent and Southampton Water SPA/ Ramsar

3.23 As a result a Stage 2 Appropriate Assessment has been undertaken to consider the effects associated with habitat fragmentation and loss, disturbance, water levels and quality and air quality on the identified European sites. This is presented in **Section 4** of this Report.

4.0 HRA STAGE 2: APPROPRIATE ASSESSMENT

4.1 This section addresses Stage 2 (Appropriate Assessment) of the HRA process, which considers if the likely significant effects on European Sites identified through the first Screening Stage (**Section 3**) have the potential to adversely affect European site integrity.

4.2 The policy screening (**Appendix 3**) and the review of plans and programmes 'in-combination' work (**Appendix 2**) undertaken at the screening stage identified (**Section 3**) four main areas of impact arising that may have a significant effect on the identified European sites: air quality; disturbance; habitat loss and fragmentation and water levels and quality. Each of these issues are investigated further below.

Air Quality

4.3 The screening assessment concluded that there is uncertainty with regard to the potential for likely significant effects at the following European sites through increased atmospheric pollution:

- Chichester and Langstone Harbours SPA/ Ramsar
- New Forest SAC/ SPA/ Ramsar
- Portsmouth Harbour SPA/ Ramsar
- River Itchen SAC
- Solent Maritime SAC
- Solent and Isle of Wight Lagoons SAC
- Solent and Southampton Water SPA/ Ramsar

What are the issues arising from the plan?

4.4 The growth proposed in the Pre-Submission Core Strategy will lead to increased atmospheric pollution (local and regional), which will predominantly arise from an increase in traffic associated with the projected population growth over the life of the plan. Embodied energy in construction materials and increased energy use from new housing and employment development will also contribute to increased atmospheric pollution through the emission of greenhouse gases. The construction of new development can also lead to direct effects on air quality (dust, equipment and vehicular emissions), although these are carefully regulated through development controls/ site management measures.

How might the European sites be affected?

4.5 Atmospheric pollution from traffic is most likely to affect the habitats which comprise the qualifying features of the identified European sites, although there is the potential for designated species to also be affected, as in most cases they rely upon the designated habitats. For

example, increased deposition of nutrients, specifically phosphorus and nitrogen, can result in the eutrophication of rivers and lakes.

Which other plans/ projects could lead to in-combination effects?

4.6 The following plans and programmes have the potential to act in-combination with the Core Strategy as they propose development that will lead to cumulative increases in road based traffic over the life of the plan:

- Hampshire County Council Local Transport Plan 2011 - 2031
- Hampshire, Portsmouth, Southampton and New Forest National Park Minerals and Waste Core Strategy
- Basingstoke and Dean Borough Council Core Strategy
- East Hampshire District Council Core Strategy
- Eastleigh Borough Council Draft Local
- Fareham Borough Council Core Strategy
- Gosport Borough Council draft Core Strategy
- Havant Borough Council Core Strategy
- New Forest District Council Core Strategy
- New Forest National Park Authority National Park Management Plan
- New Forest National Park Authority Core Strategy and Development Management Policies DPD
- Portsmouth Plan
- Southampton City Council Core Strategy
- Test Valley Borough Council Core Strategy
- Isle of Wight Council Core Strategy

What is the current situation?

4.7 The principle source of air pollution within the plan area is vehicular traffic, which produces various pollutants including carbon monoxide, nitrogen dioxide (NO_2) and volatile hydrocarbons (VOCs) such as benzene and 1,3-butadiene and primary particles (PM_{10}). Other pollution sources, including commercial, industrial and domestic sources, also make a contribution to background air pollution levels. Within the District the National Air Quality Objectives for NO_2 and PM_{10} are being exceeded in Winchester Town Centre. This location has been designated as an Air Quality Management Area (AQMA) for which the Council must produce an action plan to try and improve air quality.

4.8 There are two real time air quality monitoring stations in Winchester Town Centre, which consist of a background site at Lawn Street near Friarsgate (Nitrogen dioxide and Particles) and a roadside site in St Georges Street (Nitrogen dioxide and Particles). The Council also operates 28 nitrogen dioxide diffusion tube monitoring sites within Winchester City Centre and nine additional diffusion tube monitoring sites across the district.

4.9 Both real time monitoring sites are in compliance with 24 hour mean objectives for NO_2 in 2009 and 2010, but as in previous years only the background site complies with the annual mean objective. The diffusion tube results show that there are still areas adjacent the main roads within the AQMA that fail to meet the annual mean objective for NO_2 . These are still spatially concentrated within the one way system around the town centre with the highest levels generally being in St Georges Street, where the roadside real time analyser is located. In addition Romsey road, which suffers from traffic congestion at peak commuter times and has domestic facades in close proximity, remains significantly elevated. In 2009 all District wide monitoring sites were in compliance with the annual mean objective for NO_2 , although results were higher for all but one site compared to 2008. Results for 2010 are also in compliance with the annual mean objective, with results generally being lower than 2009[6].

4.10 For PM_{10} results both real time monitoring sites show continued compliance with both the 24 hour and annual mean objectives. A separate detailed assessment report is currently being prepared for DEFRA approval with the aim of undeclaring the PM_{10} parameter within the current Winchester City Centre AQMA[7].

4.11 Information on current levels of atmospheric pollution at the European sites is currently limited. The Air Pollution Information System (APIS) provides critical loads for acidity and nitrogen for each designated feature within every SAC and SPA in the UK, however this information is based on predictive modeling rather than from real monitoring data taken at the sites themselves. The different environmental conditions at each European site mean that the sensitivity of qualifying features to atmospheric pollution can vary between European sites, therefore this information is of limited use to the assessment.

Is there potential for adverse effects on the integrity of European sites?

4.12 Currently the only pollutant that is exceeding air quality objectives in the District is nitrogen dioxide (NO_2), the impacts of which are most relevant close to source. Therefore, the contribution of NO_2 beyond the specific areas where development and related infrastructure is located is likely to be negligible. The most acute impacts of NO_2 take place close to where they are emitted (generally within 200m of the roadside[8]) but these gases also have the potential to contribute to background pollution levels.

4.13 European sites in close proximity (within 200m) to a major road (Motorway or A road) that are likely to see a significant increase in

[6] Winchester City Council (June 2011) 2010 and 2011 Air Quality Progress Report for Winchester City Council.
[7] Ibid.
[8] Highways Agency (2007) Design Manual for Roads and Bridges: Volume 11, Section 3, Part 1.

traffic as a result of development proposed in the Core Strategy and surrounding areas are as follows:

- Chichester and Langstone Harbours SPA/ Ramsar (within 200m of the M27);
- New Forest SAC/ SPA/ Ramsar (M27 runs directly through the site);
- Portsmouth Harbour SPA/ Ramsar (within 200m of the M27);
- River Itchen SAC (the M3, M27 and A34 cross over the site);
- Solent Maritime SAC (the M27 crosses over the site); and
- Solent and Southampton Water SPA/ Ramsar (the M27 crosses over the site).

4.14 The Pre-Submission Core Strategy proposes the development of 11,000 new homes up to 2031. Approximately 7,500 of this total will be within strategic developments at North Winchester (2,000), West of Waterlooville (2,500) and North Whiteley (3,000). The increased population as a result of the development will inevitably lead to an increase in traffic and therefore atmospheric pollution in the District. A Transport Assessment (Stage 1 (2008)[9] & Stage 2 (2009)[10]) undertaken as part of the Winchester District LDF evidence base identified that the proposed development within the District, at Barton Farm, Bushfield Camp, North Whiteley and West of Waterlooville, together with smaller allocations in market towns and rural communities will generate significant volumes of traffic and travel demand. Much of the increase will focus on the M3 and M27 motorways and will add to projected increases in background traffic levels.

4.15 Determining the significance of this impact in relation to the integrity of European sites is extremely complex. The sensitivity of European sites to atmospheric pollutants is dependent on a range of factors including the types of habitat present and the environmental conditions at each site. This often means the sensitivity of each European site is different, even if they have the same qualifying features. Determining the critical loads for sites (habitats) and assessing the effect of atmospheric pollution is most appropriately carried out at a site specific level. The information available on APIS indicates that a number of qualifying features are sensitive to atmospheric pollution and that critical loads in certain areas are possibly being exceeded. Whilst this may be the case, the site specific information provided by JNCC and NE for the European sites scoped into this HRA does not indicate that atmospheric pollution is currently having adverse effects on the qualifying features of any of the sites, it appears that the sites receive the majority of nutrients from water based sources.

4.16 Whilst effects from the plan alone are considered unlikely - given the mitigation measures contained in the Core Strategy - it is clear that the development proposed in the Pre-Submission Core Strategy will contribute to background pollution levels in combination with other

[9] Winchester City Council (2008) Transport Assessment: Stage 1.
[10] Winchester City Council (2009) Transport Assessment: Stage 2.

plans, programmes and projects. There is uncertainty with regard to the significance of this in combination impact on the European sites. The Core Strategy alone cannot be expected to mitigate for the in combination effects of increased background pollution on the European sites. To effectively address the issue of air quality across Hampshire, and in particular, the effects on European designated sites, a strategic regional approach to air quality management is required.

What existing mitigations are provided in the Core Strategy?

4.17 The Transport Assessment undertaken as part of the LDF evidence base identified a range of mitigation measures to address the identified issues around increased traffic. The majority of the measures focused on reducing and managing the traffic arising as a result of the strategic developments as well as identifying potential areas for transport infrastructure investment. The assessment notes that in order to mitigate increased levels of traffic there must be an emphasis on:

- Reducing the need to travel by providing local facilities within the site or close by, particular for regular journeys such as commuting;
- Integrating the new communities with established communities in terms of local travel patterns;
- Promoting sustainable travel behaviour not only within the development sites but across established communities;
- Ensuring that walking and cycling will play a much greater role than at present rather than assuming that a shift from local journey journeys will happen;
- Reviewing the implementation of parking policies in terms of further constraints on supply at destinations (public and private non-residential) and making best use of park and ride facilities;
- Placing a major emphasis on bus and bus rapid transit as a means of avoiding car use which will require significant capital expenditure;
- Working with the relevant highway authorities to identify any necessary and appropriate highway improvement schemes and to agree contributions towards implementation of those schemes that are in keeping with specifically identified traffic impacts.

4.18 The mitigation measures outlined in the Transport Assessment are supported by the measures proposed in Winchester Town Access Plan (July 2010), which focus on improving accessibility and air quality in Winchester Town. The Access Plan acknowledges that its aims can be achieved through reducing the distance that people have to travel in their daily activities through 'self containment' policies such as providing good facilities, employment and community based facilities which can be accessed by means other than the car. It also notes that through new development there are excellent opportunities to incorporate established good practice and, on occasion, to innovate in design and layout with the aim of creating new ways of integrating travel solutions into places people live and how they access work and other facilities.

4.19 At a strategic level Winchester City Council has sought to ensure that Core Strategy policies address identified issues - outlined by the transport assessment and access plan - and has put the following robust policy measures in place to provide mitigation:

- Policy SS1 requires that for all development proposals the use of public transport, walking and cycling is made easy to reduce non-essential car use and that housing developments should be close to jobs, services and facilities and in the most accessible locations for transport by all modes. The policy also requires that proposals test whether infrastructure and services has adequate capacity to serve new development, or arrangements are made in a timely manner for appropriate increases in capacity.
- Policy WT1 supports the implementation of the Winchester Access Plan and the Winchester Air Quality Management Plan to ensure that transport provision and access to and within the Town provides opportunities for sustainable transport provision and reduced carbon emissions.
- Policy WT2 requires that any proposal for development at Barton Farm should be meet the housing needs of all sectors of the community and house types and affordability should be matched to the local employment base in order to reduce the need for in and out commuting. The policy also requires improved accessibility to the town centre and the railway station by sustainable transport systems to reduce the need to travel by car, including public transport provision and enhancement, footpaths, cycleways, bridleways, and green corridors. Measures to mitigate the traffic impacts of proposed development on the strategic and local road networks should be included and funded, including the provision of a park and ride 'light' scheme within the northern part of the development.
- Policy SH2 requires that any proposal for development on land to the West of Waterlooville should be integrated with the existing town centre and include measures to enable good pedestrian and cycle access across Maurepass Way. It also requires the provision of at least 23 ha of employment land, which will help to reduce out commuting. Any proposal must also provide a new access road through the development, with public transport provision and other measures to reduce traffic regeneration. The development must fund any off-site transport improvements necessary to achieve this and to accommodate traffic likely to be generated by the development.
- Policy SH3 requires that any proposal for development on land to the North of Whiteley is accompanied by a full Transport Assessment to ensure that the package of mitigation measures are incorporated into the scheme, including pedestrian and cycle link, a public transport strategy and any off-site contributions deemed necessary. There is also a requirement to provide measures to ensure that smarter transport choices are made to achieve a modal shift which minimises car usage, manages the impact of private cars

on the highways network, and implements measures necessary to accommodate additional traffic.

- Policy CP8 supports measures to promote self employment and working from home.
- Policy CP10 seeks to reduce demands on the transport network, manage existing capacity efficiently and secure investment to make necessary improvements. It also requires development to be located and designed to reduce the need to travel and encourages the use of non-car modes through travel plans as well as the management and improvement to the existing network. Improvements to accommodate additional traffic should be undertaken (or funded) where necessary.
- Policy CP11 requires that from 2016 onwards, all housing must meet the national Zero Carbon Homes standard and all non-residential development must meet BREEAM 'Outstanding' standard.
- Policy CP14 supports the effective use of land through supporting higher density development within urban areas that have good access to public transport.

Recommendations for avoidance and mitigation

4.20 Along with the strategic policy mitigation already in place the following recommendations should be incorporated into the Core Strategy to address identified issues with regard to air quality:

- It is recommended that the Council requires the monitoring of air quality at key locations within or close to the proposed strategic sites to determine if air quality is worsening as a result of new development (this is also a recommendation of the Sustainability Appraisal). The location of monitoring sites could be determined through lower level assessments. This information can then inform the Council and County Council's wider approach to air quality management.
- In preparing the Allocations and Other Development Management Policies DPD, the Council should consider opportunities for the phasing and management of construction to minimise any impacts on air quality (especially from vehicular movement).

4.21 The policy mitigation outlined above is effective plan level mitigation and will contribute to minimising the impacts of proposed development on air quality. However, to effectively address the issue of reduced background air quality a strategic regional approach will need to be taken.

Disturbance

4.22 The screening assessment identified that there was the potential for likely significant effects at the following European sites due to disturbance:

- Chichester and Langstone Harbours SPA/ Ramsar
- New Forest SAC/ SPA/ Ramsar
- Portsmouth Harbour SPA/ Ramsar
- River Itchen SAC
- Solent Maritime SAC
- Solent and Isle of Wight Lagoons SAC
- Solent and Southampton Water SPA/ Ramsar

What are the issues arising from the plan?

4.23 Development proposed in the Core Strategy will increase the residential population in the District and therefore has the potential to increase the levels of recreational activity on and around the designated sites. It also has the potential to result in increased levels of noise and light pollution through building construction /operation, as well as increased vehicular traffic.

How might the European sites be affected?

4.24 Increased recreational activity at European sites has the potential to cause disturbance to designated habitats and species through a variety of different pathways. This could include physical disturbance through trampling of habitats as a result of increased recreation or non-physical disturbance to species through noise and light pollution. This can also occur as a result of the development itself or as a result of increased traffic.

Which other plans/ projects could lead to in-combination effects?

4.25 The following plans and programmes have the potential to act in-combination with the Core Strategy as they propose development that will lead to cumulative increases in recreational activity and noise and light pollution over the life of the plan:

- Hampshire County Council Local Transport Plan 2011 - 2031
- Hampshire, Portsmouth, Southampton and New Forest National Park Minerals and Waste Core Strategy
- Basingstoke and Dean Borough Council Core Strategy
- East Hampshire District Council Core Strategy
- Eastleigh Borough Council Draft Local
- Fareham Borough Council Core Strategy
- Gosport Borough Council draft Core Strategy
- Havant Borough Council Core Strategy

- New Forest District Council Core Strategy
- New Forest National Park Authority National Park Management Plan
- New Forest National Park Authority Core Strategy and Development Management Policies DPD
- Portsmouth Plan
- Southampton City Council Core Strategy
- Test Valley Borough Council Core Strategy
- Isle of Wight Council Core Strategy

What is the current situation?

River Itchen SAC:

4.26 There is little available information on the current levels of recreational activity occurring at the site. The River Itchen Sustainability Study[11] identifies that public access to the River in the form of rights of way and bridleways is good, particularly in the upper reaches of the catchment. Public access to the valley south of Winchester is limited to specific sites, including the Itchen Valley Country Park (Eastleigh) and Riverside Park (Southampton). Canoeing and rowing take place within the Winchester area by arrangement with Winchester City Council and there is a canoeing centre at Woodmill. Fishing rights on the Itchen are the properties of the landowners although many of the landowners rent the fishing rights to fishing associations and corporate groups.

New Forest SAC/SPA/Ramsar:

4.27 A study[12] on changing patterns of visitor numbers within the New Forest National Park was undertaken in 2008. It examined if the number of people visiting the New Forest was having a detrimental effect on species and habitats of European importance. The study showed that the New Forest National Park receives over an estimated 13 million visits per year. The majority of these people tend to visit infrequently, in larger groups and, compared with other areas, they are less likely to be visiting to walk their dog. The study predicted that the number of visits per year would increase by 1.05 million based on development proposed within 50km of the National Park at the time the work was carried out. The key finding of the study were that development close to the park will have the greatest impacts on visitor pressure, with a high proportion of the increase being generated by development within 7km of the National Park boundary, and relatively little impact beyond 20km. The study concluded that further work on the breeding bird species is needed to determine if visitor numbers are have adverse effects on the New Forest SPA.

[11] River Itchen Steering Group (2004) River Itchen Sustainability Study: Final Technical Report.
[12] Sharp, J., Lowen, J. & Liley, D. (2008) Chaging Patterns of visitor numbers within the New Forest National Park, with particular reference to the New Forest SPA.

Chichester & Langstone Harbours SPA/ Ramsar; Portsmouth Harbour SPA/ Ramsar; Solent Maritime SAC; Solent & Isle of Wight Lagoons SAC and Solent & Southampton Water SPA/ Ramsar:

4.28 Disturbance studies have been commissioned by the Solent Forum in response to concerns over the impact of recreational pressure on features of the Solent SPA, SAC and Ramsar Sites. The project seeks to assess the current impacts of visitor numbers and activities on the survival rates of internationally designated wintering waterbirds throughout the Solent coast, and to establish the likely additional impact from the residents of development proposed in the area. Phase 1[13] of the project is complete and comprised a Desk Research Study on Recreational Disturbance to Birds and a Methodology for phases 2 and 3. Some of the key findings from Phase 1 were:

- High current human population living within a short distance of the Solent shoreline.
- High levels of housing around the shoreline, with particularly high densities in the urban areas of Southampton and Portsmouth.
- Future development is likely to result in a large increase in the residential population, particularly in the vicinity of Southampton, Portsmouth and Fareham.
- The Solent provides locations for a wide range of recreational activities.
- In contrast to the long-term datasets on bird population sizes, there seems to be little systematic monitoring of recreational access and little information to determine how patterns of access have changed over time and how they may change in the future.
- The population trends of most bird species wintering in the Solent reflect the trend in the respective national population.
- Several species, particularly wildfowl, have increased greatly in the Solent since the 1980s, mainly in Solent and Southampton Water SPA.
- Information on breeding birds is less comprehensive and available only for specific sites.
- In order to determine how new housing might change visitor levels in the future it will be necessary to separate local visitors from tourists, categorise visitors according to the activities undertaken at sites and take into account the variation between sites in terms of attractiveness and suitability for different activities.

4.29 Phase 2 of the project is currently underway and almost complete, it aims to gather data on bird numbers and their responses to various forms of recreational disturbance, visiting patterns at specific sites, household surveys to help gauge which locations are most popular and why, and then to model predicted effects on birds at hotspots of recreational visiting activity. Preliminary findings and

[13] Stillman, R. A., Cox, J., Liley, D., Ravenscroft, N., Sharp, J. & Wells, M. (2009) Solent disturbance and mitigation project: Phase I report. Report to the Solent Forum.

recommendations from the Phase 2 work[14] have informed this assessment, but further modelling work is still being carried out.

4.30 Phase 3 of the study will combine the findings of earlier phases in order to determine how development planning can influence these responses, and ways in which impacts might be mitigated.

Is there potential for adverse effects on the integrity of European sites?

4.31 Policies within the Pre-Submission Core Strategy propose the development of 11,000 new homes in Winchester District up to 2031. This will lead to an increased residential population and therefore increased levels of recreational activity within the District and surrounding areas. The information available with regard to the current levels of recreational disturbance at European sites is varied. There is information available on visitor numbers and disturbance for the New Forest SAC/ SPA/Ramsar and the European sites along the Solent but nothing for the River Itchen SAC.

4.32 The screening identified that there was uncertainty with regard to the potential for the Core Strategy to have significant effects alone on the River Itchen SAC, Solent Maritime SAC and Solent & Southampton SPA/Ramsar through increased disturbance. In relation to the River Itchen SAC the potential for adverse effects predominantly arise as a result of the overall level of development proposed for the District (Policies DS1 & CP1), particularly in Winchester Town (Policies C2, WT1 & WT2). An increased residential population has the potential to increase levels of recreational activity at the SAC. It is unlikely that there will be direct impacts relating to disturbance on the River Itchen SAC as a result of noise, light and acoustic (vibrations can create barriers to migration) pollution, given the location of proposed development and the regulatory processes in place to prevent this occurring, including the requirement for project level HRA of any proposals. This is also the case for the strategic development proposed at Barton Farm (Policy WT2) given the location of development, which is over 900m from the River Itchen SAC. There is also existing residential and infrastructure development between the strategic allocations and the SAC.

4.33 Assessing the effect of increased recreational activity on the River Itchen SAC is complex, as there are a range of factors that ultimately determine significance. There is no information available on the current levels of recreational activity occurring on the River Itchen. Site level information available on the SAC from the JNCC and NE does not indicate that recreational activities are currently having significant effects on qualifying features, with water levels and water quality being identified as the key issues in maintaining site integrity. The ways in which recreational impacts can be managed through voluntary restrictions on site are explored later in this section as well as wider

[14] Stillman, R. A., West, A. D., Clarke, R. T. and Liley, D. (2011) Solent Disturbance and Mitigation Project: Phase II Report. Report to the Solent Forum.

mitigation measures to address the impacts of increased recreation as a result of the Core Strategy.

4.34 The screening identified that there was uncertainty with regard for the potential for the Core Strategy to have significant effects alone on the Solent Maritime SAC and Solent & Southampton SPA/Ramsar through increased disturbance. This relates to the proposed strategic development of 3,000 dwellings at North Whiteley (Policy SH3), which is within 40m of the identified European sites. The Solent Disturbance project has identified that existing recreational activities are likely to be having an effect on the designated bird populations present in the Solent. Given the proximity of the development at North Whiteley to the identified European sites there is the potential for increased recreational activity, in particular terrestrial activities such as dog walking.

4.35 For the impacts of an individual strategic development such as North Whiteley (Policy SH3), there is the potential for proposals to incorporate suitable alternative areas for recreation. In this case areas that provide suitable alternatives for the recreational activity that is identified by the Solent disturbance work as having the greatest impact, which is dog walking. Mitigation measures could include alternative areas for dog walking, such as a 'dog friendly park' that provides an area for dogs to be let off the lead. The requirement for project level HRA for this development will ensure that specific mitigation measures for addressing the potential impacts of recreational activity will be considered within any proposal for the site. The ways in which recreational impacts, including water based activities can be managed through voluntary restrictions on site are explored later in this section, as well as wider mitigation measures to address the impacts of increased recreation as a result of the Core Strategy.

4.36 The contribution of the Core Strategy to the in combination effects of increased recreational activity on the New Forest SAC/SPA/Ramsar will be minimal. The study on visitor disturbance in the New Forest National Park concluded that, "development close to the National Park will have the greatest impacts on visitor pressure, with a high proportion of the increase being generated by development within 7km of the National Park boundary, and relatively little impacts beyond 20km[15]". Mitigation measures to address the wider impacts of increased recreation as a result of the Core Strategy are explored in further detail below.

4.37 There is uncertainty with regard to the significance of the Core Strategy's contribution to the in combination effects of increased recreational activities on the integrity of the River Itchen SAC and Solent European sites. Given the unique recreational opportunities that the European sites provide and the level of development proposed

[15] Sharp, J., Lowen, J. & Liley, D. (2008) Chaging Patterns of visitor numbers within the New Forest National Park, with particular reference to the New Forest SPA.

around them, it is not likely that an individual authority alone could avoid, mitigate or compensate for adverse effects of increased disturbance on the integrity of the identified European sites if they should occur. However, at a strategic level, such as the Core Strategy, authorities should seek to ensure that policies recognise and address identified issues and put robust measures in place to provide mitigation. This might include policies that provide alternative recreational spaces or by contributions to strategic management approaches in collaboration with NE and other Local Authorities.

4.38 Policy mitigation and joint working at a strategic level can help to mitigate the impacts of recreational activity to a certain extent, however; the direct impacts of recreational activity are most appropriately addressed at the site level through co-operative measures. Co-operative measures such have been shown to be highly effective in the management of recreation and tourism impacts on European sites[16]. These measures have been most successful when affected stakeholders have been invited to participate and contribute in the design of the management measures. For example, the Dutch Wadden Sea Natura 2000 site is a crucial habitat for many plants and animals and is the largest nature protection area in the Netherlands. The area attracts large amount of tourism and many water-based recreation and sports activities, especially sailors. Prior to 2003 restrictions were in place in relation to the mooring of boats, which were heavily criticised by the various water sports associations. To settle the conflict and minimise adverse effects on the site a voluntary code of conduct was developed between the nature administration and the various water sport associations, which permitted exceptions to the mooring restrictions produced prior to 2003. The underlying aim of this voluntary agreement is to motivate visitors to avoid any behaviour that may have negative impacts on biodiversity. The site is also monitored annually for possible negative impacts and the commonly agreed rules of behaviour are evaluated.

4.39 NE plays a key role in the collation of information to monitor the identified European sites and is responsible for assessing the condition of each feature within the sites. If monitoring carried out by NE on the identified European sites finds that the voluntary agreements and restrictions currently in place are not protecting the designated features then they should be re-evaluated and possibly replaced by stricter regulations. This should be done in co-operation with key stakeholders including the various sport associations and land owners. The development of co-operative measures should already be going on through the production of the management plans for the European sites, such as the Solent European Marine Site Management Scheme. The fundamental purpose of the management plans is to ensure the sustainable use of the European sites. It provides the basis for site-specific monitoring and the goal is to either maintain the favourable

[16] Proebstl, U. & Prutsch, A. (2010) Natura 2000 - Outdoor Recreation and Tourism; A guideline for the Application of the Habitats Directive and the Birds Directive. Bundesamt fuer Natuschutz, Bonn, Germany.

condition of the site it is protecting, or to define the ideal desired condition and the required actions for achieving them. Representatives of all the various sports and tourism activities will be given the opportunity to participate in the management planning process, which can often provide innovative, practical and widely accepted solutions[17].

4.40 At a strategic level the Council should seek to ensure that Core Strategy policies address identified issues - in relation to potential in combination effects of increased recreational activity - and put robust measures in place to provide mitigation. The mitigation provided by Pre-Submission Core Strategy Policies is outlined below.

What existing mitigations are provided in the Core Strategy?

- Policy WT1 seeks the provision of additional open space and recreation areas in Winchester Town, this includes 12 ha of play space and 26 ha of sports provision to be secured in conjunction with development.
- Policy WT2 requires any development at Barton Farm to provide publicy accessible land to the East of the railway line to contribute to Green Infrastructure and mitigate potential environmental impacts. This is in addition to substantial areas of on-site open space to meet all the recreational needs of the new community.
- Policy CP7 (Open Space, Sport and Recreation) seeks improvements in the open space network and in built recreation facilities within the District to achieve the type of provision, space required and levels of accessibility set out in the Council's most up to date open space standards, as set out in **Figure 5**. New development will be required to make provision for open space and built facilities in accordance with these standards. The Policy also seeks to avoid the loss of any existing open space, sports or recreation facilities.

Figure 5: Open space standards

Parks, Sports and Recreation Grounds	Natural Green Space	Informal Open Space	Equipped Children's and Young People's Space	Allotments
1.5 ha./1000 population (0.75 ha./1000 for outdoor sport) Access: 650m	1.0 ha./1000 population Access: 400m	0.8 ha./1000 population Access: 700m	0.5 ha./1000 population Access: 480m Toddler and Junior 650m Youth	0.2 ha./1000 population Access: 480m

[17] Ibid.

- Policy CP15 (Green Infrastructure) supports development proposals that maintain, protect and enhance the function of the integrity of the existing green infrastructure (GI) network in the District and at a sub-regional level, which includes strategic blue and green corridors. It also supports the proposals identified through the PUSH GI Implementation Strategy. Key GI assets and opportunities within the District are identified as:
    - River corridors, tributaries and valleys of the Itchen, Meon, Hamble, Wallington and Dever which are of considerable biodiversity, landscape and recreation value;
    - Disused railway corridors (e.g. at Bishops Waltham, Meon Valley, Winchester);
    - Important public rights of way such as the South Downs Way, Itchen Navigation Heritage Project, and Keats Walk, Winchester;
    - The South Downs National Park which covers a large part of the eastern section of the District;
    - Natural and semi-natural urban greenspaces such as chalk downlands e.g. at St Catherine's Hill and Old Winchester Hill National Nature Reserve;
    - Areas of accessible and/or ancient woodland, including the those of the Forest of Bere (i.e. West Walk, Creech Woods, Whiteley Pastures);
    - Farmland which makes up around 73% of the district; predominantly arable land in the north and downlands and pasture in the south and along the river valleys;and
    - Historic parks and landscape features such as park pales, veteran trees, and sunken lanes;
    - Formal and informal recreation areas such as Farley Mount Country Park.

Further recommendations for avoidance and mitigation

4.41 Whilst Policy CP16 (Biodiversity) is considered to afford good protection to habitat and species more generally, there is potential to strengthen the wording with specific regard to the Solent disturbance project. It is recommended that the following wording is incorporated into the supporting text for Policy CP16:

The Council will implement the findings of the Solent Bird Disturbance and Mitigation Project commissioned by the Solent Forum and will ensure that any proposed strategic avoidance and/or mitigation measures are adopted in all planning documents and in the assessment of planning applications.

4.42 To address the identified issue of recreational disturbance on the designated bird species as a result of proposed development at North Whiteley it is recommended that the following should be incorporated into the Core Strategy:

- It is recommended that Policy SH3 (Strategic Housing Allocation - North Whiteley) should require any proposal for the site to incorporate suitable areas for dog walking. This should include a best practice'dog friendly park', which provides a suitable area for dogs to be let off the lead and that is of sufficient size and quality to deter owners from travelling to the European sites. This should be developed in consultation with local dog owners and trainers.

4.43 The policy mitigation outlined above is effective plan level mitigation and will contribute to minimising the impacts of the Core Strategy on increased levels of recreational activity.

Habitat (& species) Fragmentation & Loss

4.44 The screening assessment identified that there was the potential for likely significant effects at the following European sites through habitat fragmentation and loss:

- Mottisfont Bats SAC
- River Itchen SAC
- Solent Maritime SAC
- Solent and Southampton Water SPA/ Ramsar

What are the issues arising from the plan?

4.45 Development proposed in the Pre-Submission Core Strategy and surrounding areas could lead to the loss and fragmentation of supporting habitats, i.e. those that lie outside the designated area but have an identified role to play in maintaining the overall integrity of the European sites. It is unlikely that development proposed in the Core Strategy will lead directly to the loss of designated habitat as policies within the plan divert development away from European sites and actively seek to protect habitats and species.

How might the European sites be affected?

4.46 The loss or reduced connectivity of supporting habitats can adversely affect designated habitats by reducing their ability respond to natural processes, such as coastal erosion. The loss and fragmentation of supporting habitats can also adversely affect the designated mobile or migratory species that rely upon them.

Which other plans/ projects could lead to in-combination effects?

4.47 The following plans and programmes have the potential to act in-combination with the Core Strategy as they propose development that will lead to the cumulative increase of habitat fragmentation and loss:

- Hampshire, Portsmouth, Southampton and New Forest National Park Minerals and Waste Core Strategy
- Basingstoke and Dean Borough Council Core Strategy
- East Hampshire District Council Core Strategy
- Eastleigh Borough Council Draft Local
- Fareham Borough Council Core Strategy
- Gosport Borough Council draft Core Strategy
- Havant Borough Council Core Strategy
- New Forest District Council Core Strategy
- New Forest National Park Authority National Park Management Plan
- New Forest National Park Authority Core Strategy and Development Management Policies DPD

- Portsmouth Plan
- Southampton City Council Core Strategy
- Test Valley Borough Council Core Strategy
- Isle of Wight Council Core Strategy

What is the current situation?

4.48 The estuarine and coastal European sites along the Solent are under threat from the potential loss and fragmentation of supporting habitat. Development along the coast through increased housing/ industrial expansion in the area can result in coastal squeeze and the subsequent loss and fragmentation of habitat. Another cause is often the development of structures that seek to protect the land and/or infrastructure from erosion and sea defences to prevent erosion and/or flooding. These and other techniques effectively 'fix' the coastline, which is particularly important where it affects habitats and ecosystems that would normally move landward in response to erosive forces. Where there is a rise in sea level relative to the land a coastal squeeze takes place.

4.49 The Southern Damselfly - a qualifying feature of the River Itchen SAC - has very specialised habitat requirements, being confined to shallow, well-vegetated, base-rich runnels and flushes in open areas or small side-channels of chalk rivers. The majority of these sites are usually on wet heath. The loss and/ or fragmentation of suitable areas of wet heath near to the River Itchen therefore has the potential to adversely affect the Southern Damselfly population.

4.50 Barbastelle bats are a qualifying feature of the Mottisfont Bats SAC, which is approximately 6km from Winchester District. Linear habitat features, such as hedgerows and tree lines are particularly important for bat species as these types of habitat are used for foraging and movement between roosts. Barbastelle bats in the UK appear to prefer wooded river valleys and forage in mixed habitats, usually over water. The species is known to forage/migrate over large distances.

Is there potential for adverse effects on the integrity of European sites?

4.51 Development proposed in the Pre-Submission Core Strategy is unlikely to lead to the direct loss or fragmentation of designated habitats. There is however, the potential for loss of supporting habitats through land take. Considering the location of proposed development and sensitivities of the designated features, the European sites with the highest vulnerability to habitat loss and fragmentation are as follows:

- Mottisfont Bats SAC - The Pre-Submission Core Strategy proposes development (the Spatial Planning Objectives and Policies DS1, SH1 & CP1) of 11,000 new dwellings in Winchester District, which has the potential to result in the loss and/or fragmentation of foraging areas used by Barbastelle bats. This is likely to be more of an issue for development proposed (Policies WT1, WT2 & MTRA2) in close

proximity to the River Itchen as the Barbastelle bats in the UK tend to forage in wooded river valleys and mixed habitats, usually over water.

- River Itchen SAC - Development proposed in the Core Strategy (in particular Policies WT1, WT2, CP1 & MTRA2) along or near to the River Itchen has the potential to result in the loss and/or fragmentation of supporting habitat for the Southern Damselfly.
- Solent Maritime SAC and Solent & Southampton Water SPA/ Ramsar - Core Strategy proposes the development of 3,000 dwellings on land at North Whiteley (through Policies SH1, SH3 & CP1), which is within 40m of the European sites. There is the potential for development at this site to act in combination with other plans, programmes and projects to contribute to the loss and fragmentation of supporting habitats.

4.52 The potential impacts of proposed development on supporting habitats would most appropriately be addressed at the project level. Project level HRA would provide a detailed site level analysis of the importance of the site to the European sites, and provide suitable mitigation measures to reduce the adverse effects of the proposed development. For example, key considerations for the Barbastelle bats are likely to involve avoiding or minimising loss/breaching of linear features (e.g. hedgerows, woodland belts) in riparian corridors and appropriate design of site lighting to maintain 'dark corridors' as far as practicable. Where loss or interruption of linear features is unavoidable, either mitigation should be provided and/or any gaps kept to a width of 10m or less. The requirement for project level HRA for individual developments would ensure that there is no loss of important supporting habitat as a result of proposed development. The potential for the loss and fragmentation of supporting habitat is an issue that should be considered in more detail through the HRA of the Development Management and Allocations DPD.

4.53 At a strategic level the Council should seek to ensure that Core Strategy policies address identified issues - in relation to potential adverse impacts on habitat loss and fragmentation - and put robust measures in place to provide mitigation. The mitigation provided by Pre-Submission Core Strategy Policies is outlined below.

What existing mitigations are provided in the Core Strategy?

- Policy SH1 seeks to protect important natural assets, particularly habitats of national and international importance.
- Policy SH3 requires any development at North Whiteley to protect and enhance the various environmentally sensitive areas within and around the site, avoiding harmful effects or providing mitigation as necessary. Any proposal must also undertake a full assessment of the impact on habitats and bio-diversity (especially those of national and international importance such as the River Hamble and the Solent) of development both locally and in combination with other nearby sites.

- Policy CP16 supports development which maintains, protects and enhances biodiversity across the District, delivering a net gain in biodiversity and has regard to the following:
  - protecting sites of European importance from inappropriate development.
  - new development will be required to show how biodiversity will be retained, protected and enhanced through its design and implementation.
  - new development will be required to avoid adverse impacts, or If unavoidable, ensure impacts are appropriately mitigated, with compensation measures used as only a last resort. Development proposals will only be supported if the benefits of the development clearly outweigh the harm of the habitat and/or species.
  - maintaining a District wide network of local wildlife sites and corridors to support the integrity of the biodiversity network, prevent fragmentation, and enable biodiversity to respond and adapt to the impacts of climate change.
  - supporting and contributing to the targets set out in the District's Biodiversity Action Plan (BAP) for priority habitats and species.

Further recommendations for avoidance and mitigation

4.54 It is recommended that the wording of Policy CP16 (Biodiversity) is amended as follows:

protecting sites of European importance - including any supporting habitats that are important to maintain the integrity of these sites - from inappropriate development.

4.55 The policy mitigation outlined above is effective plan level mitigation and will contribute to minimising the impacts of proposed development on supporting habitats that are important in maintaining the integrity of European sites.

Water Levels & Quality

4.56 The screening assessment identified that there was the potential for likely significant effects at the following European sites through reduced water levels and quality:

- Chichester and Langstone Harbours SPA/ Ramsar
- New Forest SAC/ SPA/ Ramsar
- Portsmouth Harbour SPA/ Ramsar
- River Itchen SAC
- Solent Maritime SAC
- Solent and Isle of Wight Lagoons SAC
- Solent and Southampton Water SPA/ Ramsar

What are the issues arising from the plan?

4.57 The level of development proposed in the Core Strategy has the potential to act both alone and in combination with development proposed in surrounding areas through increased levels of abstraction to provide water supply; increased pressure on sewerage capacity and increased surface water run-off.

How might the European sites be affected?

4.58 Increased abstraction has the potential to lead to reduced water levels, which can have adverse effects on the integrity of water dependent European sites. Changes to water levels can impact river flow and water quality, which can adversely affect water dependent habitats and the species that rely upon them. Increased waste water discharges (consented) and surface water run-off (which can transfer pollutants to water bodies) have the potential to reduce water quality, which can also have adverse effects on designated habitats and species.

Which other plans/ projects could lead to in-combination effects?

4.59 The following plans and programmes have the potential to act in-combination with the Core Strategy as they propose development that will lead to the cumulative increase in water abstraction, consented discharges and surface water run-off:

- South East River Basin Management Plan
- The Test and Itchen Catchment Abstraction Management Strategy
- The East Hampshire Catchment Abstraction Management Strategy
- The Arun and Western Streams Catchment Abstraction Management Strategy.
- Portsmouth Water - Water Resource Management Plan
- Southern Water - Water Resource Management Plan
- Thames Water - Water Resource Management Plan

- Hampshire County Council Local Transport Plan 2011 - 2031
- Hampshire, Portsmouth, Southampton and New Forest National Park Minerals and Waste Core Strategy
- Basingstoke and Dean Borough Council Core Strategy
- East Hampshire District Council Core Strategy
- Eastleigh Borough Council Draft Local
- Fareham Borough Council Core Strategy
- Gosport Borough Council draft Core Strategy
- Havant Borough Council Core Strategy
- New Forest District Council Core Strategy
- New Forest National Park Authority National Park Management Plan
- New Forest National Park Authority Core Strategy and Development Management Policies DPD
- Portsmouth Plan
- Southampton City Council Core Strategy
- Test Valley Borough Council Core Strategy
- Isle of Wight Council Core Strategy

What is the current situation?

4.60 Water Levels: The principal supplier of water to the Winchester area is Southern Water with Portsmouth Water, Thames Water and Albion Water also serving small parts of the District. The majority of the District falls within the Hampshire South Water Resource Zone (WRZ), which is located in the southern part of Hampshire, extending from the boundaries of the New Forest in the west towards the River Meon in the east. The Hampshire South WRZ supplies the cities of Southampton and Winchester and towns such as Romsey and Eastleigh, in addition to the surrounding rural areas. There are ten WRZs in the Southern Water's supply area, however; some of these WRZs are connected by means of treated or raw water transfers. For the purposes of strategic planning, Southern Water has amalgamated some of the WRZs into larger, sub-regional areas. The Hampshire WRZ forms part of the sub-regional Western Area, which covers part Hampshire County and the whole of the Isle of Wight. The Western Area has the following inter-zonal connections:

- From Hampshire South WRZ to the Isle of Wight WRZ, via the cross-Solent main; and
- A number of very small interconnections between the Hampshire South and Hampshire Andover WRZs.

4.61 The Western Area is supplied by three surface water sources and over 30 groundwater sources. The groundwater sources abstract almost exclusively from the Chalk aquifer and the surface water sources comprise the abstractions on the Rivers Test and Itchen, which form a significant proportion of the supplies in Hampshire South WRZ. According to the figures within Southern Water's Water Resources Management Plan (WRMP), average annual demand within the

Hampshire South WRZ is 144.42 Megalitres per day (Ml/d), which can rise to 206.41 Ml/d during peak times in dry years. This will increase given the level of growth proposed within the District and surrounding areas.

4.62 The WRMP predicts that there will be a significant surplus within the Hampshire South WRZ at the start of the planning period until 2015. The WRZ would then go into significant deficit in 2019-20 and remain there until 2034-35 as a result of sustainability reductions imposed by the Environment Agency. The Habitats Directive Stage 4 Review of Consents (RoC) undertaken by the Environment Agency concluded that Sustainability Reductions were required to mitigate the effect of current abstractions which have been "investigated and identified" as having a detrimental effect on the environment. The outcome of the Stage 4 RoC for the River Itchen SAC was that the EA advised Southern Water to make significant changes to the Southern Water Lower Itchen abstraction licences.

4.63 To meet demand the WRMP proposes a number of measures, which include:

2010 - 15

- A policy of universal metering throughout the area by 2015, which will give benefits in terms of demand savings and associated reductions in supply pipe leakage;
- The optimisation of inter-zonal transfers, from the Hampshire South WRZ to the Isle of Wight WRZ via the cross-Solent main;
- A series of groundwater source improvements, which could deliver over 9 Ml/d for the average condition;
- The development of Testwood Water Supply Works (WSW) up to the current licence limit; and
- The development of the enabling Testwood to Otterbourne transfer.

2015 - 35

- The transfer of the Candover/Alre augmentation scheme to Southern Water from the Environment Agency, to enable the full yield benefits of the scheme to be realised, and satisfy any residual supply demand balance deficit arising from the Sustainability Reductions;
- The refurbishment of two small groundwater sources on the Isle of Wight;
- The refurbishment of three groundwater sources in the Hampshire South WRZ;
- Water efficiency kits being issued on the Isle of Wight; and
- A total further reduction in leakage of 8.9 Ml/d, which is equivalent to a reduction of 34% below the 2007-08 outturn figure[18].

[18] Southern Water (2009) Water Resource Management Plan.

4.64 Water Quality: The majority of groundwater in the District is currently at 'poor' status under the WFD. Ground water resources in the District are amongst the most sensitive in the region and are highly vulnerable to pollution. 80% of the District is underlain by principal aquifer and 46% of the District is within Source Protection Zones.

4.65 The majority of the River Itchen's length is currently assessed by the EA as having 'poor' ecological and 'failed' chemical status under the WFD, whereas the River Meon is currently assessed as having 'good' ecological and 'high' chemical status. The River Hamble is assessed as having predominantly 'moderate' ecological status[19].

4.66 Habitats Directive Review of Consents: The effects of abstraction and discharge of water on European sites are considered through the Environment Agency's RoC process. Stage 4 RoC Action Plans were prepared for the Portsmouth Harbour SPA/Ramsar; River Itchen SAC; Solent & Isle of Wight Lagoons SAC; Solent Maritime SAC and Solent & Southampton Water SPA/Ramsar. Stage 4 of the RoC process was undertaken for European sites for which permissions assessed at Stage 3 were shown to have adverse effects. The Action Plans proposed the modification of a number of discharge and abstraction licenses, which allowed the EA to conclude that existing permissions are not adversely affecting the integrity of the identified European sites.

Is there potential for adverse effects on the integrity of European sites?

4.67 All of the identified European sites are sensitive to changes in water levels and quality, in particular European sites with water dependent interest features. Development proposed in the Pre-Submission Core Strategy (provision of 11,000 new homes up to 2031) and surrounding areas will increase water abstraction which has the potential to result in reduced water levels. Development proposed in the Pre-Submission Core Strategy and surrounding areas will also increase pressure on sewerage capacity and increase levels of surface water run-off, which can result in reduced water quality. Effluent discharges can contain contaminants which build up in the food chain and can have toxic effects on organisms. They can also contain non-toxic contaminants, such as oxygen-depleting substances and nutrients. Eutrophication of water based habitats can lead to the excessive growth of planktonic or benthic algae, which is caused by increased nutrient inputs originating from sewage or agricultural run-off.

4.68 Any applications for new abstraction licences are assessed by the EA through the RoC process to ensure that adverse impacts on internationally important nature conservation sites do not occur. If the assessment of a new application shows that it could have an impact on a European site the EA follows strict rules in setting a time limit for that license. This ensures that water levels at European sites do not fall below critical levels. This could involve the issue of a license with

[19] Environment Agency. What's in Your Backyard?

conditions attached, such as a 'Hands-Off Flow' condition. This specifies that if the flow or level in the river drops below that which is required to protect the environment, the abstraction must stop. The EA also has a duty to assess the effects of consented discharges to address the potential for impacts on internationally important nature conservation sites. This regulated process serves to protect European sites.

4.69 The impacts of new development on the water environment are carefully regulated through development controls/ site management measures. These measures along with the mitigation already contained in the Plan (outlined below) will ensure that the potential adverse effects of the Core Strategy alone on water levels and quality are mitigated sufficiently. However, even with the regulatory processes in place to protect European sites there is still uncertainty with regard to the potential in combination effects of proposed development in the District and surrounding areas on the integrity of European sites through reduced water levels and quality.

4.70 At a strategic level the Council should seek to ensure that Core Strategy policies address these issues and put robust policy measures in place to provide mitigation. Further recommendations are also made to ensure that the impacts of proposed development on the water environment are minimised.

What existing mitigations are provided in the Core Strategy?

- Policy DS1 requires development proposals to consider the importance of retaining environmental assets and the efficient use of scarce resources. It also requires that development proposals test whether infrastructure has adequate capacity to serve new development, or arrangements are made in a timely manner for appropriate increases in capacity. Development proposals are also required to consider impacts on the water environment are properly addressed.
- Policy WT2 requires any development at Barton Farm to avoid harmful impacts on water resources, given the proximity of the site to the River Itchen and provide a fully integrated Sustainable Drainage System.
- Policy WT3 proposals for development at the Bushfield Camp opportunity site must meet the test of the Habitats Regulations and be accompanied by a full set of measures to avoid or mitigate the local and wider impacts of the development on the water environment and biodiversity.
- Policy SH3 requires any development at North Whiteley to undertake a full assessment of the impacts on habitats and biodiversity (especially those of national and international importance such as the River Hamble and the Solent) of development both locally and in combination with other nearby sites.
- Policy MTRA3 requires developments in the market towns and rural areas to be of an appropriate scale so as not to exceed capacity of

existing infrastructure or should be accompanied by any required improvements to physical infrastructure provision.

- Policy CP11 requires that from the adoption of the Core Strategy residential developments achieve Level 4 for the water aspect of the Code for Sustainable Homes and all non-residential development must meet BREEAM 'Excellent' standard. From 2016 onwards, all non-residential development must meet BREEAM 'Outstanding' standard.
- Policy CP17 (Flooding, Flood Risk and the Water Environment) supports development that includes sustainable water management systems. It also supports development that does not cause unacceptable deterioration to water quality or have unacceptable impact on water quantity by:
  - Protecting surface water and groundwater through suitable pollution prevention measures;
  - Using opportunities to improve water quality where possible;
  - Optimising water efficiency;
  - Ensuring water supply, surface water drainage and wastewater infrastructure to service new development are provided and connect to the nearest point of adequate capacity.

  The Policy also supports the development or expansion of water supply, surface water drainage and wastewater treatment facilities where they are needed to serve existing or new development or in the interests of securing long term supply, provided that the need for such facilities is consistent with other policies protecting the natural environment.
- Policy CP21 (Infrastructure and Community Benefit) supports development proposals which provide or contribute towards infrastructure needed to support them.

Further recommendations for avoidance and mitigation

4.71 Along with the strategic policy mitigation already in place the following recommendations should be incorporated into the Core Strategy to address the uncertainty surrounding water levels and quality:

- It is recommended that the Core Strategy require sustainable water strategies to accompany all proposals for strategic developments, which should specifically consider the incorporation of Sustainable Drainage Systems into any proposals.
- It is recommended that Policy CP11 should seek the incorporation of higher water efficiency measures in developments where suitable, in particular for strategic sites. The supporting text of Policy CP11 should also include further detail in relation to the types of water efficiency measures that might be used.

4.72 The policy mitigation outlined above is effective plan level mitigation and will contribute to minimising the impacts of proposed development on the water environment.

5.0 HRA CONCLUSIONS

HRA Summary

5.1 This report outlines the methods used and the findings arising from the Appropriate Assessment stage of the Habitats Regulations Assessment for the Winchester Core Strategy. The HRA of the Core Strategy has been undertaken in accordance with available guidance and good practice and has been informed by the previous HRA screening work and findings produced for earlier iterations of the Core Strategy, as well as advice received from Natural England.

5.2 The first stage of the HRA process (screening) considered the likely significant effects of the Pre-Submission Core Strategy on eleven European sites within the influence of the plan. Three of the European sites (Butser Hill SAC, East Hampshire Hangers SAC and Emer Bog SAC) were screened out of the assessment, given the location and sensitivities of the sites in relation to the location of development proposed in the Core Strategy. The screening concluded that the effects of the Plan were uncertain with regard to seven of the remaining European sites as a result of changes to air quality, water levels, water quality and levels of disturbance. It also concluded that the effects of the Core Strategy on four of the European sites were uncertain as a result of the loss and fragmentation of important supporting habitats. Based on the precautionary approach these issues were progressed through to the Appropriate Assessment stage to be examined in more detail.

5.3 The AA considered the potential for the Core Strategy alone to have adverse effects on the integrity of the River Itchen SAC, Solent Maritime SAC and Solent and Southampton Water SPA/ Ramsar through reduced air quality, water levels and water quality, increased disturbance and the loss and fragmentation of supporting habitats. The potential for adverse effects alone predominantly arises as a result of the proposed location of development, which is in close proximity to the three European sites. The assessment noted that the impacts of individual developments are carefully regulated through development controls/ site management measures, including the requirement for project level HRA. The AA concluded that these measures along with mitigation provided by Pre-Submission Policies and further recommendations provided by the AA would ensure that the Core Strategy alone will not have adverse effects on the integrity of the European sites.

5.4 The AA also considered the potential for the Core Strategy to have adverse in combination effects - with development proposed in surrounding areas - on seven of the identified European sites through reduced air quality, water levels and quality and increased disturbance. Given a lack of available evidence and ongoing studies, the AA was unable to conclude with certainty that the Core Strategy would not have adverse effects on the integrity of the identified

European sites as a result of these issues. To strengthen the mitigation already proposed in the Plan the AA recommended a number of policy safeguards to help provide effective plan level mitigation that will contribute to minimising the impacts of proposed development on air quality, water levels and water quality. Recommendations included:

- the monitoring of air quality at key locations within or close to the proposed strategic sites;
- additional policy wording that supports the findings of the Solent Bird Disturbance and Mitigation Project and ensure any proposed strategic avoidance and/or mitigation measures are adopted;
- the requirement for any proposal on land at North Whiteley to incorporate suitable areas for dog walking;
- the requirement for sustainable water strategies to accompany all proposals for strategic developments; and
- seeking the incorporation of higher water efficiency measures in developments where suitable, in particular for strategic sites.

5.5 The assessment also considered the potential for the Core Strategy to have adverse in combination effects on the eight of the European sites through the loss and fragmentation of supporting habitats. The AA concluded that the potential impacts of proposed development on supporting habitats would most appropriately be addressed at the project level. Project level HRA would provide a detailed site level analysis of the importance of the site to the designated features, and provide suitable mitigation measures to reduce the adverse effects of the proposed development. The AA recommended additional policy wording to strengthen the protection of important supporting habitats within the Core Strategy.

5.6 Provided that the recommendations of the AA are incorporated, it is considered that the Core Strategy will contain effective strategic plan level mitigation to address the issues identified through the HRA process, as far as is possible within the remit of a planning document. The plan should, however be seen in conjunction with the need for wider measures (e.g. effective European site management and coordinated regional approaches to air quality). The findings of this plan level HRA do not obviate the need to undertake HRA for lower level, project scale/ implementation plans where there is potential for a significant effect on one or more European Sites. Accordingly, this AA should be used to inform any future assessment work. It should also be revisited in the light of any significant changes to the Core Strategy and/ or if any further information becomes available.

5.7 These findings are subject to consultation comments and advice from NE and wider stakeholders.

Consultation Arrangements

5.8 In addition to the ongoing, statutory consultation undertaken with Natural England this HRA (AA) Report is available for wider public view and comment. Consultation on this HRA Report will take place in parallel with consultation on the Pre-Submission Core Strategy. The consultation period is from 25 January 2012 to 12 March 2012. All responses should be sent to:

Head of Strategic Planning
Winchester City Council
City Offices
Colebrook Street
Winchester
Hampshire
SO23 9LJ

Tel : 01962 840 222
Email : LDF@winchester.gov.uk

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Appendix 1: European Site Characterisations

SAC

Site Name: Butser Hill **Location: SU716197** **Size: 238.66ha**	**HRA Data Proforma**
Designation	**SAC**
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) ▪ *Taxus baccata* woods of the British Isles Priority feature
Conservation Objectives	Conservation Objectives The Conservation Objectives for this site are, subject to natural change, to maintain the following habitats and geological features in favourable condition (*), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar) as individually listed in Table 1. **Habitat Types represented (Biodiversity Action Plan categories)** Lowland Calcareous Grassland Broadleaved, Mixed and Yew Woodland **Geological features (Geological Site Types)** STATIC (FOSSIL) GEOMORPHOLOGICAL (IS) (*) or restored to favourable condition if features are judged to be unfavourable.
Component SSSIs	▪ Butser Hill
Key Environmental Conditions	▪ Maintain well drained soils.

Site Name: Butser Hill **Location: SU716197** **Size: 238.66ha**	**HRA Data Proforma**
Designation	**SAC**
(factors that maintain site integrity	▪ Maintain soil chemistry. ▪ Minimise soil disturbance - Manage/restrict recreational use. ▪ Maintain levels of grazing.
Vulnerabilities (includes existing pressures and trends)	▪ Its immediate location adjacent to the A3 and the surrounding intensively managed arable land means that there is the potential for localised atmospheric pollution. o Nitrogen deposition o Photochemical oxidants (ozone). o Particulate matter. ▪ Recreational pressure. o Trampling of shallow/thin soils.

Site Name: East Hampshire Hangers **Location: SU739268** **Size: 569.68ha**	**HRA Data Proforma**
Designation	**SAC**
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia)* (important orchid sites) * Priority feature ▪ *Asperulo-Fagetum* beech forests ▪ Tilio-Acerion forests of slopes, screes and ravines Priority feature Annex I Habitats qualifying feature: ▪ Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) ▪ *Taxus baccata* woods of the British Isles * Priority feature Annex II Species qualifying feature: ▪ Early gentian *Gentianella anglica*
Conservation Objectives	No conservation objectives available. From the information provided by Natural England on the component SSSIs it is possible that future conservation objectives will try to maintain, in a favourable condition the: ▪ Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (important orchid sites)* Priority feature ▪ *Asperulo-Fagetum* beech forests ▪ Tilio-Acerion forests of slopes, screes and ravines * Priority feature ▪ *Taxus baccata* woods of the British Isles * Priority feature They could also contain reference to maintain*, in favourable condition, the habitats for the population of: ▪ Early gentian *Gentianella anglica*

Site Name: East Hampshire Hangers **Location: SU739268** **Size: 569.68ha**	**HRA Data Proforma**
Designation	**SAC**
Component SSSIs	▪ Upper Greensand Hangers: Empshott to Hawkley ▪ Wick Wood and Worldham Hangers ▪ Upper Greensand Hangers: Wyck to Wheatley ▪ Noar Hill ▪ Selborne Common ▪ Wealden Edge Hangers ▪ Coombe Wood and The Lythe
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain soil chemistry. ▪ Maintain surface water regime. ▪ Minimise soil disturbance. ▪ Maintain levels of grazing. ▪ Maintain air quality.
Vulnerabilities (includes existing pressures and trends)	▪ Recreational pressure (trampling, rock climbers etc), this may not be an issue for the *Tilio-Acerion* forests of slopes, screes and ravines due to inaccessibility. ▪ Eutrophication as a result of run-off from adjacent agricultural land. ▪ Growth of ruderal vegetation. ▪ Beech disease.

Site Name: Emer Bog **Location: SU394214** **Size: 37.5ha**	**HRA Data Proforma**
Designation	**SAC**
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Transition mires and quaking bogs
Conservation Objectives	To maintain*, in favourable condition, the: ▪ Transition Mires and Quaking Bogs *maintenance implies restoration, if the feature is not currently in favourable condition.
Component SSSIs	▪ Baddesley Common and Emer Bog
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain levels of Nitrogen. ▪ Maintain surface and groundwater hydrological processes.
Vulnerabilities (includes existing pressures and trends)	▪ Principal threat to site is adjacent land-use. ○ Nitrogen deposition ○ Affect hydrological processes.

Site Name: Mottisfont Bats **Location: SU322297** **Size: 196.88ha**	**HRA Data Proforma**
Designation	
Qualifying Features	Annex II Species primary reason for selection: ▪ Barbastelle *Barbastella barbastellus*
Conservation Objectives	Subject to natural change, maintain, in favourable condition*, the broadleaved, mixed and yew woodland as a habitat for: ▪ Barbastelle *Barbastella barbastellus* * or restored to favourable condition if features are judged to be unfavourable.
Component SSSIs	▪ Mottisfont Bats
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain woodland, which the bats use for breeding, roosting, commuting and feeding. ○ Appropriate management of vegetation at roost entrances. The presence of trees can cause shading and damage by tree root growth can cause problems to structure. ○ Bats require connectivity of habitat features for commuting and foraging. ▪ Restrict/reduce recreational disturbance at site.
Vulnerabilities (includes existing pressures and trends)	▪ Recreational pressure. ▪ Light pollution.

Site Name: River Itchen **Location: SU467174** **Size: 309.26ha**	**HRA Data Proforma**
Designation	**SAC**
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation Annex II Species primary reason for selection: ▪ Southern damselfly *Coenagrion mercuriale* ▪ Bullhead *Cottus gobio* Annex II Species qualifying feature: ▪ White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes* ▪ Brook lamprey *Lampetra planeri* ▪ Atlantic salmon *Salmo salar* ▪ Otter *Lutra lutra*
Conservation Objectives	To maintain*, in favourable condition, the river as a habitat for: ▪ floating formations of water crowfoot (*Ranunculus*) of plain and sub-mountainous rivers ▪ populations of Atlantic salmon (*Salmo salar*) ▪ populations of bullhead (*Cottus gobio*) ▪ populations of brook lamprey (*Lampetra planeri*) ▪ populations of white-clawed crayfish (*Austropotamobius pallipes*) and the river and adjoining land as habitat for: ▪ populations of southern damselfly (*Coenagrion mercuriale*)

Site Name: River Itchen Location: SU467174 Size: 309.26ha	HRA Data Proforma
Designation	**SAC**
	▪ populations of otter (*Lutra lutra*) *maintenance implies restoration, if the feature is not currently in favourable condition.
Component SSSIs	▪ River Itchen
Key Environmental Conditions (factors that maintain site integrity	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation ▪ Maintain hydrological process of river – river velocity, transport etc. ○ Manage and monitor abstraction levels[1]. Southern damselfly *Coenagrion mercuriale* ▪ Maintain shallow, well-vegetated, base-rich runnels and flushes in open areas. ○ Maintenance of grazing. Bullhead *Cottus gobio* ▪ Maintain water quality.
Vulnerabilities (includes existing pressures and trends)	▪ Decrease in flow velocities and increased siltation. ▪ Increased abstraction in the upper catchment has led to a Reduction in macrophyte cover (especially Ranuculus). ▪ Low flows interact with nutrient inputs from point sources to produce localised increases in filamentous algae and nutrient-tolerant macrophytes at the expense of Ranunculus. ▪ Discharges into the River Itchen SAC from a sewage treatment works at Chickenhall (Eastleigh)[2].

[1] The Test and Itchen Catchment Abstraction Management Strategy, March 2006.
[2] Appropriate Assessment of the Draft South East Plan Final Report, October 2006.

Site Name: Solent & Isle of Wight Lagoons **Location: SZ608977** **Size: 36.24ha**	**HRA Data Proforma**
Designation	**SAC**
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Coastal lagoons Priority feature
Conservation Objectives	Subject to natural change, maintain, in favourable condition*, the coastal lagoons as a habitat for: ▪ Lagoonal sand-shrimp (*Gammarus insensibilis*) ▪ Starlet sea anemone (*Nematostella vectensis*) *or restored to favourable condition if features are judged to be unfovourable. Based on information sent from Natural England on the conservation objectives for the Newton Lagoon component SSSI and the Yar Lagoon component SSSI.
Component SSSIs	▪ Hurst Castle and Lymington River Estuary ▪ Langstone Harbour ▪ Brading Marshes to St Helens Ledges ▪ Gilkicker Lagoon

Site Name: Solent & Isle of Wight Lagoons **Location: SZ608977** **Size: 36.24ha**	**HRA Data Proforma**
Designation	**SAC**
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain water quality. ▪ Maintain water salinity. ▪ Maintain suitable distance between SAC and development to allow for managed retreat of intertidal habitats. ▪ Avoid introduction of non-native species, e.g. from shipping activity[3].
Vulnerabilities (includes existing pressures and trends)	▪ Water quality due to industrial waste disposal/landfill/discharges and diffuse pollution occurring off the site. ▪ Effects of sea-level rise; coastal defence. ▪ Water level management/sluice maintenance. ▪ Water-based and land-based recreational pressures, water quality problems, over-abstraction, coastal squeeze. ▪ Pollution from shipping[4]. ▪ Recreational Pressure.

[3] Habitats Regulations Assessment of the Hampshire Minerals Plan Final Report, October 2007.
[4] Appropriate Assessment of the Draft South East Plan Final Report, October 2006.

Site Name: Solent Maritime **Location: SU756003** **Size: 11325.09ha**	**HRA Data Proforma**
Designation	**SAC**
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Estuaries ▪ Spartina swards (*Spartinion maritimae*) ▪ Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) Annex I Habitats qualifying feature: ▪ Sandbanks which are slightly covered by sea water all the time ▪ Mudflats and sandflats not covered by seawater at low tide ▪ Coastal lagoons * Priority feature ▪ Annual vegetation of drift lines ▪ Perennial vegetation of stony banks ▪ Salicornia and other annuals colonising mud and sand ▪ Shifting dunes along the shoreline with *Ammophila arenaria* (`white dunes`) Annex II Species qualifying feature: ▪ Desmoulin`s whorl snail (*Vertigo moulinsiana*)
Conservation Objectives	1. Subject to natural change, maintain* the Estuaries in favourable condition, in particular: ▪ Shingle communities. ▪ Reedbed communities. ▪ Saltmarsh communities. ▪ Intertidal mudflat & sandflat communities. ▪ Intertidal mixed sediment communities. ▪ Subtidal sediment communities.

Site Name: Solent Maritime Location: SU756003 Size: 11325.09ha	HRA Data Proforma
Designation	**SAC**
	2. The conservation objective for annual vegetation of drift lines Subject to natural change, maintain* the Annual vegetation of drift lines in favourable condition. 3. The conservation objective for Atlantic salt meadows (*Glauco-Puccinellietalia*) Subject to natural change, maintain* the Atlantic salt meadows (*Glauco-Puccinellietalia*) in favourable condition, in particular: ▪ Low marsh communities. ▪ Mid-marsh communities. ▪ Upper marsh communities. ▪ Transitional high marsh communities. 4. The conservation objective for Salicornia and other annuals colonising mud and sand Subject to natural change, maintain* the Salicornia and other annuals colonising mud and sand in favourable condition, in particular: ▪ Annual Salicornia saltmarsh communities (SM8). ▪ *Suaeda maritima* saltmarsh communities (SM9). 5. The conservation objective for cordgrass swards (Spartinion) Subject to natural change, maintain* the cordgrass swards (Spartinion) in favourable condition, in particular: ▪ Small cordgrass (*Spartina maritima*) communities.

Site Name: Solent Maritime Location: SU756003 Size: 11325.09ha	HRA Data Proforma
Designation	**SAC**
	▪ Smooth cordgrass (*Spartina alterniflora*) communities. ▪ Townsend's cordgrass (*Spartina x townsendii*) communities. 6. The conservation objective for mudflats and sandflats not covered by seawater at low tide Subject to natural change, maintain* the mudflats and sandflats not covered by seawater at low tide in favourable condition, in particular: ▪ Intertidal mud communities. ▪ Intertidal muddy sand communities. ▪ Intertidal sand communities. ▪ Intertidal mixed sediment communities. 7. The conservation objective for sandbanks slightly covered by seawater all the time Subject to natural change, maintain* the sandbanks slightly covered by seawater all the time in favourable condition, in particular: ▪ Subtidal gravel and sands. ▪ Subtidal muddy sand. ▪ Subtidal eelgrass Zostera marina beds. 8. The conservation objective for lagoons Subject to natural change, maintain* the lagoons in favourable condition. 9. The conservation objective for perennial vegetation of stony banks

Site Name: Solent Maritime Location: SU756003 Size: 11325.09ha	HRA Data Proforma
Designation	**SAC**
	Subject to natural change, maintain* the Perennial vegetation of stony banks in favourable condition. 10. The conservation objective for shifting dunes along the shoreline with Ammophilia arenaria (white dunes) Subject to natural change, maintain* the Shifting dunes along the shoreline with Ammophilia arenaria (white dunes) in favourable condition. 11. The conservation objective for *Vertigo moulinsiana* (Desmoulin's Whorl Snail) Subject to natural change, maintain* in favourable condition the habitats for *Vertigo moulinsiana* (Desmoulin's Whorl Snail) *maintenance implies restoration if the feature is not currently in favourable condition.
Component SSSIs	▪ Yar Estuary ▪ North Solent ▪ Newtown Harbour ▪ Langstone Harbour ▪ Lee-on-the-Solent to Itchen Estuary ▪ Hurst Castle and Lymington River Estuary ▪ King's Quay Shore ▪ Eling and Bury Marshes ▪ Lower Test Valley ▪ Bouldnor and Hamstead Cliffs ▪ Medina Estuary ▪ Lincegrove and Hackett's Marshes

Site Name: Solent Maritime **Location: SU756003** **Size: 11325.09ha**	**HRA Data Proforma**
Designation	**SAC**
	▪ Upper Hamble Estuary and Woods ▪ Thorness Bay ▪ Hythe to Calshot Marshes ▪ Chichester Harbour
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain water quality. ▪ Maintain coastal hydrological processes. ▪ Maintain suitable distance between intertidal habitats and development to reduce coastal squeeze. ▪ Restriction of dredging or land-claim of coastal habitats.

Vulnerabilities (includes existing pressures and trends)	▪ Developments pressures including ports, marinas, jetties etc.
	▪ Existing and proposed flood defence and coast protection works.
	▪ Coastal squeeze of intertidal habitats due to coastal erosion/ sea level rise and sea-walls/ development in the hinterland.
	▪ Potential accidental pollution from shipping, oil/chemical spills, heavy industrial activities, former waste disposal sites and waste-water discharge. Chickenhall (Eastleigh) sewage treatment works discharges into the River Itchen SAC, which drains into the Solent Maritime SAC[5].
	▪ Introduction of non-native species e.g. from shipping activity.
	▪ Atmospheric pollution.
	  ○ Nitrogen deposition
	  ○ Photochemical oxidants (ozone).
	  ○ Particulate matter.

[5] Appropriate Assessment of the Draft South East Plan Final Report, October 2006.

Site Name: The New Forest **Location: SU225075** **Size: 29262.36**	**HRA Data Proforma**
Designation	**SAC**
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Oligotrophic water containing very few minerals of sandy plains (*Littorelletalia uniflorae)* ▪ Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletalia uniflorae* and/or *Isoeto-Nanojuncetea* ▪ Northern Atlantic wet heaths with *Erica tetralix* ▪ European dry heaths ▪ *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae)* ▪ Depressions on peat substrates of the *Rhynchosporion* ▪ Atlantic acidophilios beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-patraeae* or *Ilici-Fragenion)* ▪ *Asperulo-Fagetum* beech forests ▪ Old acidophilous oak woods with *Quercus robur* on sandy plains ▪ Bog woodland *Priority Feature ▪ Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae* *Priority Feature Annex I Habitats qualifying feature: ▪ Transition mires and quaking bogs ▪ Alkaline fens Annex II Species primary reason for selection: ▪ Southern Damselfly *Coenagrion mercuriale* ▪ Stag beetle *Lucanus cervus* Annex II Species qualifying feature:

Site Name: The New Forest **Location: SU225075** **Size: 29262.36**	**HRA Data Proforma**
Designation	**SAC**
	▪ Great crested newt *Titurus cristatus*
Conservation Objectives	The conservation objectives for the European interest on the SSSI are To maintain*, in favourable condition, the: ▪ Alkaline fens ▪ Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanaem Salicion albae*) ▪ *Asperulo-Fagetum* beech forests ▪ Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae or Ilici-Fagenion*) ▪ Bog woodland ▪ Depressions on peat substrates of the Rhyncosporion ▪ European dry heath ▪ Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) ▪ North Atlantic wet heaths with *Erica tetralix* ▪ Old acidophilous oak woods with *Quercus robur* on sandy plains ▪ Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and or of the *Isoeto-Naonjuncetea* ▪ Oligotrophic waters containing very few minerals of sandy plains: *Littorelletalia uniflora* ▪ Transition mires and quaking bogs To maintain*, in favourable condition, the habitats for the population of: ▪ Great crested newt (*Triturus cristatus*)

Site Name: The New Forest Location: SU225075 Size: 29262.36	HRA Data Proforma
Designation	**SAC**
	▪ Southern damselfly (*Coenagrion mercuriale*) ▪ Stag beetle (*Lucanus cervus*) * maintenance implies restoration if the feature is not currently in favourable condition
Component SSSIs	▪ The New Forest ▪ Langley Wood and Homan's Copse ▪ Roydon Woods ▪ Whiteparish Common ▪ Loosehanger Copse and Meadows ▪ Landford Bog
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain natural hydrological regime. o Water levels. o Flushing rates of the system. ▪ Maintain sedimentary regime within acceptable limits. ▪ Maintain water quality. ▪ Management of heathland. o Control of inappropriate and invasive species. o Grazing. ▪ Maintain sward composition and structure (height, litter and bare ground). ▪ Management of vegetation structure. ▪ Management of surrounding tress and scrubs. ▪ Management of woodland required to maintain natural processes, a diverse woodland structure, tree regeneration potential, a diverse age structure, control invasive species, and support characteristic species and habitat types.

Site Name: The New Forest Location: SU225075 Size: 29262.36	HRA Data Proforma
Designation	**SAC**
Vulnerabilities (includes existing pressures and trends)	▪ The New Forest is a popular tourist destination and is subject to recreational pressures potentially affecting habitats. ▪ Drainage of wetland habitats for improved grazing and farming has affected the condition of habitats. ▪ Areas of the New Forest have undergone afforestation of heathland habitats, with conifers and other non-native species, modifying the original biodiversity of the area. ▪ Risks also exist due to fluctuating farming trends (relating to the level of livestock) and the extent of grazing.

SPA

Site Name: Chichester & Langstone Harbours **Location (Lat & Long):** **50 48 23 N** **00 55 12 W** **Size: 5810.03ha**	**HRA Data Proforma**
Designation	**SPA**
Qualifying Features	Article 4.1 Qualification During the breeding season the area regularly supports: ▪ *Sterna albifrons* 4.2% of the GB breeding population ▪ *Sterna Hirundo* 0.3% of the GB breeding population ▪ *Sterna sandvicensis* 0.2% of the GB breeding population Over winter the area regularly supports: ▪ *Limosa Lapponica* 3.2% of the GB breeding population Article 4.2 Qualification Over winter the area regularly supports: ▪ *Anas acuta* 1.2% of the population in Great Britain ▪ *Anas clypeata* 1% of the population in Great Britain ▪ *Anas crecca* 0.5% of the population ▪ *Anas Penelope* 0.7% of the population in Great Britain ▪ *Arenaria interpres* 0.7% of the population in Great Britain ▪ *Branta bernicla bernicla* 5.7% of the population ▪ *Calidris alba* 0.2% of the population ▪ *Calidris alpina* alpina 3.2% of the population

Site Name: Chichester & Langstone Harbours **Location (Lat & Long):** **50 48 23 N** **00 55 12 W** **Size: 5810.03ha**	**HRA Data Proforma**
Designation	**SPA**
	▪ *Charadrius hiaticula* 3% of the population in Great Britain ▪ *Mergus serrator* 3% of the population in Great Britain ▪ *Numenius arquata* 1.6% of the population in Great Britain ▪ *Pluvialis squatarola* 2.3% of the population ▪ *Tadorna tadorna* 3.3% of the population in Great Britain ▪ *Tringa tetanus* 1% of the population Article 4.2 Qualification: Internationally Important Assemblage of Birds ▪ 93,230 Waterfowl
Conservation Objectives	1. The conservation objective for the internationally important populations of the regularly occurring Annex 1 species Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 species, in particular: ▪ Sand and shingle ▪ Shallow coastal waters 2. The conservation objective for the internationally important populations of the regularly occurring migratory species Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular: ▪ Reedbeds

Site Name: Chichester & Langstone Harbours Location (Lat & Long): 50 48 23 N 00 55 12 W Size: 5810.03ha	HRA Data Proforma
Designation	**SPA**
	▪ Standing water ▪ Coastal and inundation grassland ▪ Sand and shingle ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Mixed sediment shores ▪ Shallow coastal waters 3. The conservation objective for the internationally important assemblage of waterfowl Subject to natural change, maintain* in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular: ▪ Reedbeds ▪ Standing water ▪ Coastal and inundation grassland ▪ Sand and shingle ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Mixed sediment shores ▪ Shallow coastal waters *maintenance implies restoration if the feature is not currently in favourable condition.

Site Name: Chichester & Langstone Harbours **Location (Lat & Long):** **50 48 23 N** **00 55 12 W** **Size: 5810.03ha**	**HRA Data Proforma**
Designation	**SPA**
Component SSSIs	▪ Chichester Harbour ▪ Langstone Harbour
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain water quality. ▪ Maintain hydrological regime, e.g. freshwater flows at heads of channels for birds. ▪ Maintain suitable distance between SPA and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze. ▪ Maintain short grasslands surrounding SPA as it is a key foraging resource for Brent Goose[6]. ▪ Avoid introduction of non-native species, e.g. from shipping activity[7].
Vulnerabilities (includes existing pressures and trends)	▪ Significant recreational pressure during summer months. ▪ Effluent discharges and agricultural run-off can lead to localised eutrophication. This more likely to occur at Chichester Harbour as it surrounded mainly by high grade farmland. ▪ Sea-level rise and 'coastal squeeze' are significant threats to the long-term maintenance of habitat diversity and structural integrity. ▪ Incremental loss of fringing habitats and transitional communities is a threat as hard coastal defences are maintained by riparian land-owners. ▪ SPA lies close to the A259 so there is potential for atmospheric pollution, especially in the case of Langstone Harbour, which is fringed by urban and industrial development.

[6] Habitats Regulations Assessment of the Hampshire Minerals Plan Final Report, October 2007.
[7] Opcite.

Site Name: New Forest **Location (Lat & Long):** **50 49 32 N** **01 39 22 W** **Size: 28002.81**	**HRA Data Proforma**
Designation	**SPA**
Qualifying Features	Article 4.1 Qualification During the breeding season the area regularly supports: ▪ *Caprimulgus europaeus* 8.8% of the GB breeding population ▪ *Lullula arborea* 29.5% of the GB breeding population ▪ *Pernis apivorus* 12.5% of the GB breeding population ▪ *Sylvia undata* 33.6% of the GB breeding population Over winter the area regularly supports: ▪ *Circus cyaneus 2% of the GB population]* Article 4.2 Qualification During the breeding season the area regularly supports: ▪ *Falco subbuteo 5%* of the GB population ▪ *Phylloscopus sibilatrix* 2% of the GB population
Conservation Objectives	The conservation objectives for the European interest on the SSSI are To maintain*, in favourable condition, the: ▪ Alkaline fens ▪ Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanaem Salicion albae*) ▪ *Asperulo-Fagetum* beech forests

Site Name: New Forest **Location (Lat & Long):** **50 49 32 N** **01 39 22 W** **Size: 28002.81**	**HRA Data Proforma**
Designation	**SPA**
	▪ Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae or Ilici-Fagenion*) ▪ Bog woodland ▪ Depressions on peat substrates of the Rhyncosporion ▪ European dry heath ▪ Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) ▪ North Atlantic wet heaths with Erica tetralix ▪ Old acidophilous oak woods with *Quercus robur* on sandy plains ▪ Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and or of the *Isoeto-Naonjuncetea* ▪ Oligotrophic waters containing very few minerals of sandy plains: *Littorelletalia uniflora* ▪ Transition mires and quaking bogs To maintain*, in favourable condition, the habitats for the populations of Annex 1 bird species + of European importance, with particular reference to: ▪ dry heathland ▪ dry grassland ▪ inclosure and pasture woodlands + Honey Buzzard, Nightjar, Woodlark, Dartford Warbler, Hen Harrier * maintenance implies restoration if the feature is not currently in favourable condition

Site Name: New Forest **Location (Lat & Long):** **50 49 32 N** **01 39 22 W** **Size: 28002.81**	**HRA Data Proforma**
Designation	**SPA**
Component SSSIs	▪ The New Forest
Key Environmental Conditions (factors that maintain site integrity	▪ Manage/maintain habitats (see Key Environmental Conditions for The New Forest SAC) ▪ Reduce disturbance. ○ Manage recreational activities.

Vulnerabilities (includes existing pressures and trends)	▪ Recreational pressure.
	  ○ Walkers.
	  ○ Predation by dogs.
	▪ Low water levels.
	▪ Many mires have been damaged in the past by drainage to improve grazing and forestry, which in turns dries out the peat layers.
	▪ Afforestation of heathland habitats, with conifers and other non-native species, modifying the original biodiversity of the area.
	▪ Grazing trends.

Site Name: Portsmouth Harbour **Location (Lat & Long):** **50 49 41 N** **01 07 32 W** **Size: 1248.77ha**	**HRA Data Proforma**
Designation	**SPA**
Qualifying Features	Article 4.2 Qualification Over winter the area regularly supports: ▪ *Branta bernicla bernicla* 0.9% of the population ▪ *Calidris alpina alpine* 1% of the population in Great Britain ▪ *Limosa limosa islandica* 0.4% of the population in Great Britain ▪ *Mergus serrator* 0.9% of the population in Great Britain
Conservation Objectives	The conservation objective for the internationally important populations of the regularly occurring migratory species Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular: ▪ Coastal and inundation grassland ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Shallow coastal waters *maintenance implies restoration if the feature is not currently in favourable condition.
Component SSSIs	▪ Portsmouth Harbor
Key Environmental Conditions (factors that maintain site	▪ Maintain water quality. ▪ Maintenance of freshwater inputs for certain bird species.

Site Name: Portsmouth Harbour Location (Lat & Long): 50 49 41 N 01 07 32 W Size: 1248.77ha	HRA Data Proforma
Designation	**SPA**
integrity	▪ Restriction of dredging or land-claim of coastal habitats. ▪ Maintain suitable distance between SPA and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze. ▪ Restrict public access over-wintering periods. ▪ Avoid introduction of non-native species, e.g. from shipping activity[8].
Vulnerabilities (includes existing pressures and trends)	▪ Modification of physical processes through large-scale land-claim, capital and maintenance dredging, sea defences and the knock on effects on the extent and distribution of intertidal habitats. ▪ Sea Level Rise and issues related to Coastal Squeeze. ▪ Maintenance and development of both commercial and military ports. ▪ Accidental pollution from shipping and heavy industrial activities, former military and waste disposal sites, re-distribution of contaminated sediments. ▪ High levels of recreational pressure both on shore and offshore which can have disturbance effects during sensitive (over-wintering) periods.

[8] Habitats Regulations Assessment of the Hampshire Minerals Plan Final Report, October 2007.

Site Name: Solent & Southampton Water **Location (Lat & Long):** **50 44 25 N** **01 31 33 W** **Size: 5505.86**	**HRA Data Proforma**
Designation	**SPA**
Qualifying Features	Article 4.1 Qualification During the breeding season the area regularly supports: ▪ *Larus melancephalus* 15.4% of the GB breeding population ▪ *Sterna albifrons* 2% of the GB breeding population ▪ *Sterna dougallii* 3.1% of the GB breeding population ▪ *Sterna hirundo* 2.2% of the GB breeding population ▪ *Sterna sandvicensis* 1.7% of the GB breeding population Article 4.2 Qualification Over winter the area regularly supports: ▪ *Ana crecca* 1.1% of the population ▪ *Branta bernicula* 2.5% of the population ▪ *Charadrius hiaticula* 1.2% of the population ▪ *Limosa islandica* 1.7% of the population Article 4.2 Qualification: Internationally Important Assemblage of Birds ▪ 51,361 Waterfowl
Conservation Objectives	1. The conservation objective for the internationally important populations of the regularly occurring Annex 1 species

Site Name: Solent & Southampton Water **Location (Lat & Long):** **50 44 25 N** **01 31 33 W** **Size: 5505.86**	**HRA Data Proforma**
Designation	**SPA**
	Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 species, in particular: ▪ Standing water ▪ Sand and shingle ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Shallow coastal waters ▪ Lagoons 2. The conservation objective for the internationally important populations of the regularly occurring migratory species Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular: ▪ Grazing marsh ▪ Reedbeds ▪ Standing water ▪ Coastal and inundation grassland ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Boulder and cobble shores

Site Name: Solent & Southampton Water **Location (Lat & Long):** **50 44 25 N** **01 31 33 W** **Size: 5505.86**	**HRA Data Proforma**
Designation	**SPA**
	▪ Mixed sediment shores ▪ Lagoons 3. The conservation objective for the internationally important assemblage of waterfowl Subject to natural change, maintain* in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular: ▪ Grazing marsh ▪ Reedbeds ▪ Standing water ▪ Coastal and inundation grassland ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Boulder and cobble shores ▪ Mixed sediment shores ▪ Lagoons *maintenance implies restoration if the feature is not currently in favourable condition.
Component SSSIs	▪ Thorness Bay ▪ Sowley Pond ▪ Medina Estuary ▪ Hurst Castle and Lymington River Estuary

Site Name: Solent & Southampton Water **Location (Lat & Long):** **50 44 25 N** **01 31 33 W** **Size: 5505.86**	**HRA Data Proforma**
Designation	**SPA**
	▪ Brading Marshes to St. Helen's Ledges ▪ Lymington River Reedbeds ▪ Lincegrove and Hackett's Marshes ▪ Lower Test Valley ▪ Ryde Sands and Wootton Creek ▪ Lee-on-The-Solent to Itchen Estuary ▪ Titchfield Haven ▪ Newtown Harbour ▪ Yar Estuary ▪ King's Quay Shore ▪ Eling and Bury Marshes ▪ Upper Hamble Estuary and Woods ▪ Hythe to Calshot Marshes ▪ Whitecliff Bay and Bembridge Ledges ▪ North Solent
Key Environmental Conditions (factors that maintain site integrity	▪ Retain the current extent and condition of the habitat whilst allowing natural coastal processes to operate along the length of the rocky coast. ▪ Maintenance of a broad and integrated approach to coastal management as inappropriate coastal defences or development which may alter erosion/deposition rates may have indirect, off-site impacts on an interconnected part of the coast ▪ Maintenance of the natural processes and dynamics of dune development and succession in order to

Site Name: Solent & Southampton Water Location (Lat & Long): 50 44 25 N 01 31 33 W Size: 5505.86	HRA Data Proforma
Designation	**SPA**
	maintain the range of habitats and associated species reflecting the different stages of succession. Mobility of the substrate is essential to maintain vegetation diversity. ▪ Management of access to minimise trampling and disturbance. ▪ Maintenance of good water quality and sediment quality is vital, and maintenance of the sediment budget within the estuarine or coastal system to ensure it is not restricted by anthropogenic influences. ▪ Create space to enable landward roll-back to take place in response to sea-level rise and allow the system to be dynamic and retain the flexibility to respond to associated changes such as migrating subtidal sandbanks. ▪ Where saltmarshes have a history of management through grazing, continue this to provide habitat variety, particularly for wintering birds, and maintain botanical diversity - avoid overgrazing as this may reduce species diversity and impact the sediments supporting the saltmarsh. ▪ Where there is no history of grazing, the saltmarsh will be able to maintain itself and grazing-sensitive species are likely to be present so grazing should not be introduced. ▪ Maintain grazing. ▪ Agricultural operations should be avoided before mid-June to minimise disturbance to breeding birds or the destruction of nests. ▪ An element of managed scrub, both within and fringing a field can be of importance to birds and invertebrates, as can a surrounding hedge. ▪ A mosaic of flooded grassland and permanently un-flooded grassland is desirable, with both temporary and permanent pools present to provide roosting and feeding habitat for birds – area of flooding should be adjusted to meet seasonal bird needs. ▪ Minimise any harmful disturbance, especially at times when bird populations are under stress, such as severely cold conditions. ▪ Predators, especially crows and related species, should be controlled and this may be best achieved by

Site Name: Solent & Southampton Water Location (Lat & Long): 50 44 25 N 01 31 33 W Size: 5505.86	HRA Data Proforma
Designation	**SPA**
	limiting their nesting sites. ▪ Careful maintenance of existing ditches and drains is usually acceptable practice, but abandonment or deepening of ditches can be harmful. ▪ Maintaining salinity and water depths.
Vulnerabilities (includes existing pressures and trends)	▪ Sea level rise and coastal squeeze ▪ Due to the scale of Southampton port and increasing concentration of shipping transportation the potential for accidental pollution from shipping, heavy industrial activities and former waste disposal sites is a serious threat to the environment. ▪ The area is also vulnerable to ongoing impacts from waste water discharge. ▪ The area is highly developed with ongoing pressures both on shore and at sea from recreational and commercial interests. ▪ Modified physical processes and sediment transfer patterns caused by previous flood and coastal defence works, which may have a knock on effect on the extent and distribution of intertidal habitats. ▪ Flood and coastal defence works - sedimentation, see level rise. Physical damage from dredging. ▪ Accidental pollution from former waste disposal sites, toxic contamination.

Ramsar

Site Name: Chichester & Langstone Harbour **Location (Lat & Long):** **50 48 23 N** **00 55 12 W** **Size: 5810.03ha**	**HRA Data Proforma**
Designation	**Ramsar**
Qualifying Features	Ramsar criterion1 ▪ Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes. Ramsar criterion 5 ▪ Species with peak counts in winter (76480 waterfowl) Ramsar criterion 6 Species with peak counts in spring/autumn: ▪ Ringed plover, *Charadrius hiaticula* ▪ Black-tailed godwit, *Limosa limosa islandica* ▪ Common redshank, *Tringa totanus tetanus* ▪ Species with peak counts in winter: ▪ Dark-bellied brent goose, *Branta bernicla bernicla* ▪ Common shelduck, *Tadorna tadorna* ▪ Grey plover, *Pluvialis squatarola* ▪ Dunlin, *Calidris alpina alpina*
Conservation Objectives	1. The conservation objective for the internationally important populations of the regularly occurring Annex 1 species

Site Name: Chichester & Langstone Harbour Location (Lat & Long): 50 48 23 N 00 55 12 W Size: 5810.03ha	HRA Data Proforma
Designation	**Ramsar**
	Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 species, in particular: ▪ Sand and shingle ▪ Shallow coastal waters 2. The conservation objective for the internationally important populations of the regularly occurring migratory species Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular: ▪ Reedbeds ▪ Standing water ▪ Coastal and inundation grassland ▪ Sand and shingle ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Mixed sediment shores ▪ Shallow coastal waters 3. The conservation objective for the internationally important assemblage of waterfowl

Site Name: Chichester & Langstone Harbour **Location (Lat & Long):** **50 48 23 N** **00 55 12 W** **Size: 5810.03ha**	**HRA Data Proforma**
Designation	**Ramsar**
	Subject to natural change, maintain* in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular: ▪ Reedbeds ▪ Standing water ▪ Coastal and inundation grassland ▪ Sand and shingle ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Mixed sediment shores ▪ Shallow coastal waters *maintenance implies restoration if the feature is not currently in favourable condition.
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain water quality. ▪ Maintain hydrological regime, e.g. freshwater flows at heads of channels for birds. ▪ Maintain suitable distance between SPA and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze. ▪ Maintain short grasslands surrounding SPA as it is a key foraging resource for Brent Goose[9]. ▪ Avoid introduction of non-native species, e.g. from shipping activity[10].

[9] Habitats Regulations Assessment of the Hampshire Minerals Plan Final Report, October 2007.
[10] Opcite.

Site Name: Chichester & Langstone Harbour Location (Lat & Long): 50 48 23 N 00 55 12 W Size: 5810.03ha	HRA Data Proforma
Designation	**Ramsar**
Vulnerabilities (includes existing pressures and trends)	▪ Significant recreational pressure during summer months. ▪ Effluent discharges and agricultural run-off can lead to localised eutrophication. This more likely to occur at Chichester Harbour as it surrounded mainly by high grade farmland. ▪ Sea-level rise and 'coastal squeeze' are significant threats to the long-term maintenance of habitat diversity and structural integrity. ▪ Incremental loss of fringing habitats and transitional communities is a threat as hard coastal defences are maintained by riparian land-owners. ▪ SPA lies close to the A259 so there is potential for atmospheric pollution, especially in the case of Langstone Harbour, which is fringed by urban and industrial development.

Site Name: New Forest **Location (Lat & Long):** **50 49 32 N** **01 39 22 W** **Size: 28002.81ha**	**HRA Data Proforma**
Designation	**Ramsar**
Qualifying Features	Ramsar criterion: ▪ Valley mires and wet heaths found throughout the site – largest concentration of intact valley mires of their type in Britain. ▪ Diverse assemblage of wetland plants and animals including several nationally rare species. ▪ Mire habitats are of high ecological quality and diversity – concentration of rare and scarce wetland species.
Conservation Objectives	The conservation objectives for the European interest on the SSSI are To maintain*, in favourable condition, the: ▪ Alkaline fens ▪ Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanaem Salicion albae)* ▪ *Asperulo-Fagetum* beech forests ▪ Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae or Ilici-Fagenion*) ▪ Bog woodland ▪ Depressions on peat substrates of the *Rhyncosporion* ▪ European dry heath ▪ Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) ▪ North Atlantic wet heaths with Erica tetralix ▪ Old acidophilous oak woods with Quercus robur on sandy plains ▪ Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and or of

Site Name: New Forest Location (Lat & Long): 50 49 32 N 01 39 22 W Size: 28002.81ha	HRA Data Proforma
Designation	**Ramsar**
	the Isoeto-Naonjuncetea ▪ Oligotrophic waters containing very few minerals of sandy plains: *Littorelletalia uniflora* ▪ Transition mires and quaking bogs To maintain*, in favourable condition, the habitats for the population of: ▪ Great crested newt (*Triturus cristatus*) ▪ Southern damselfly (*Coenagrion mercuriale)* ▪ Stag beetle *(Lucanus cervus)* To maintain*, in favourable condition, the habitats for the populations of Annex 1 bird species + of European importance, with particular reference to: ▪ dry heathland ▪ dry grassland ▪ inclosure and pasture woodlands + Honey Buzzard, Nightjar, Woodlark, Dartford Warbler, Hen Harrier * maintenance implies restoration if the feature is not currently in favourable condition
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain natural hydrological regime. ○ Water levels. ○ Flushing rates of the system. ▪ Maintain water quality.

Site Name: New Forest **Location (Lat & Long):** **50 49 32 N** **01 39 22 W** **Size: 28002.81ha**	**HRA Data Proforma**
Designation	**Ramsar**
	▪ Management of vegetation structure. ▪ Management of surrounding tress and scrubs.
Vulnerabilities (includes existing pressures and trends)	▪ The New Forest is a popular tourist destination and is subject to recreational pressures potentially affecting habitats. ▪ Drainage of wetland habitats for improved grazing and farming has affected the condition of habitats. ▪ Areas of the New Forest have undergone afforestation of heathland habitats, with conifers and other non-native species, modifying the original biodiversity of the area. ▪ Risks also exist due to fluctuating farming trends (relating to the level of livestock) and the extent of grazing.

Site Name: Portsmouth Harbour **Location (Lat & Long):** **50 49 41 N** **01 07 32 W** **Size: 1248.77ha**	**HRA Data Proforma**
Designation	**Ramsar**
Qualifying Features	Ramsar criterion 3 ▪ The intertidal mudflat areas possess extensive beds of eelgrass *Zostera angustifolia* and *Zostera noltei* which support the grazing dark-bellied brent geese populations. ▪ The mud-snail *Hydrobia ulvae* is found at extremely high densities, which helps to support the wading bird interest of the site. ▪ Common cord-grass *Spartina anglica* dominates large areas of the saltmarsh and there are also extensive areas of green algae *Enteromorpha spp*. and sea lettuce *Ulva lactuca*. ▪ More locally the saltmarsh is dominated by sea purslane *Halimione portulacoides* which gradates to more varied communities at the higher shore levels. ▪ The site also includes a number of saline lagoons hosting nationally important species. Ramsar criterion 6 Species with peak counts in winter: ▪ Dark-bellied brent goose, *Branta bernicla bernicla* - 2105 individuals, representing an average of 2.1% of the GB population
Conservation Objectives	The conservation objective for the internationally important populations of the regularly occurring migratory species Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular: ▪ Coastal and inundation grassland ▪ Saltmarsh ▪ Intertidal mudflats and sandflats

Site Name: Portsmouth Harbour **Location (Lat & Long):** **50 49 41 N** **01 07 32 W** **Size: 1248.77ha**	**HRA Data Proforma**
Designation	**Ramsar**
	▪ Shallow coastal waters *maintenance implies restoration if the feature is not currently in favourable condition.
Key Environmental Conditions (factors that maintain site integrity	▪ Maintain water quality. ▪ Maintenance of freshwater inputs for certain bird species. ▪ Restriction of dredging or land-claim of coastal habitats. ▪ Maintain suitable distance between SPA and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze. ▪ Restrict public access over-wintering periods. ▪ Avoid introduction of non-native species, e.g. from shipping activity[11].
Vulnerabilities (includes existing pressures and trends)	▪ Modification of physical processes through large-scale land-claim, capital and maintenance dredging, sea defences and the knock on effects on the extent and distribution of intertidal habitats. ▪ Sea Level Rise and issues related to Coastal Squeeze. ▪ Maintenance and development of both commercial and military ports. ▪ Accidental pollution from shipping and heavy industrial activities, former military and waste disposal sites, re-distribution of contaminated sediments. ▪ High levels of recreational pressure both on shore and offshore which can have disturbance effects during sensitive (over-wintering) periods.

[11] Habitats Regulations Assessment of the Hampshire Minerals Plan Final Report, October 2007.

Site Name: Solent & Southampton Water **Location (Lat & Long):** **50 44 25 N** **01 31 32 W** **Size: 5346.44ha**	**HRA Data Proforma**
Designation	**Ramsar**
Qualifying Features	Ramsar criterion 1 ▪ The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs. Ramsar criterion 2 ▪ The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site. Ramsar criterion 5 Assemblages of international importance: Species with peak counts in winter: ▪ 51343 waterfowl Ramsar criterion 6 Species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation): Species with peak counts in spring/autumn: ▪ Ringed plover, *Charadrius hiaticula*, 397 individuals, representing an average of 1.2% of the GB population Species with peak counts in winter:

Site Name: Solent & Southampton Water **Location (Lat & Long):** **50 44 25 N** **01 31 32 W** **Size: 5346.44ha**	**HRA Data Proforma**
Designation	**Ramsar**
	▪ Dark-bellied brent goose, *Branta bernicla bernicla*, 6456 individuals, representing an average of 3% of the population ▪ Eurasian teal, *Anas crecca*, 5514 individuals, representing an average of 1.3% of the population ▪ Black-tailed godwit, *Limosa limosa islandica*, 1240 individuals, representing an average of 3.5% of the population
Conservation Objectives	1. The conservation objective for the internationally important populations of the regularly occurring Annex 1 species Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 species, in particular: ▪ Standing water ▪ Sand and shingle ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Shallow coastal waters ▪ Lagoons 2. The conservation objective for the internationally important populations of the regularly occurring migratory species Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular:

Site Name: Solent & Southampton Water Location (Lat & Long): 50 44 25 N 01 31 32 W Size: 5346.44ha	HRA Data Proforma
Designation	**Ramsar**
	▪ Grazing marsh ▪ Reedbeds ▪ Standing water ▪ Coastal and inundation grassland ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Boulder and cobble shores ▪ Mixed sediment shores ▪ Lagoons 3. The conservation objective for the internationally important assemblage of waterfowl Subject to natural change, maintain* in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular: ▪ Grazing marsh ▪ Reedbeds ▪ Standing water ▪ Coastal and inundation grassland ▪ Saltmarsh ▪ Intertidal mudflats and sandflats ▪ Boulder and cobble shores

Site Name: Solent & Southampton Water **Location (Lat & Long):** **50 44 25 N** **01 31 32 W** **Size: 5346.44ha**	**HRA Data Proforma**
Designation	**Ramsar**
	▪ Mixed sediment shores ▪ Lagoons *maintenance implies restoration if the feature is not currently in favourable condition.
Key Environmental Conditions (factors that maintain site integrity	▪ Retain the current extent and condition of the habitat whilst allowing natural coastal processes to operate along the length of the rocky coast. ▪ Maintenance of a broad and integrated approach to coastal management as inappropriate coastal defences or development which may alter erosion/deposition rates may have indirect, off-site impacts on an interconnected part of the coast ▪ Maintenance of the natural processes and dynamics of dune development and succession in order to maintain the range of habitats and associated species reflecting the different stages of succession. Mobility of the substrate is essential to maintain vegetation diversity. ▪ Management of access to minimise trampling and disturbance. ▪ Maintenance of good water quality and sediment quality is vital, and maintenance of the sediment budget within the estuarine or coastal system to ensure it is not restricted by anthropogenic influences. ▪ Create space to enable landward roll-back to take place in response to sea-level rise and allow the system to be dynamic and retain the flexibility to respond to associated changes such as migrating subtidal sandbanks. ▪ Where saltmarshes have a history of management through grazing, continue this to provide habitat variety, particularly for wintering birds, and maintain botanical diversity - avoid overgrazing as this may reduce species diversity and impact the sediments supporting the saltmarsh. ▪ Where there is no history of grazing, the saltmarsh will be able to maintain itself and grazing-sensitive species are likely to be present so grazing should not be introduced.

Site Name: Solent & Southampton Water **Location (Lat & Long):** **50 44 25 N** **01 31 32 W** **Size: 5346.44ha**	**HRA Data Proforma**
Designation	**Ramsar**
	▪ Maintain grazing. ▪ Agricultural operations should be avoided before mid-June to minimise disturbance to breeding birds or the destruction of nests. ▪ An element of managed scrub, both within and fringing a field can be of importance to birds and invertebrates, as can a surrounding hedge. ▪ A mosaic of flooded grassland and permanently un-flooded grassland is desirable, with both temporary and permanent pools present to provide roosting and feeding habitat for birds – area of flooding should be adjusted to meet seasonal bird needs. ▪ Minimise any harmful disturbance, especially at times when bird populations are under stress, such as severely cold conditions. ▪ Predators, especially crows and related species, should be controlled and this may be best achieved by limiting their nesting sites. ▪ Careful maintenance of existing ditches and drains is usually acceptable practice, but abandonment or deepening of ditches can be harmful. ▪ Maintaining salinity and water depths.
Vulnerabilities (includes existing pressures and trends)	▪ Sea level rise and coastal squeeze ▪ Due to the scale of Southampton port and increasing concentration of shipping transportation the potential for accidental pollution from shipping, heavy industrial activities and former waste disposal sites is a serious threat to the environment. ▪ The area is also vulnerable to ongoing impacts from waste water discharge. ▪ The area is highly developed with ongoing pressures both on shore and at sea from recreational and commercial interests. ▪ Modified physical processes and sediment transfer patterns caused by previous flood and coastal defence

Site Name: Solent & Southampton Water Location (Lat & Long): 50 44 25 N 01 31 32 W Size: 5346.44ha	HRA Data Proforma
Designation	**Ramsar**
	works, which may have a knock on effect on the extent and distribution of intertidal habitats. ▪ Flood and coastal defence works – sedimentation, see level rise. Physical damage from dredging. ▪ Accidental pollution from former waste disposal sites, toxic contamination

Appendix 2: Plans & Programmes Review

Regional

South East River Basin Management Plan, December 2009.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The River Basin Management Plan describes the main issues for the South East river basin district and highlights some key actions proposed for dealing with them set out in brief the actions the EA propose should be taken. The document sets out detailed proposals for the next six years and beyond. Key actions for the Test and Itchen Catchment are: • The Environment Agency will modify abstraction licences and discharge consents to ensure no adverse impact on the River Itchen Special Area of Conservation. • Southern Water will improve sewage works at three locations including Eastleigh and Millbrook to reduce levels of phosphate and organic pollutants. • Natural England, the Environment Agency and others will work to reduce diffuse pollution from agriculture, partly though the England Catchment Sensitive Farming Delivery Initiative. This will also address rising trends in nitrate at sources in the Test and Itchen chalk aquifers. • The Environment Agency will work with landowners on a fish passage programme which aims to address barriers at sites on the rivers Test and Itchen including Bishopstoke Mill, Durngate and Otterbourne Lock. Through the 'better rivers' programme we will enhance habitat in 18 priority river	A Habitats Regulations Assessment of this plan has been carried out to consider whether it is likely to have a significant effect on any Natura 2000 sites. The assessment was undertaken by the Environment Agency, in consultation with Natural England. The assessment concluded that the river basin management plan is unlikely to have any significant negative effects on any Natura 2000 sites. The plan itself does not require further assessment under the Habitats Regulations. This conclusion is reliant on the fact that before any measures in the plan are implemented they must be subject to the requirements of the Habitats Regulations. Any plans, project or permissions required to implement the measures must undergo an appropriate assessment if they are likely to a have a significant effect.

South East River Basin Management Plan, December 2009.	
water bodies including the Test, Alre and Itchen Navigation. • The Environment Agency will monitor salmon and control invasive non-native fish. • The Environment Agency will work with industry to minimise the impact of fish farms and cress farms on water quality. • The Highways Agency, local authorities and the Environment Agency will develop targeted pollution prevention initiatives to prevent and limit the introduction of pollutants to groundwater from road drainage, private sewage disposals, oil and chemical use and storage, and pesticide use in urban areas. • WWF will work with the Environment Agency and partners in the Rivers on the Edge project that includes the Itchen. Some key actions for the East Hampshire catchment are: The Environment Agency will modify abstraction licences to ensure no adverse impact on internationally important wildlife sites. Southern Water will improve sewage works at four locations including Peel Common, Bishops Waltham and Budds Farm, these will reduce levels of nutrients such as phosphate and benefit shellfish and bathing waters. The Environment Agency and others will improve the potential for river wildlife and aim to address barriers to fish passage. The Downs and Harbours Clean Water Partnership will target land management advice particularly in the Wallington. A range of initiatives will improve river flow for example by reducing abstraction and other measures, particularly in the summer months. The Environment Agency will work to investigate and address	

South East River Basin Management Plan, December 2009.	
sewerage misconnections in urban areas, and target pollution prevention around industrial areas. The Environment Agency will collate information on swallow holes and raise awareness of landowners to prevent groundwater pollution. The Environment Agency will investigate landfill sites to assess their impact on the River Alver and groundwater bodies in the area.	

The Test and Itchen Catchment Abstraction Management Final Strategy, March 2006.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The document sets out how the Environment Agency will manage water abstraction the Test and Itchen catchment. The strategy provides the framework for any decision on an abstraction license application. The resource availability status for groundwater sources was: • Cheriton Stream at Sewards Bridge Itchen - No Water Available • River Alre at Drove Lane Itchen - No Water Available • Candover Stream at Borough Bridge Itchen - No Water Available • River Itchen at Easton Itchen - No Water Available • River Itchen at Allbrook & Highbridge Itchen - Over Abstracted • River Itchen at Riverside Park Itchen - Over Abstracted • River Itchen Total Itchen - Over Abstracted • Monks Brook at Stoneham Lane Itchen - No Water	Under the Habitats Regulations the Environment Agency has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.

The Test and Itchen Catchment Abstraction Management Final Strategy, March 2006.	
Available The final assessment for water resource management units was: • Upper Itchen to Easton Itchen - No Water Available • Candover Stream to Borough Bridge Itchen - No Water Available • Lower Itchen from Easton to Woodmill Itchen - Over Abstracted	

The East Hampshire Catchment Abstraction Management Strategy, May 2003.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The document sets out how the Environment Agency will manage water abstraction from the East Hampshire rivers catchment until 2009. The strategy provides the framework for any decision on an abstraction license application. The three principal rivers within the CAMS area are the River Hamble, River Meon and River Wallington. Groundwater abstraction accounts for 98% of all licensed abstraction by volume. Surface water abstractions are used for fish farming and spray irrigation. There are 10 water company abstractions in the CAMS area accounting for 89% of all licensed abstraction. Most water abstracted for public water supply is consumed within the East Hampshire CAMS area. However, 84% of all discharge consents in the CAMS area discharge out to the Solent and the largest consents are for sewage treatment works along the south coast. The catchment has been split into 7 Water Resource	The rivers within the East Hampshire Catchment ultimately flow into the English Channel. Therefore any impact to the coastal and marine European sites caused by changes to the water resource management of the catchment needs is considered as part of the CAMS process. Under the Habitats Regulations the Environment Agency has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.

The East Hampshire Catchment Abstraction Management Strategy, May 2003.	
Management Units (WRMU). The CAMS assesses: ▪ WRMU 1 as 'water available' ▪ WRMU 2 as 'over-abstracted' ▪ WRMU 3 as 'no water available' ▪ WRMU 4 as 'over-abstracted' ▪ WRMU 5 as 'over-abstracted' ▪ WRMU 6 as 'over-abstracted' ▪ WRMU 7 as 'over-licensed'	

The Arun and Western Streams Catchment Abstraction Management Strategy, April 2003.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The document sets out how the Environment Agency Wales will manage water abstraction from the Arun and Western Streams catchment until 2009. The strategy provides the framework for any decision on an abstraction license application. The CAMS area incorporates the catchments of the River Arun, including its main tributary the River Rother, and the West Sussex coastal streams including the rivers Ems and Lavant. There are two major aquifers within the catchment, which represent the area's most important water resource and provide the numerous springs and streams which support surface water flows. The catchment has been split into 7 Water Resource Management Units (WRMU). The CAMS assesses: ▪ WRMU 1 as 'water available' ▪ WRMU 2 as 'over-abstracted'	The aquifers within the catchment support freshwater inputs to Chichester and Langstone Harbour SPA and Ramsar site and Solent Maritime SAC. Under the Habitats Regulations the Environment Agency has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.

The Arun and Western Streams Catchment Abstraction Management Strategy, April 2003.	
▪ WRMU 3 as 'over-licensed' ▪ WRMU 4 as 'over-abstracted' ▪ WRMU 5 as 'no water available' ▪ WRMU 6 as 'no water available' ▪ WRMU 7 as 'over-licensed'	

Portsmouth Water - Final Water Resource Management Plan, 2009.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Water Resources Management Plan sets out how Portsmouth Water proposes to ensure that there is sufficient security of water supplies to meet the anticipated demands of its customers over the 25-year planning period from 2010 to 2035. At Average Demand the Baseline Supply/Demand Balance confirms that there is a surplus of supply over demand throughout the planning period and this surplus falls from 46 Ml/d at the base year to just over 14 Ml/d by 2034/35. The Availability of Resources remains above the Total Demand and Headroom Forecast throughout the period. The Final Planning Solution proposed is as follows: • A compulsory metering programme utilising Automatic Meter Reading (AMR) technology over a 15 year period from 2015 to 2030 • A programme of Leakage Savings delivering a 3 Ml/d leakage reduction between 2015 and 2020	The EA produced separate Site Action Plans for each of the following European sites as a result of the Habitats Directive Stage 4 Review of Consents: ▪ Chichester Harbour SPA ▪ Langstone Harbour SPA ▪ Portsmouth Harbour SPA ▪ Solent Maritime SAC ▪ Solent and Southampton Water SPA ▪ River Itchen SAC The Environment Agency has recently provided indicative conclusions for the Company's sources, the key outcomes being: ▪ a significant reduction in deployable output at the Company's Gaters Mill abstraction on the River Itchen. ▪ a marginal reduction in deployable output for the Havant & Bedhampton Springs licence. ▪ the imposition of time-limited licences for the remaining Hampshire sources which result in uncertainty for the future.

Portsmouth Water - Final Water Resource Management Plan, 2009.	
• The construction of a Washwater Recovery Plant at Farlington Water Treatment Works in 2017/18 • The development of Havant Thicket Winter Storage Reservoir, filled by surplus yield from the Company's Havant & Bedhampton Springs, between 2025 and 2035.	▪ the imposition of a new group licence for the majority of the Sussex sources which will reduce annual licensed capacity but not the deployable output.

Southern Water - Water Resource Management Plan, October 2009.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Water Resources Management Plan sets out how Southern Water proposes to ensure that there is sufficient security of water supplies to meet the anticipated demands of its customers over the 25-year planning period from 2010 to 2035. The WRMP predicts that there will be a significant surplus within the Hampshire South WRZ at the start of the planning period until 2015. The WRZ would then go into significant deficit in 2019-20 and remain there until 2034-35 as a result of sustainability reductions imposed by the Environment Agency. The Habitats Directive Stage 4 Review of Consents (RoC) undertaken by the Environment Agency concluded that Sustainability Reductions were required to mitigate the effect of current abstractions which have been "investigated and identified" as having a detrimental effect on the environment. The outcome of the Stage 4 RoC for the River Itchen SAC was that the EA advised Southern Water to make significant changes to the Southern Water Lower Itchen abstraction licences. To meet demand the WRMP proposes a number of measures,	The EA produced separate Site Action Plans for each of the following European sites as a result of the Habitats Directive Stage 4 Review of Consents: ▪ Chichester Harbour SPA ▪ Langstone Harbour SPA ▪ Portsmouth Harbour SPA ▪ Solent Maritime SAC ▪ Solent and Southampton Water SPA ▪ River Itchen SAC The Action Plans proposed the modification of a number of discharge and abstraction licenses, which allowed the EA to conclude that existing permissions are not adversely affecting the integrity of the identified European sites.

Southern Water - Water Resource Management Plan, October 2009.	
which include: 2010 - 15 ▪ A policy of universal metering throughout the area by 2015, which will give benefits in terms of demand savings and associated reductions in supply pipe leakage; ▪ The optimisation of inter-zonal transfers, from the Hampshire South WRZ to the Isle of Wight WRZ via the cross-Solent main; ▪ A series of groundwater source improvements, which could deliver over 9 Ml/d for the average condition; ▪ The development of Testwood Water Supply Works (WSW) up to the current licence limit; and ▪ The development of the enabling Testwood to Otterbourne transfer. 2015 - 35 ▪ The transfer of the Candover/Alre augmentation scheme to Southern Water from the Environment Agency, to enable the full yield benefits of the scheme to be realised, and satisfy any residual supply demand balance deficit arising from the Sustainability Reductions; ▪ The refurbishment of two small groundwater sources on the Isle of Wight; ▪ The refurbishment of three groundwater sources in the Hampshire South WRZ; ▪ Water efficiency kits being issued on the Isle of Wight; and ▪ A total further reduction in leakage of 8.9 Ml/d, which is equivalent to a reduction of 34% below the 2007-08 outturn figure.	

Southern Water - Water Resource Management Plan, October 2009.	

Thames Water - Water Resource Management Plan, October 2009.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Plan sets out how Thames Water intends to maintain the balance between supply and demand for water over the next 25 years.	The HRA identifies that at a strategic level, there is generally insufficient information available (i.e. groundwater modelling studies) to state the nature and magnitude of likely impacts. It also states that when the EA's RoC is available, it will then be possible to consider in-combination effects of proposed new schemes with those existing schemes. The HRA screening does not identify any European sites at risk of likely significant effects that are of relevance to this HRA.

County

Hampshire County Council Local Transport Plan 2011 - 2031	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The LTP sets out the County Council's transport strategy and explains how it has been designed to achieve wider policy objectives, such as improving quality of life, protecting the environment and securing economic prosperity. It will also help realise our vision of The overall vision for this LTP is of a transport strategy that provides "safe, efficient and reliable ways to get around a prospering and sustainable Hampshire". The Plan identifies three main transport priorities for Hampshire over the next 20 years, these are: ▪ Main Priority 1: To support economic growth by ensuring the safety, soundness and efficiency of the transport network in Hampshire. ▪ Main Priority 2: Provide a safe, well-maintained, and more resilient road network in Hampshire as the basic transport infrastructure of the county on which all forms of transport directly or indirectly depend, and the key to continued casualty reduction. ▪ Main Priority 3: Manage traffic to maximise the efficiency of existing network capacity, improving journey time reliability and reducing emissions, thereby supporting the efficient and sustainable movement of people and goods;	An HRA Screening Report for LTP3 Strategy was produced in March 2011. It concluded that the LTP3 is unlikely to generate significant effects at any European site, either alone or in-combination with other plans and projects. As a result a stage 2 Appropriate Assessment was not undertaken.

Hampshire, Portsmouth, Southampton and New Forest National Park Minerals and Waste Core Strategy, Publication November 2011.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Strategy sets out a Spatial Vision for future minerals and waste planning in Hampshire and explains its role within the planning process. It also sets out the various environmental and social and economic objectives relevant to minerals and waste developments in Hampshire and respective general policies. The Strategy also includes a number of 'development control' policies for evaluating planning applications for minerals and waste developments. The overall strategic aim is to provide sufficient minerals and waste development to support Hampshire's and neighbouring areas economies throughout the plan period. However, it will also ensure that Hampshire's environment and the quality of life of it's communities are protected. Accordingly, minerals and waste development will not be located in areas of important environmental designations, such as the New Forest and South Downs National Parks. Likewise, development will be located and controlled so that the amenity and living standards of Hampshire's and neighbouring areas residents and local businesses will not be harmed	The HRA (Nov 2011) of the Publication concluded that by applying a legally enforceable and appropriate suite of mitigating measures in relation to potential impacts on European sites, the development proposed to bring forward the required capacity can be delivered.

Local

Basingstoke and Dean Borough Council Core Strategy Issues and Options Consultation, January 2008.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Basingstoke and Dean Core Strategy will be the key Development Plan Document within the Basingstoke and Dean Local Development Framework (LDF). The Core Strategy sets the LDF's long-term spatial Vision and Strategic Objectives for development planning and it considers the options available through the planning system to the Council and communities in the Basingstoke and Dean Borough area. The scale of employment land requirement has not yet been agreed, and will depend on the outcome of further work to forecast future economic growth in the Borough, The Core Strategy proposes 740 new dwellings per annum during the life of the plan. The focus for housing provision in terms of the number of new homes lies within the Western Corridor/ Blackwater Valley sub-regional area, as defined in the South East Plan.	The potential effects arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of designated and/or supporting habitats.

East Hampshire District Council Core Strategy Issues and Options, Spring 2008.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Basingstoke and Dean Core Strategy will be the key Development Plan Document within the Basingstoke and Dean Local Development Framework (LDF). The Core Strategy sets the LDF's long-term spatial Vision and Strategic Objectives for development planning and it considers the options available through the planning system to the Council and communities in	The potential effects arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites.

East Hampshire District Council Core Strategy Issues and Options, Spring 2008.	
the Basingstoke and Dean Borough area. The South East Plan proposes 5,200 new dwellings in East Hampshire between 2006 and 2026 (Panel Report recommends an extra 2,500). Of these 4,000 homes are to be provided in the part of the district that lies within Central Hampshire. 1,200 homes are to be provided within the part of the district that lies within South Hampshire.	▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of designated and/or supporting habitats.

Eastleigh Borough Council Draft Local Plan 2011-2029	
Document Details	**Potential impacts that could cause 'in-combination' effects**
Housing Proposes the development of 9,400 new homes (523 per annum) over the next 18 years. This will consist of: ▪ 4700 homes in the existing urban areas, across the borough, many at Eastleigh, but with sites also in Chandler's Ford, Netley and West End ▪ 3,700 homes on three large scale developments ▪ 1,300 south of Chestnut Avenue, Eastleigh ▪ 1,000 west of Woodhouse Lane, Hedge End ▪ 1,400 north east of Boorley Green, Botley ▪ 1,000 homes on a range of smaller green field sites across the borough at Allbrook, Bishopstoke, Botley, Bursledon, Fair Oak, Hedge End, Netley and West End	The potential effects arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of

Eastleigh Borough Council Draft Local Plan 2011-2029	
Employment ▪ Employment development focussed at Eastleigh River Side ▪ Small green field employment sites at West End and Allbrook ▪ Offices and shops focussed in town, district and local centres Infrastructure ▪ Botley bypass ▪ Sunday's Hill bypass, Hedge End ▪ Other road and junction improvements ▪ Cycle routes and footpaths	designated and/or supporting habitats.

Fareham Borough Council Core Strategy (adopted) August 2011.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
CS1 Employment Provision Additional employment development will be permitted to meet a minimum floorspace target of 41,000 sq.m (excluding the SDA) and to contribute to GVA growth. This will be met through: ▪ Completed floorspace between April 2006 and March 2010; ▪ Safeguarding existing employment areas; ▪ Implementing existing commitments;	An AA Report (Dec 2010) demonstrated that there will be no adverse effects on the ecological integrity of European sites as a result of the Fareham Borough Core Strategy Regulation 27 document in relation to the following impact types: ▪ Atmospheric pollution at the New Forest SAC/SPA/Ramsar; ▪ Water abstraction in relation to River Itchen SAC, Solent Maritime SAC, Chichester & Langstone Harbours SPA/Ramsar, and Solent & Southampton Water SPA/Ramsar; ▪ Water pollution in relation to Solent Maritime SAC, Portsmouth Harbour SPA/Ramsar, and Solent & Southampton Water SPA/Ramsar; and ▪ Loss / degradation of supporting habitats in relation to Portsmouth

Fareham Borough Council Core Strategy (adopted) August 2011.	
▪ Requiring the inclusion of 10,000 sq.m of new B1 development as part of mixed use schemes within Fareham town centre; ▪ Daedalus Airfield Strategic Development Allocation to accommodate a minimum of 10,000 sq.m and up to 33,000 sq.m of net additional23 general, or light industrial or warehousing employment floorspace (Policy CS12); ▪ Taking a flexible approach to the redevelopment of existing employment sites for different uses which contribute to economic development. **CS2 Housing Provision** 3,729 dwellings will be provided within the Borough to meet the South Hampshire sub-regional strategy housing target between 2006 and 2026, excluding the SDA. Priority will be given to the reuse of previously developed land within the existing urban areas. Housing will be provided through; ▪ completions between April 2006 and March 2010 (1,637 units); ▪ sites that already have planning permission (1,434 units); ▪ dwellings on previously developed land; ▪ sites allocated in earlier local plans; ▪ the Strategic Development Allocation at the former Coldeast Hospital; ▪ the Strategic Development Location at Fareham Town Centre; and	Harbour SPA/Ramsar and Solent & Southampton Water SPA/Ramsar. The report found that there was potential for adverse effects at certain European sites against the following issues, but these can be overcome provided the recommended avoidance and mitigation measures are successfully adopted and implemented: Atmospheric pollution Atmospheric pollution effects at River Itchen SAC, Solent Maritime SAC, Chichester & Langstone Harbours SPA/Ramsar, Portsmouth Harbour SPA/Ramsar, and Solent & Southampton Water SPA/Ramsar are overcome by the Core Strategy‟s spatial and transport strategies. The siting of new development in suitably accessible locations and promotion of sustainable transport are the key measures in this respect. This is strengthened by the plan‟s commitment to flexibility in the rate, scale and distribution of development, to enable it to respond to the findings of new evidence and further assessments. Disturbance from recreation Disturbance effects from recreational activity at Chichester & Langstone Harbours SPA/Ramsar, Portsmouth Harbour SPA/Ramsar, Solent & Southampton Water SPA/Ramsar, and the New Forest SPA are overcome through the delivery of alternative natural greenspace for recreation, and access management measures at European sites, facilitated through developer contributions. The detail of these measures is developed and promoted through the South Hampshire Green Infrastructure Strategy, Solent Disturbance and Mitigation Project and New Forest Recreation Management Strategy. They are strengthened by the plan‟s commitment to flexibility in the rate, scale and distribution of development, to enable it to respond to the findings of new evidence and further assessments. Displacement effects from potential wind energy generation

Fareham Borough Council Core Strategy (adopted) August 2011.	
▪ new allocations and redesignations to be identified through the Site Allocations and Development Management DPD **CS6 The Development Strategy** Development will be focussed in: ▪ Fareham (Policy CS7), the Western Wards & Whiteley (Policy CS9), Portchester, Stubbington & Hill Head and Titchfield (Policy CS11); ▪ Land at the Strategic Development Locations to the North of Fareham (Policy CS13) and Fareham Town Centre; (Policy CS8); ▪ Land at the Strategic Development Allocations at the former Coldeast Hospital (Policy CS10) and Daedalus Airfield (Policy CS12).	Displacement effects from possible wind turbine development at Portsmouth Harbour SPA/Ramsar are considered to be avoidable through the means of implementation of the Core Strategy. Wind energy may form a part of the Borough's commitment to renewable energy, but not in areas where environmental constraints are irresolvable, whereas several other options are available.

Gosport Borough Council draft Core Strategy Preferred Options, September 2009.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Core Strategy will make provision for the following over the period 2006-2026: ▪ Employment: a minimum of 81,500 sq.m net additional floorspace ▪ Housing: a minimum of 2.500 net additional dwellings ▪ Retail: Up to 11,000 sq.m net additional floorspace.	The potential effects arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites.

Gosport Borough Council draft Core Strategy Preferred Options, September 2009.	
Development will be focussed at the following strategic areas: ▪ The Gosport Waterfront and Gosport Town Centre (mixed-use); ▪ Daedalus (mixed-use employment led); ▪ The Haslar Peninsula at Royal Hospital Haslar (mixed-use medical/health/care led) and Blockhouse (mixed-use leisure/ maritime use led); and ▪ Rowner Renewal (mixed-use residential led).	▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of designated and/or supporting habitats. HRA Screening Report (September 2009) concluded that the Gosport Core Strategy will require appropriate assessment under the Habitats Regulations in order to ascertain whether or not it will lead to adverse effects on site integrity, at thirteen European sites, either alone or in combination with other plans or projects.

Havant Borough Council Core Strategy (adopted) March 2011.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
Employment The council will to seek to accommodate flexibly a net total of 162,000 square metres of new employment floorspace between 2006 and 2026 as follows: ▪ 75,000 square metres of B1 offices ▪ 45,500 square metres of B2 manufacturing ▪ 41,500 square metres of B8 warehousing. Planning permission will be granted for housing proposals that	AA Report (March 2010) found that subject to its recommendations being successfully adopted and implemented, the negative effects of the Havant Borough Pre-Submission Core Strategy (March 2010) in relation to the conservation objectives of the European sites are removed, and do not require further assessment in combination with effects of other plans and projects.

Havant Borough Council Core Strategy (adopted) March 2011.	
will: - Contribute to achieving a net total of 6,300 new dwellings between 2006 and 2026. Concentrate new housing, employment, retail, leisure and other development within the five urban areas of Havant, Leigh Park, Waterlooville, Emsworth and Hayling Island. The council will permit development at the following strategic sites: 1. Havant Public Service Village 2. Havant Thicket Reservoir 3. Dunsbury Hill Farm 4. Major Development Area and Waterlooville Town Centre Integration 5. Woodcroft Farm	

New Forest District Council Core Strategy (adopted) October 2009.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The spatial strategy is to locate new residential development primarily within the towns and larger villages. Providing for a minimum of 3,920 new dwellings within the Plan Area between 2006 and 2026. Provision will be made for new housing development for: ▪ around 100 dwellings at Totton; and ▪ around 150 dwellings at Ringwood. Policy CS18 New provision for industrial and office	The HRA (Oct 2008) of the Core Strategy identified three policies having uncertain effects in-combination in relation to disturbance effects on the New Forest SAC, SPA and Ramsar site as they may result in an increase in visitor recreational pressure. Given the opportunity for in-combination effects and the levels of uncertainty the assessment has adopted a precautionary approach and considered effects further in an appropriate assessment. This concludes that a range of mitigation and avoidance measures are available. These are reflected in the submission Core Strategy and so it is concluded that it is possible to demonstrate the plan will not adversely the designated sites.

New Forest District Council Core Strategy (adopted) October 2009.	
development and related uses ▪ provision for new employment sites, for development over the 2006-2026period: ▪ adjoining Totton (up to around 5 hectares); ▪ adjoining New Milton (up to around 5 hectares); ▪ adjoining Ringwood (up to around 5 hectares).	

New Forest National Park Authority National Park Management Plan 2010-2015	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The draft National Park Plan sets out the long-term Vision and objectives for the National Park, together with the policies and actions for the next 5 years and beyond. The Plan combines two statutory documents into a single integrated plan; these are the National Park Management Plan and the Local Development Framework Core Strategy including Development Control policies. The strategic policy approach is to consider activity generating development and outdoor recreation in the context of three broad geographical zones covering the National Park, which are based on the sensitivity and level of risk to the natural environment. Zone 1 is the most sensitive and is characterised by the New Forest SSSI, SAC, SPA and Ramsar. Central to this Plan, and reflected by the approach above, is the conservation and enhancement of the Special Qualities of the National Park. The approach taken will be to: ▪ Minimise the impact of external development pressures on	Generic effects arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of designated and/or supporting habitats. The National Park Plan contains strong policies in regard to the protection and enhancement of biodiversity and habitats and also proposes a limited

New Forest National Park Authority National Park Management Plan 2010-2015	
the National Park, especially recreational pressure from the proposed future development in the adjoining growth areas of the South Hampshire sub-region and the Bournemouth, Christchurch, Poole conurbation. There is no specific National Park requirement and nearly all new residential development will be in settlements outside the National Park. Based on past building rates it is estimated that on average 10 dwellings per year might be built within the National Park. There is also no strategic employment development requirement. The National Park Plan will seek to retain existing employment sites whilst encouraging some limited new employment development in the defined Service Villages, and very limited development in other rural settlements. More detailed policies and actions for recreation will be published separately in the Recreation Management Strategy for the National Park.	amount of development. The Winchester Core Strategy is more likely act in combination with surrounding Plans and Programmes in the South Hampshire area by increasing the levels of recreational activity in the New Forest National Park.

New Forest National Park Authority Core Strategy and Development Management Policies DPD (adopted) December 2010	
Document Details	**Potential impacts that could cause 'in-combination' effects**
New Residential Development An additional 220 dwellings will be required within the New Forest National Park between 2006 and 2026.	HRA (September 2010) concluded that an adequate policy framework is in place that will enable delivery of the measures necessary to mitigate for adverse effects on European sites.

Portsmouth Plan Pre-Submission draft, 2011.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
Portsmouth will plan for an additional 7,117 – 8,387 homes in the city between 2010 - 2027. This will be delivered broadly in line with the following distribution: ▪ Port Solent 500 ▪ Horsea Island 0-500 ▪ Tipner 480-1250 ▪ Somerstown and North Southsea 539 ▪ City centre 1600 ▪ Other town centres 602 ▪ Rest of the city 1674 Sustainable economic development will be promoted by the provision of a flexible supply of good quality office, manufacturing and warehouse land and floorspace in the following locations, totalling at least 243,000 sq m by 2027.	The HRA (February 2011) recommended a series of avoidance and mitigation measures for resolving adverse effects in relation to the identified impacts of the plan. The recommendations were examined and changes subsequently made to the Core Strategy. The HRA Report concluded that there will be no adverse effects on the ecological integrity of any European site as a result of the Portsmouth Core Strategy in relation to the following impact types: ▪ Water abstraction; and ▪ Waste water pollution. The Report also concludes that adverse effects associated with the Core Strategy in relation to the following impact types can be overcome provided the avoidance and mitigation package is successfully adopted and implemented: ▪ Atmospheric pollution; ▪ Disturbance from recreation; ▪ Flood risk and coastal squeeze; and ▪ Displacement and collision mortality risk from site-specific developments.

Southampton City Council Core Strategy (adopted) January 2010.	
Document Details	**Potential impacts that could cause 'in-combination' effects**

Southampton City Council Core Strategy (adopted) January 2010.	
City Centre The continuing viability and vitality of the city centre is key to the achievement of the growth set out in the emerging South East Plan. Consequently this is the focus for significant new offices, retail, hotel and leisure development, the majority of which can be accommodated in a strategic site, the major development quarter (MDQ) located next to the West Quay shopping centre. About 5400 new homes will be built in the city centre provided flood risk issues are dealt with. Shirley Town Centre and Bitterne, Portswood, Lordshill, Woolston District Centres The continuing viability of these centres is important to local residents since very often they are the focus for the community, providing local shops, small scale offices, leisure and other facilities and services. Residential Neighbourhoods Outside the city centre approximately 6,400 new homes will be dispersed through the residential neighbourhoods, generally on smaller sites. This figure excludes homes that have already been built, small sites and a figure for houses on unidentified sites. Local services and shops will be found in the district centres and local centres, however, individual shops and local services such as doctors, schools and community centres will be encouraged throughout the neighbourhoods. Such local provision, within walking distance for many people, reduces the need to use motorised transport. The Port, Employment Sites and Areas Approximately 97,000 sq m of new and expanded industrial and warehousing uses will be directed to established	The HRA for the Core Strategy determined that there is the potential for likely significant effects as a result of proposed development and recommended a number of mitigation measures to address them. The HRA conclusions were uncertain in some cases as a result of the emerging evidence base for recreational impacts on International Sites. It noted that it will be necessary to undertake further Appropriate Assessment on lower tier plans in the future.

Southampton City Council Core Strategy (adopted) January 2010.	
employment areas and sites. The Port will rationalise and intensify its uses in the city within its existing boundaries supported through improved transport infrastructure within and outside the city. Significant additional office and retail floorspace will be located in the city centre.	

Test Valley Borough Council Core Strategy Regulation 25. November 2011.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
Provision of 12,550 dwellings between 2006-2031, which includes the following: ▪ Northern test Valley (Andover & Rural Test Valley) - 8,250 ▪ Southern Test Valley - 4,300 Strategic developments: ▪ Whitenap, Romsey - approx 1,500 dwellings ▪ Hoe Lane, North Baddesley - approx 300 dwellings Employment Extension to Walworth Business Park - 11ha Land at Adanac Park - 30ha	Generic effects arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of designated and/or supporting habitats. There is potential for likely significant in-combination effects on Mottisfont Bats SAC through habitat loss and fragmentation and the New Forest SAC/ SPA/ Ramsar through increased levels of disturbance.

Test Valley Borough Council Core Strategy Regulation 25. November 2011.	

Isle of Wight Council Core Strategy Submission, December 2008.	
Document Details	**Potential impacts that could cause 'in-combination' effects**
Spatial Strategy Key Regeneration Areas: ▪ Medina Valley (Newport, Cowes and East Cowes) ▪ Ryde ▪ The Bay (Sandown, Shanklin and Lake) Smaller Regeneration Areas: ▪ West Wight (Freshwater and Totland) ▪ Ventnor Housing The strategy provides for 8,320 dwellings for the Isle of Wight in the period 2011-2027, which is an average of 520 dwellings per year. These will be delivered broadly in accordance with the following distribution: ▪ 3,765 existing permissions. ▪ 1,268 new dwellings within the Medina Valley. ▪ 1,900 new dwellings within Ryde. ▪ 250 new dwellings within The Bay. ▪ 200 new dwellings within the West Wight.	The HRA Report (April 2011) considered that all negative effects of the Core Strategy in relation to the conservation objectives of European sites can be effectively removed and do not require further assessment at this level in combination with the effects of other plans and projects, provided the avoidance and mitigation measures set out are adopted and implemented successfully. The HRA concluded there are no likely significant effects as a result of the strategic-level Core Strategy policies. It also found that in relation to European and Ramsar sites, the identified level of development can be accommodated within the broad locations set out in the Core Strategy.

Isle of Wight Council Core Strategy Submission, December 2008.	
▪ 85 new dwellings within Ventnor. ▪ 852 through smaller-scale development at the Rural Service Centres and wider rural area. Economic Development The strategy allows for at least 42 hectares of new economic development land to be delivered over the plan period, primarily within the Key Regeneration Areas and the Smaller Regeneration Areas. The 42 hectares should consist of around 9 hectares of B1b, B1c and B2 uses, around 13 hectares of B8 uses and around 20 hectares of B1a uses. To contribute to this target, the Council allocates the following sites for employment uses: 1. Up to 25 hectares of land at Horsebridge Hill, Newport, for a range of B-type employment uses that reflect the general split outlined above to meet local and Island-wide need for employment provision. 2. Up to 8.8 hectares of land at Stag Lane, Newport, for a range of B1, B2 and B8 employment uses, primarily related to renewable energy. 3. Up to 2.8 hectares of land to the east of Pan Lane, Newport, for a range of B1 and B2 uses suitable to a mixed-use scheme. 4. Up to 14.7 hectares of land to the south of Nicholson Road, Ryde, for a mix of primarily smaller scale B1 and B2 uses.	

Appendix 3: Pre-Submission Policy Screening

Policy Screening: Categorising the Potential Effects of the Plan (Tyldesley, 2009)	
Criteria Category	**Rationale**
Category A: No negative effect	
A1	Options/ policies that will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development, or they are not a land use planning policy.
A2	Options/ policies intended to protect the natural environment, including biodiversity.
A3	Options/ policies intended to conserve or enhance the natural, built or historic environment, where enhancement measures will not be likely to have any negative effect on a European site.
A4	Options/ policies that positively steer development away from European sites and associated sensitive areas.
A5	Options/ policies that would have no effect because no development could occur through the policy itself, the development being implemented through later policies in the same plan, which are more specific and therefore more appropriate to access for their effects on European Sites and associated sensitive areas.
Category B: No significant effect	
B	Options/ policies that could have an effect but would not be likely to have a significant (negative) effect on a European site (alone or in-combination with other plans or projects) because the effects are trivial or 'de minimis' even if combined with other effects.
Category C: Likely significant effect alone	
C1	The option, policy could **directly affect** a European site because it provides for, or steers, a quantity or type of development onto a European site, or adjacent to it.
C2	The option, policy could **indirectly affect** a European site e.g. because it provides for, or steers, a quantity or type of development that may be very close to it, or ecologically, hydrologically or physically connected to it or it may increase disturbance as a result of increased recreational pressure.
C3	Proposals for a **magnitude of development** that, no matter where it is located, the development would be likely to have a significant effect on a European site.
C4	An option, or policy that makes provision for a quantity/ type of development (and may indicate one or more broad locations e.g. a particular part of the plan area), but the effects are uncertain because the detailed location of the development is to be selected following **consideration of options in a later, more specific plan**. The consideration of options in the later plan will assess potential effects on European Sites, but because the development could possibly affect a European site a significant effect cannot be ruled out on the basis of objective information
C5	Options, policies or proposals for developments or infrastructure projects that **could block options or alternatives** for the provision of other development or projects in the future, which will be required in the public interest, that may lead to adverse effects on

Policy Screening: Categorising the Potential Effects of the Plan (Tyldesley, 2009)	
Criteria Category	**Rationale**
	European sites, which would otherwise be avoided.
C6	Options, policies or proposals which **depend on how the policies etc are implemented** in due course, for example, through the development management process. There is a theoretical possibility that if implemented in one or more particular ways, the proposal could possibly have a significant effect on a European site
C7	Any other options, policies or proposals that would be **vulnerable to failure** under the Habitats Regulations at project assessment stage; to include them in the plan would be regarded by the EC as 'faulty planning'.
C8	Any other proposal that may have an adverse effect on a European site, which might try to pass the tests of the Habitats Regulations at project assessment stage by arguing that the **plan provides the imperative reasons** of overriding public interest to justify its consent despite a negative assessment.
Category D: Likely significant effects in combination	
D1	The option, policy or proposal alone would not be likely to have significant effects but if its effects are combined with the effects of other policies or proposals **provided for or coordinated** by the Local Development Document (internally) the **cumulative** effects would be likely to be significant.
D2	Options, policies or proposals that alone would not be likely to have significant effects but if their effects are **combined with the effects of other plans and projects** and possibly the effects of other developments provided for in the Local Development Document as well, the combined effects are likely to be significant.
D3	Options or proposals that are, or could be, part of a **programme or sequence of development** delivered over a period, where the implementation of the early stages would not have a significant effect on European sites, but which would dictate the nature, scale, duration, location, timing of the whole project, the later stages of which could have adverse effects on such sites.

Likely Significant Effect (LSE) Key	
x	There are unlikely to be significant effects.
?	There may be significant effects but the effects are uncertain at this stage
✓	There are likely to be significant effects

Pre-Submission Policy	Assessment Category	Commentary	LSE
Spatial Planning Vision	**A5**	Sets overarching/ Strategic Framework for development, location and quantum of development proposed in later policies.	**X**
Spatial Planning Objectives	**C2 & D2**	One of the spatial planning objectives seeks the provision of 11,000 new homes across the District by 2031. The potential issues arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of designated and/or supporting habitats.	**?**
Policy DS1 Development Strategy and Principles	**C2 & D2**	The policy seeks to deliver 4,000 new homes in Winchester Town and 5,500 new homes in South Hampshire urban areas. The potential issues arising as a result proposed development are the same as those identified for the Spatial Planning Objectives.	**?**
Policy WT1 Development Strategy for Winchester Town	**C2 & D2**	The policy seeks to deliver 4,000 new homes in Winchester Town through the development of 2,000 homes within and adjoining the defined built-up areas of Winchester and a new neighbourhood to the north of Winchester at Barton Farm for about 2,000 homes. The potential issues arising as a result of proposed development are the same as those identified for the Spatial Planning Objectives.	**?**
Policy WT2 Strategic Housing Allocation -	**C2 & D2**	The policy allocates land at Barton Farm for the development of 2,000 dwellings together with supporting uses. The potential issues arising as a result of proposed	**?**

Barton Farm		development are the same as those identified for the Spatial Planning Objectives.	
Policy WT3 Bushfield Camp Opportunity Site	**C2 & D2**	The policy allocates 20 ha of land at Bushfield Camp as an opportunity site for future development, which is in close proximity (within 500m) to the River Itchen SAC. The policy ensures that any future proposal must include an HRA to consider the potential effects on biodiversity, on-site and on the River Itchen, and the possible in combination effects of the development on nearby sites of national and international importance. The development proposals must meet the tests of the Habitats Regulations and be accompanied by a full set of measures to avoid or mitigate the local and wider impacts of the development on the water environment, green infrastructure and biodiversity. The potential impacts of a future proposal on European sites would most appropriately be addressed at the project level, when the type and quantum of development is known. This is considered suitable strategic plan level mitigation as project level HRA will ensure there are no significant effects on European sites.	**X**
Policy SH1 Development Strategy for South Hampshire Urban Areas	**C2 & D2**	The policy seeks to deliver 3,000 dwellings in a new community to the West of Waterlooville and 3,000 dwellings in a new community to the North of Whitely. The potential issues arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of designated and/or supporting habitats.	**?**
Policy SH2 Strategic Housing Allocation - West of Waterlooville	**D2**	The policy allocates land to the West of Waterlooville for the development of 3,000 dwellings together with supporting uses and the provision of at least 23 ha of employment land. The site is approximately 3km from the nearest European site and is separated sites by existing development and infrastructure. Given the mitigation	**?**

		provided by Plan policies and the requirement for project level HRA to accompany any proposal for development, it is not likely that the policy will result in significant effects alone on European sites. There is however the potential for the policy to have in combination effects on European sites through: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites	
Policy SH3 Strategic Housing Allocation - North Whiteley	**C2 & D2**	The policy allocates land to the North of Whiteley for the development of 3,000 dwellings together with supporting uses. The potential issues arising as a result of proposed development are the same as those identified for Policy SH1.	**?**
Policy SH4 North Fareham SDA	**A1**	Policy sets out how the Council will work with Fareham Borough Council to develop a Strategic Development Area of between 6,500 - 7,500 dwellings and supporting uses through the provision of Land within Winchester District that will form part of the open areas to ensure separation between the SDA and the existing settlements of Knowle and Wickham. The policy itself will not lead to development.	**X**
Policy MTRA1 Development Strategy Market Towns and Rural Area	**A5**	The Policy seeks to achieve the spatial planning vision for the Market Towns and Rural Area through the provision of new homes and the retention of exiting employment land and premises. The location and quantity of development is proposed in later policies.	**X**
Policy MTRA 2 Market Towns and Larger Villages	**C2 & D2**	The Policy supports the larger settlements in the Market Towns and Rural Area through supporting economic and commercial growth as well as the provision of 400 - 500 new homes in both Bishops Waltham and New Alresford and the provision of 150 - 250 new homes in each of the following settlements: Colden Common; Denmead; Kings Worthy; Swanmore; Waltham Chase and Wickham. The potential issues arising as a result of proposed development are the same as those identified for Policy SH1.	**?**
Policy MTRA 3 Other Settlements in the Market	**A1**	The Policy sets criteria for development in settlements not covered by Policy MTRA 1. No specific locations or quantities for development are provided. The potential effects of	**X**

Towns and Rural		development on European sites would be more appropriately addressed at the project level, once the location and quantum of development is known.	
Policy MTRA 4 Development in the Countryside	**A1**	Policy sets out criteria for development in the countryside. No specific locations or quantities for development are provided. The potential effects of development on European sites would be more appropriately addressed at the project level, once the location and quantum of development is known.	**X**
Policy MTRA 5 Major Commercial and Educational Establishments in the Countryside	**A1**	Policy supports the retention and development of major commercial and educational establishments which occupy rural locations in the District. No specific locations or quantities for development are provided. The potential effects of development on European sites would be more appropriately addressed at the project level, once the location and quantum of development is known.	**X**
Policy CP1 Housing Provision	**C2 & D2**	Policy seeks the provision of 11,000 dwellings within the District from April 2011 to March 2031. Of this total, 7,500 will be within major developments at North Winchester, West of Waterlooville and North Whiteley. The following targets are proposed: 2011 - 2016 2,300 dwellings 2016 - 2021 4,000 dwellings 2021 - 2026 2,700 dwellings 2026 - 2031 2,000 dwellings The potential issues arising as a result of proposed development are: ▪ Increased water abstraction, which can lead to reduced water levels at European sites. ▪ Increased water discharges (consented), which can lead to reduced water quality at European sites. ▪ Increased surface water runoff, which can lead to reduced water quality at European sites. ▪ Increased atmospheric pollution, which can result in reduced air quality at European sites. ▪ Increased recreational activity, which can lead to increased disturbance at European sites ▪ Increased noise and light pollution, which can lead to increased disturbance at European sites. ▪ Land take, which can lead to habitat loss and fragmentation of designated and/or	**?**

		supporting habitats.	
Policy CP2 Housing Provision and Mix	**A1**	The Policy itself will not lead to development as it sets criteria for the provision and mix of housing.	**X**
Policy CP3 Affordable Housing Provision on Market Led Housing Sites	**A1**	The Policy itself will not lead to development as it sets criteria for the provision of affordable housing.	**X**
Policy CP4 Affordable Housing on Exception Sites to Meet Local Needs	**A1**	The Policy itself will not lead to as it sets criteria for the provision of affordable housing on exception sites to meet local needs.	**X**
Policy CP5 Sites for Gypsies, Travellers and Travelling Showpeople	**A1**	The Policy sets out criteria for the allocation of sites and the granting of planning permission to meet the identified accommodation needs of gypsies, travelers and travelling showpeople. No specific locations or quantities for development are provided as the Council is to undertake a needs assessment to quantify the accommodation requirements for gypsies, travelers and travelling showpeople within the District. The potential effects of development on European sites would be more appropriately addressed at the project level, once the location and quantum of development is known.	**X**
Policy CP6 local services and facilities	**A1**	Policy supports proposals for the development of new, extended or improved facilities and services. No specific locations or quantities for development are provided. The potential effects of development on European sites would be more appropriately addressed at the project level, once the location and quantum of development is known.	**X**
Policy CP7 Open Space, Sport and Recreation	**B**	The Policy seeks improvements in the open space network and in built recreation facilities within the District, which is not likely to have significant effects on European sites.	**X**
Policy CP8 Economic Growth and Diversification	**A1**	Policy encourages economic development and diversification across Winchester District. No specific locations or quantities for development are provided. The potential effects of development on European sites would be more appropriately addressed at the project level, once the location and quantum of development is known.	**X**
Policy CP9 Retention of Employment Land and	**A1**	The policy seeks to retain land in employment use and will resist proposals to develop employment land and floorspace. It sets out criteria for the redevelopment or	**X**

Premises		modernisation of business land and premises.	
Policy CP10 Transport	**A1**	The policy seeks to minimise demands on the transport network, manage existing capacity efficiently and secure investment to make necessary improvements. No specific transport developments are identified; therefore the potential effects of development on European sites would be more appropriately addressed at the project level, once the location and type of development is known.	**X**
Policy CP11 Sustainable Low and Zero Carbon Built Development	**A1**	Policy itself will not lead to development as it sets out design standards for reducing carbon emissions.	**X**
Policy CP12 Renewable and Decentralised Energy	**A1**	Policy supports the generation of renewable and decentralised energy in the District. No specific locations for development are provided. The potential effects of a renewable development on European sites would be more appropriately addressed at the project level, once the location and type of development is known.	**X**
Policy CP 13 High quality design	**A1**	Policy itself will not lead to development as it sets out criteria for the sustainable design of development.	**X**
Policy CP14 The effective use of land	**A1**	Policy itself will not lead to development as it sets criteria for the effective use of land.	**X**
Policy CP15 Green Infrastructure	**A3**	Policy supports development proposals that will maintain, protect and enhance the function or integrity of the existing green infrastructure network, particularly where the proposal allows for the enhancement of green infrastructure both on site and in the immediate area. Maintaining and enhancing the District's green infrastructure has the potential to provide mitigation for the impacts of other Core Strategy Policies.	**X**
Policy CP17 Biodiversity	**A2**	Policy seeks to protect the integrity of European designations from inappropriate development.	**X**
Policy CP17 Flooding, Flood Risk and the Water Environment	**A1**	The policy seeks to avoid flood risk to people and property where possible and protect and enhance the water environment. Protecting and enhancing the water environment has the potential to provide mitigation for the impacts of other Core Strategy Policies.	**X**
Policy CP18 Settlement Gaps	**A1**	Policy itself will not lead to development as it seeks to retain settlement gaps.	**X**

Policy CP19 South Downs National Park.	**A2**	Policy sets out criteria for development to protect the South Downs National Park.	**X**
Policy CP20 Heritage and Landscape Character	**A3**	Policy seeks to protect and enhance District's distinctive landscape and heritage assets.	**X**
Policy CP21 Infrastructure and Community Benefit	**A1**	The policy supports development proposals which provide or contribute towards the infrastructure and services needed to support them. Development will occur as a result of earlier policies.	**X**

Appendix 4: Consultation Commentary

HRA Screening Interim Report Final Draft (February 2008)

Respondent	Summarised Comment	Response
Ceri Morgan Natural England 01/04/09	Thank you for consulting Natural England on the HRA at this stage. We appreciate the opportunity of early involvement, as it can make the process easier in the long term for all concerned.	Noted.
	Overall, Natural England is satisfied with the HRA method being used, as long as there is continual evidence that the HRA outputs are successfully informing the development of the Core Strategy.	Noted.
	It may be prudent at this stage to also consult with the Environment Agency, if you have not already done so, considering the potential within the Core Strategy for effects on the River Itchen and the Upper Hamble.	The EA had the opportunity to comment on the Consultation Draft HRA Screening Report, which was available on the Winchester City Council website.
	Natural England would also like to take this opportunity to emphasise the importance of pursuing avoidance of impact measures at the earliest opportunity. This should be the first action before looking for mitigation opportunities.	The potential for avoidance measures have been considered throughout the HRA process, which began in early 2008.
	Section 2.2 Table 4 Task 1 Suggest removing Swindon and replacing with Winchester.	Noted.
	It is imperative to remember that screening distances alone do not take into account specific environmental impacts that the plan will have, alone or in combination with other plans or projects, as required by the Habitats Regulations. The distances between proposed development and designated sites and the sensitivities of each site being factors in reaching conclusions on Likely significant Effect, rather than applying unsupported distance criteria alone. Acknowledgement and demonstration of this within the HRA would be useful.	Section 3, paragraphs 3.3 to 3.5 in the HRA (AA) Report outline the scope of the HRA. Rather than rely on distance alone, the HRA uses a 'source-pathway-receptor' model, which focuses on whether there is a pathway by which impacts from the plan can affect the identified sensitivities/ vulnerabilities of European site(s)' environmental conditions.

	Section 3.2 Table 5 Solent Maritime SAC stretches into the Upper Hamble, and therefore should be considered as a European Site within Winchester City Council administrative boundaries.	Noted, the Solent Maritime SAC is identified as a European site within Winchester City Council's administrative boundary.
	Appendix 2 – List of plans and programmes Whilst there is a danger of an open-ended list rather than a comprehensive one to assess impacts against, there does need to be more detail here. For example, the inclusion of nearby Strategic Development Areas such as Fareham SDA. There are plans and programmes which will require cross-border working to achieve effective avoidance and mitigation measures and effective green infrastructure.	The level of detailed contained within the Plans and Programmes Review is considered sufficient to inform the in combination assessment.

Habitat Regulations Assessment (HRA) Screening Report (May 2009)

Respondent	Summarised Comment	Response
Ceri Morgan Natural England 02/07/09	Natural England agrees that an Appropriate Assessment (AA) is required, and would need to see evidence that the continual assessment process is informing the evolution of the Core Strategy.	Noted, the HRA has informed the Core Strategy throughout its development.
	Therefore we would also like to see evidence in the AA that the findings of emerging studies and strategies from PUSH (such as the GI Strategy) and neighbouring boroughs are taken into account during the life of the assessment.	The findings of emerging strategies have been used to inform the HRA throughout the process. This includes consideration of the Solent Visitor and Bird Disturbance work commissioned by the Solent Forum.
	Natural England believes all the relevant designated sites have been taken into account in the HRA at this time.	Noted.