



Wiltshire & Swindon Aggregate Minerals Site Allocations DPD

Pre-Submission Habitats Regulations Assessment Screening Report

January 2012

Centre for Sustainability at TRL *in
association with* Enfusion



Wiltshire & Swindon Aggregate
Minerals Site Allocations DPD



Habitats Regulations Assessment Screening Report

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Appendix 1: European Site Characterisations

Executive Summary

Wiltshire Council and Swindon Borough Council are jointly preparing their Minerals and Waste Development Framework that sets out strategic planning policy over the period to 2026. To date the Councils have produced:

- A Minerals Core Strategy DPD (adopted July 2009); and
- A Minerals Development Control Policies DPD (adopted September 2009).

This report outlines the methods used and the findings arising from the screening stage of the Habitats Regulations Assessment (HRA) for Wiltshire and Swindon's Aggregate Minerals Site Allocations DPD. The screening took forward the Minerals and Waste Core Strategies and Development Control Policies HRA findings and ensured that the recommendations were effectively applied to the Site Allocations DPD. The purpose of the Site Allocations DPD is to provide detailed local expression to the adopted Minerals Core Strategy in terms of identifying sites that the Councils consider will be required to meet the demand for aggregate minerals.

The Minerals and Waste Core Strategy HRA identified that for each European site there was a distance for which it cannot be certain that a likely significant effect will not result from the siting and operation of a mineral and/or waste site. Based on the findings of the HRA for the Minerals and Waste Core Strategies, three of the seven sites proposed in the Aggregate Minerals Site Allocations Pre-submission DPD are within the distance at which aggregate extraction may adversely affect a European site. The three proposed aggregate sites and their distance from European sites are as follows:

- Site U7 - Land East of Calcutt is 1.1km from the North Meadow and Clattinger Farm SAC at its nearest point;
- Site U22 - Land at Cotswold Community is 200m from the North Meadow and Clattinger Farm SAC at its nearest point; and
- Site SE2/SE3 - Extension to Brickworth Quarry is 1.1km from the New Forest SAC at its nearest point.

These three aggregate minerals sites have been assessed by the Wiltshire County Ecologist to determine the likelihood for aggregate extraction operations to have significant effects on the European sites. Whilst the potential for adverse effects was identified (including groundwater issues, contaminated run-off, and dust and air pollution), it was considered that appropriate measures are available to mitigate these effects (recommendations include robust Construction Method Statements, phasing of extraction and restoration and mitigation relating to specific identified impacts e.g. contaminated run-off).

In addition, the potential for aggregate minerals extraction at these three sites to give rise to significant effects when considered in combination with other plans and projects was also considered.

The assessment concluded that extraction of aggregate minerals at these sites will not have likely significant effects on the European sites, either alone or in combination with other plans and projects.

The findings of this plan level HRA does not take away the need for individual minerals extraction proposals to undertake project level HRA/AA, as the detailed nature and scale of extraction activities at a particular site will only be known at the planning application stage. This assessment should be revisited in the light of any significant changes to the plan and this screening opinion is subject to consultation and advice from the statutory body Natural England and other key stakeholders.

1 Introduction

Wiltshire Council and Swindon Borough Council are jointly preparing their Minerals and Waste Development Framework that sets out strategic planning policy over the period to 2026. Enfusion and C4S/TRL were appointed by Wiltshire Council and Swindon Borough Council to undertake Habitats Regulations Assessment (HRA) and Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) of the Wiltshire and Swindon Minerals and Waste Development Framework.

C4S is undertaking the SA/SEA and HRA of the Minerals DPDs. This report details the HRA for the Wiltshire Council and Swindon Borough Council Aggregate Minerals Site Allocations Pre-submission DPD. HRA of the Wiltshire and Swindon Waste Development Framework is an ongoing process, each plan / stage progressively informing the lower level documents.

Habitats Regulations Assessment is also commonly referred to as Appropriate Assessment (AA) although the requirement for AA is first determined by an initial 'screening' stage undertaken as part of the full HRA. This report details the findings and recommendations of the initial 'screening' stage in the HRA process.

1.1 Requirement for Habitats Regulations Assessment

Articles 6 (3) and 6 (4) of the Habitats Directive require AA to be undertaken on proposed plans or projects which are not necessary for the management of the site but which are likely to have a significant effect on one or more Natura 2000 sites either individually, or in combination with other plans and projects¹. This is transposed into UK law by the Conservation of Habitats and Species Regulations 2010, which requires the application of HRA to all land use plans. The purpose of HRA is to assess the impacts of a land-use plan, in combination with the effects of other plans and projects, against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity² of that site. In this report the term 'European sites' will be used when referring to SACs, SPAs and Ramsar sites.

1.2 Guidance for Habitats Regulations Assessment

A number of guidance documents have been produced for undertaking HRA at different spatial scales. Key guidance that has informed the approach in this Report is produced by Natural England, 'The Habitats Regulations Assessment of Local Development Documents' (D Tyldesley and Associates, Feb 2009).

¹ Determining whether an effect is 'significant' is undertaken in relation to the designated interest features and conservation objectives of the Natura 2000 sites. If an impact on any conservation objective is assessed as being adverse then it should be treated as significant. Where information is limited the precautionary principle applies and significant effects should be assumed until evidence exists to the contrary.

² Integrity is described as the sites' coherence, ecological structure and function across the whole area that enables it to sustain the habitat, complex of habitats and/or levels of populations of species for which it was classified, (ODPM, 2005).

Based on the available guidance and emergent practice, HRA is approached in three main stages, as shown in Table 1-1 below. This report outlines the method and findings for stage 1 of the HRA process; the screening.

Table 1-1: Habitats Regulations Assessment - Key Stages

| Stage 1 | |
|---|--|
| Screening | <p>Identify international sites in and around the plan/ strategy area</p> <p>Examine conservation objectives</p> <p>Identify potential effects on Natura 2000 sites</p> <p>Examine other plans and programmes that could contribute to 'in combination' effects</p> <hr/> <p><i>If no effects are likely - report that there is no significant effect.</i></p> <p><i>If effects are judged likely or uncertainty exists - the precautionary principle applies, proceed to stage 2</i></p> |
| Stage 2 | |
| Appropriate Assessment | <p>Collate information on sites and evaluate impact in light of conservation objectives</p> <p>Consider how plan 'in combination' with other plans and programmes will interact when implemented (the Appropriate Assessment)</p> <p>Consider how the effect on integrity of sites could be avoided by changes to the plan and the consideration of alternatives</p> <p>Develop mitigation measures (including timescale and mechanisms)</p> <hr/> <p><i>Report outcomes of AA and develop monitoring strategies</i></p> <p><i>If effects remain, following the consideration of alternatives and development of mitigation measures, proceed to stage 3</i></p> |
| Stage 3 | |
| Assessment where no alternatives and adverse impacts remain | <p>Identify 'imperative reasons of overriding public interest' (IROPI)</p> <p>Identify/ develop potential compensatory measures</p> <hr/> <p><i>Difficult test to pass, requirements are onerous and untested to date</i></p> |

1.3 Consultation

The Habitats Regulations require the plan making/competent authority to consult the appropriate nature conservation statutory body (Natural England (NE)). NE were consulted both during and after the preparation of the HRA for the Minerals and Waste Core Strategies and Development Control Policies DPDs. The approach to assessing specific sites was then

agreed with NE in September 2010 during the preparation of the HRA for the Waste Sites DPD.

The Habitats Regulations leave consultation with other bodies and the public to the discretion of the plan making authority. Further consultation on this report, with NE and wider stakeholders will be undertaken as part of the main consultation for the Wiltshire Council and Swindon Borough Council Aggregate Minerals Site Allocations Pre-submission DPD.

1.4 Purpose & Structure of Report

This report documents the process and findings from the screening of the HRA for the Wiltshire Council and Swindon Borough Council Aggregate Minerals Site Allocations DPD. The report builds on and incorporates the findings from the HRA of higher level DPDs, such as the Core Strategy and Development Control Policies, which have informed the development of the Aggregate Minerals Site Allocations DPD and this HRA. Following this introductory section the document is organised into a further four sections:

Section 2 - provides background information on the Minerals and Waste Development Framework, outlining the purpose and contents of each DPD;

Section 3 - outlines the methods and findings of the HRAs for the Minerals and Waste Core Strategies and Development Control Policies;

Section 4 - initially identifies the potential impacts of mineral extraction activities on European sites, as well as the sensitivities of the identified European sites themselves. The Section then outlines the method and summarises the findings and recommendations of the screening stage for the Aggregate Minerals Site Allocations DPD; and

Section 5 - summarises the key conclusion and recommendations of the HRA Screening process.

2 Minerals and Waste Development Framework

2.1 Introduction

Wiltshire Council and Swindon Borough Council are jointly preparing their Minerals and Waste Development Framework that sets out strategic minerals and waste planning policy over the period to 2026. The framework comprises:

- A portfolio of local development plan documents (DPDs);
- A Local Development Scheme³ (LDS); and
- A Statement of Community Involvement⁴.

2.2 Minerals Core Strategy DPD

In July 2009, Wiltshire Council and Swindon Borough Council adopted the Minerals Core Strategy DPD, which sets out the spatial vision, key objectives and overall principles for minerals extraction activities up to 2026.

The strategy recognises a number of key issues for minerals development in Wiltshire and Swindon:

- The substantial growth of the principal urban areas, identified in the draft Regional Spatial Strategy for the South West as Strategically Significant Cities and Towns and the need to provide a supply of minerals.
- The constraints on minerals development brought by the large number of environmental and historical designations in the plan area.
- The need to develop policies and proposals that are flexible enough to react to changing circumstances over the plan period.

The strategy sets out:

- A Spatial Vision for minerals planning in Wiltshire and Swindon that focuses on making a positive and sustainable contribution to the local area.
- Strategic Objectives for managing the minerals resource, the economy, communities and local amenity, the environment and collaborative working.
- Policies for primary aggregates; secondary and recycled aggregates; cement raw materials; building stones; collaborative working; safeguarding minerals resources, rail head facilities and minerals recycling facilities; protecting the environment and residential

³ Wiltshire Council and Swindon Borough Council prepare separate Local Development Schemes that, for the purposes of Minerals and Waste planning, complement one another.

⁴ Again, Wiltshire Council and Swindon Borough Council have prepared separate Statements of Community Involvement. These documents have been used to inform and guide the consultation activity undertaken to date.

amenity; minerals transportation; restoration and after-use; and monitoring.

The Core Strategy policies steer future aggregate minerals extraction to the following areas, referred to as – “Minerals Resource Zones”:

- Land within the Cotswold Water Park / Upper Thames Valley;
- Land to the east and south-west of Calne;
- Land to the south-east of Salisbury;
- Land within the Bristol Avon Valley; and
- Land within the Salisbury / Hampshire Avon.

2.3 Minerals Development Control Policies DPD

In September 2009, Wiltshire Council and Swindon Borough Council adopted the Minerals Development Control Policies DPD, which sets out policies to assist with the process of determining planning applications for minerals development within the Plan area of Wiltshire and Swindon.

The principle aim of the Minerals Development Control Policies, Development Plan Document (DPD) is to ensure that applications for minerals development received by Wiltshire Council and Swindon Borough Council (the Councils), result in sites that are operated and managed to high standards with minimum impacts to local communities and the environment.

The DPD commences with an overarching policy that requires applications to adhere to the principles of sustainable minerals development. The remaining policies are designed to manage the following aspects of minerals development:

- Protection of residential amenity and the environment from impacts associated with noise, dust, lighting, vibration and emissions to air;
- Impacts upon groundwater and surface water;
- Enabling appropriate non-minerals development within minerals safeguarding areas;
- Protection and enhancement of Wiltshire and Swindon’s landscape character;
- Protection and enhancement of Wiltshire and Swindon’s biodiversity and geological interest;
- Protection of Wiltshire and Swindon’s historic environment;
- Ensuring that minerals development minimises HGV miles for transporting minerals by road and minimises the impacts upon other transport networks; and
- A comprehensive approach to managing the restoration of minerals developments that will deliver a range of after uses and provide tangible benefits to the local area.

To ensure that the policies are being implemented as intended, the document also includes a detailed policy monitoring framework.

2.4 Aggregate Minerals Site Allocations DPD

The purpose of the Aggregate Minerals Site Allocations DPD is to provide detailed local expression to the adopted Minerals Core Strategy in terms of the identification of sites that the Councils consider will be required in order to meet the forecast requirements for the supply of aggregate minerals.

Development and Consultation March 2004 - April 2011

Wiltshire and Swindon Councils initially undertook a focused 'call for sites' in April 2004 by writing to mineral operators and landowners known to have an interest in sand and gravel extraction. This resulted in a number of sites being put forward for consideration. However, the estimated yield for these sites was insufficient to meet forecast demand of 1.85 million tonnes per annum at the time.

The Councils issued a further call for sites in 2006 through a newsletter issued to every contact on the councils' consultation database. As a result of this work no additional land was put forward for consideration.

With a view to identifying potential sites for future sand and gravel extraction, the councils prepared a series of concise Topic Papers for informal consultation in late 2007. This was followed up by workshop events designed to engage local communities in the Mineral Resource Zones (MRZs).

The adopted Mineral Resource Zones cover extensive areas of land, some parts of which may not be suitable for development due to planning constraints. Following initial work in 2004 and 2006 the Councils embarked on a methodical sieving exercise of the un-worked areas of the five Mineral Resource Zones during 2009/2010, in line with key SA criteria, removing the most constrained areas from further consideration. Landowners within the remaining areas were then identified and contacted to see whether they would consider putting their land forward for sand and gravel extraction. Through this process 62 initial site options were identified.

An informal (Regulation 25) consultation on the 62 initial site options for sand and gravel extraction in Wiltshire and Swindon took place between 5 August and 31 October 2010. The purpose of this consultation was to provide an early opportunity for stakeholders to review the site options presented by landowners for consideration and comment on the key issues identified for each site option to help determine the scope of any further assessments.

Two additional site options were submitted as part of the consultation. One of these was considered suitable for further assessment. During the consultation eight site options and parts of two site options were withdrawn from further consideration at the request of the landowners.

The Councils produced a report presenting the results of the consultation exercise on the initial list of 62 site options for sand and gravel extraction across Wiltshire and Swindon, which is available below. This can be accessed from the Wiltshire Council website 'Minerals and Waste Policy' pages.

Following the analysis of comments received during the consultation period between 5 August and 31 October 2010, a report was prepared for consideration by Council members. This report recommended that a further 32 site options be excluded at this stage of the process as they were unlikely to be deliverable given constraints to their development.

The report recommended that the 22 remaining site options should be subject to further evidence gathering and assessment to ensure that any decision on their suitability is based on robust evidence and qualified professional judgement.

The Councils then initiated further more detailed assessments on the remaining site options on a range of disciplines using in-house experts. Detailed assessments were carried out on the 22 sites in the following specialist areas:

- Archaeology;
- Ecology;
- Historic built environment;
- Landscape and visual impact; and
- Transport.

The details of the findings of these further assessments can be accessed from the Wiltshire Council website 'Minerals and Waste Policy' pages.

The detailed assessments identified a number of constraints with the site options being considered, leading the Councils to determine that it is not possible to meet Wiltshire and Swindon's contribution to national and regional forecasts for sand and gravel, currently set at 1.85 million tonnes per annum. The results of the assessments, past production data and detailed dialogue with the minerals industry indicated that a local forecast figure of 1.2 million tonnes per annum would be achievable over the remaining plan period to 2026 and should be used as the basis for finalising the list of site options in the emerging Aggregate Minerals Site Allocations DPD.

Taking into account the findings from the detailed assessments, seven sites that theoretically should be able to deliver the required volume of sand and gravel were considered as being suitable for inclusion in the Aggregate Minerals Site Allocations DPD. (NB: from this stage onwards two of the sites adjacent to Brickworth Quarry were considered to be a single site (Site SE2/SE3) due to their similar constraints, restoration proposals, proximity, and the likelihood that they would be worked in a phased manner).

The seven sites included in the Aggregate Minerals Site Allocations DPD are as follows:

- Site U3 – Cox's Farm (east of Marston Meysey);
- Site U4 - Blackburr Farm (north west of Castle Eaton);
- Site U5 – North Farm (south west of Castle Eaton);
- Site U7 - Land East of Calcutt;
- Site U22 - Land at Cotswold Community;

- Site C3 - Land near Compton Bassett; and
- Site SE2/SE3 - Extension to Brickworth Quarry.

Additional noise, air quality and hydrogeological assessments have been undertaken, where relevant, on these seven sites by external specialist consultants in order to predict the impacts associated with extraction operations at these sites and to consider the mitigation measures that would be most suitable for reducing any impacts.

In addition, a workshop to explore restoration options for the seven minerals sites proposed for inclusion in Aggregate Minerals Site Allocations DPD was held in August 2011. This was jointly hosted by the Councils and Nature After Minerals⁵ and was attended by a wide range of stakeholders including amongst others, nature conservation groups, minerals extraction companies and the RAF. The restoration options developed through the workshop have been included in the Aggregate Minerals Sites DPD.

⁵ <http://www.afterminerals.com>

3 HRA Method & Findings for the Minerals & Waste Core Strategies and DC Policies

This Section outlines the method used and findings of the HRAs for the Minerals and Waste Core Strategies and Development Control Policies DPDs.

3.1 HRA of Minerals and Waste Core Strategies

Screening

A HRA screening report for the Minerals and Waste Core Strategies was produced in April 2007. It was considered appropriate to undertake a joint HRA screening for the DPDs, as both were at similar stages of development. This helped to ensure consistency between the waste and minerals site allocation processes in relation to impacts on European sites. The HRA screening involved the tasks presented in Table 3-1 below.

Table 3-1: HRA Screening Tasks and Findings for the Minerals and Waste Core Strategies

| HRA Screening Stage 1: Key Tasks | HRA Screening Findings |
|--|---|
| Task 1 Identification of Natura 2000 sites & characterisation | The screening identified 22 European sites within the influence of the Core Strategies, 11 within and 11 outwith the Plan area. |
| Task 2 Strategy review and identification of likely impacts | <p>A review of the DPDs identified a number of potential environmental impacts that could arise from waste and minerals activities:</p> <ul style="list-style-type: none"> • Emissions/ particulates • Dust • Noise/ Light • Odour • Litter • Liquid Pollutant • Spores/non-native release • Land take/ Habitat fragmentation • Topography alterations (change to landscape form) • Contamination/ accumulation of toxic substances • Attraction of vermin/ invasion/ alien species • Restoration potential for wildlife • Alteration of hydrology • Potential for combustion |

| HRA Screening Stage 1: Key Tasks | HRA Screening Findings |
|--|---|
| <p>Task 3</p> <p>Consideration of other plans and programmes</p> | <p>Key plans considered in combination included:</p> <ul style="list-style-type: none"> • The Draft Regional Spatial Strategy for the South West 2006-2026 • South West Regional Waste Strategy 2004-2020 • South West Regional Housing Strategy 2005-2016 • Wiltshire Local Transport Plan 2006/7 – 2010/11 • Swindon Borough Council Local Transport Plan 2006-2011 • Relevant Local Development Documents, Wiltshire/ Swindon and neighbouring authorities as necessary • Other Minerals and Waste Local Plans/ Local Development Frameworks produced by neighbourhood planning authorities |
| <p>Task 4</p> <p>Screening Assessment</p> | <p>Of the 22 European sites considered, 13 were screened out from more detailed AA as they were unlikely to be significantly affected by the plans. The nine remaining European sites (including three sites with multiple designations) were progressed to the next stage of the HRA process; the AA. The European sites considered by the screening to require AA were as follows:</p> <ul style="list-style-type: none"> • Avon Valley SPA & Ramsar • Bath and Bradford on Avon Bats SAC • Chilmark Quarries SAC • Mottisfont Bats SAC • New Forest SAC, SPA & Ramsar • North Meadow and Clattinger Farm SAC • Porton Down SPA • River Avon SAC • Salisbury Plain SAC & SPA |

Appropriate Assessment

As for the screening, the AA stage of the HRA for the Minerals and Waste Core Strategies was undertaken jointly, to ensure consistency. The AA Report was produced in February 2008 and accompanied the Core Strategies on Submission. The AA tasks and findings are presented in Table 3-2.

Table 3-2: Appropriate Assessment Tasks and Findings for the Minerals and Waste Core Strategies

| Appropriate Assessment Stage 2: Key Tasks | Appropriate Assessment Findings |
|---|--|
| Task 1 Scoping and Additional Information Gathering | Further information was gathered on those European sites that the screening considered as requiring AA. In particular, additional information was sought regarding environmental conditions that support the integrity of the sites, vulnerabilities of the designated habitats and a more detailed analysis of plans that may act 'in-combination' was undertaken. |
| Task 2 AA - Assessing the Impacts | The impact assessment element of the AA took forward the initial work on the assessment of likely significant effects completed at the screening stage. The assessment focused on those sites where the screening had identified possible significant effects as well as those cases where the precautionary principle had been applied because uncertainty existed, either through limited availability of data and/or due to potential 'in combination' effects. The AA focused on whether the impacts identified at screening could potentially affect the conservation objectives at each site. |
| Task 3 Considering Mitigation Measures | Potential for significant effect was identified with regard to two European sites (North Meadow and Clattinger Farm SAC and the River Avon SAC) and this related primarily to site-specific hydrological connectivity. The AA noted the need for robust policy wording and also suggested mitigation measures to be incorporated into subsequent DPDs and planning consents as appropriate. This included the avoidance of development at sites where hydrological connectivity [and the associated risk to the designated site interest feature] is proven. |
| Task 4 Concluding the AA - Conclusions and Recommendations | The assessment found that the Minerals and Waste Core Strategies provide strong policy protection for designated sites and the spatial intent for minerals and waste sites, as directed by the strategies, will lead to no significant effect on the integrity of 7 European sites considered (Avon Valley SPA/ Ramsar, Bath and Bradford on Avon Bats SAC, Chilmark Quarries SAC, Mottisfont Bats SAC, New Forest SAC/SPA/Ramsar, Porton Down SPA, Salisbury Plain SAC/SPA). Recommendations made focused on the need for lower level DPDs and site level design, construction and operation to be cognisant of the sensitivities of the designated site interest features. |

3.2 HRA of Minerals and Waste Development Control Policies

A HRA screening for the Minerals and Waste Development Control Policies was produced in July 2008. Similar to the Core Strategies it was considered appropriate to undertake a joint HRA screening for the DC Policies, as both were at similar stages of development. The screening of

the DC Policies involved the same tasks as those identified for the screening of the Core Strategies in Table 3-1 and Table 3-2.

The findings and conclusions of the HRA/AA for the Core Strategies were used to inform the screening of the DC Policies. The assessment considered whether the DC Policies could have a significant effect on the European sites previously identified (through the Core Strategies HRA) as potentially affected by minerals and waste developments.

The screening reviewed the DC Policies (in the light of information arising from the Core Strategies HRA) to identify whether they may have an effect on European sites. The screening concluded that there were no likely significant impacts that would arise as a result of DC policy implementation that were not previously addressed through the HRA of the Core Strategies. In particular, the screening assessment noted that environmental protection measures had been effectively integrated throughout the DC policies, and that this approach takes forward recommendations made in relation to specific European sites at the conclusion of the Core Strategies HRA.

Key issues identified for consideration at the site allocations stage included water quality and hydrological connectivity, which were identified as being particularly relevant to the integrity of several SACs as identified in the AA of the Core Strategies.

4 HRA Method & Findings for the Site Allocations DPD

4.1 Introduction

This Section outlines the method and findings of the screening stage of the HRA for Wiltshire and Swindon Borough Council's Aggregate Minerals Site Allocations DPD. This screening is being reported separately from the HRA for the Waste Site Allocations as the DPDs are at different stages of development.

4.2 Sustainability Impacts of Minerals Extraction Activities

Minerals extraction and its associated infrastructure has the potential to cause severe damage to the conservation interests of Natura 2000 sites through the loss, degradation and fragmentation of valuable habitat areas and a reduction in biodiversity. Minerals extraction and its associated activities can also cause indirect effects, such as those associated with changes to water regimes, noise and dust issues, and the impacts of minerals transportation. Table 4-1 summarises the potential impacts of minerals developments.

Table 4-1: Environmental Impacts Associated with Minerals Extraction

| Environmental Impacts Associated with Minerals Extraction/ Materials | | |
|---|---|--|
| Material | Activities associated with minerals development | Potential Environmental Impacts |
| All materials | <p>Site operations will normally include:</p> <ul style="list-style-type: none"> ▪ Extraction by hydraulic excavator or mechanical rock breaker etc. ▪ Development of ancillary of infrastructure. ▪ Processing of the materials. ▪ Transportation of materials around the site. <p>Transportation of minerals by road or rail.</p> <p>Site restoration (either during and/or after workings) and after-care.</p> | <p>Land take & Habitat Loss/Fragmentation</p> <ul style="list-style-type: none"> ▪ From continued extraction of aggregates and the development of ancillary infrastructure. Any land take within a Natura 2000 site is likely to have an adverse impact upon site integrity. It is likely to impact on species populations and species movements. ▪ The impact may also relate to non-designated habitat features. For example, any fragmentation or loss of habitat associated with a SAC woodland, or equally any significant areas of woodland or hedgerows in the vicinity of the SAC may have an adverse effect on bats through the loss of foraging or commuting habitat. Similarly, removal of a habitat adjacent to or within vicinity of a SAC or SPA habitat may have a negative impact on the designated site through a reduction in buffering or changes to local hydrology. ▪ Restoring quarries to biodiversity can be |

| Environmental Impacts Associated with Minerals Extraction/ Materials | | |
|--|---|--|
| Material | Activities associated with minerals development | Potential Environmental Impacts |
| | | <p>positive for nature conservation.</p> <ul style="list-style-type: none"> ▪ Partial and full restoration of extraction sites has the potential to improve the SACs and SPAs through increasing the robustness of sites. This could be either through enhancing buffers or improving the connectivity of sites. <p>Disturbance</p> <ul style="list-style-type: none"> ▪ Noise and light pollution from extraction, ancillary facilities, transportation and some types of restoration may impact upon fauna such as bats and birds. <p>Water pollution</p> <ul style="list-style-type: none"> ▪ Contamination of habitats may occur from a number of sources. ▪ Impacts may include reductions in prey species with subsequent impacts on the food chain, bioaccumulation of toxins in the food chain or eutrophication. ▪ Contaminants can be transported large distances with surface or ground water. Impacts may depend on the strength of the pathway between the source and the site. ▪ Wetland habitats are particularly vulnerable to pollution from surface or ground water sources. <p>Air pollution</p> <ul style="list-style-type: none"> ▪ On site operations and transportation may result in reduced condition and integrity of Nature 2000 sites. ▪ The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern. ▪ Other pollutants including sulphur dioxide, ozone and particulates. ▪ Air pollution has been linked to ill health amongst trees, particularly over mature specimens, and also a failure to regenerate, either from coppice, pollard or seed. ▪ Air pollution may also cause changes in species assemblages, for example in lichens. <p>Dust</p> |

| Environmental Impacts Associated with Minerals Extraction/ Materials | | |
|--|---|--|
| Material | Activities associated with minerals development | Potential Environmental Impacts |
| | | <ul style="list-style-type: none"> ▪ Dust from extraction and on site operations may have an impact on habitats and species. ▪ Potential for affecting the growth of plants. ▪ Dust could also get into water sources. <p>Hydrology</p> <ul style="list-style-type: none"> ▪ Decreased (for example as a result of extraction) or increased water quantity (for example due to impeded water flow or restoration utilising non-permeable fill materials) ground or surface water levels may impact upon designated habitats. ▪ This could impact on the integrity of the site by causing alterations in the species composition or reducing the extent of target habitats. ▪ Reduced water levels in water courses and water bodies could have direct impacts on wetland habitats and designated wildfowl populations. ▪ Reduced volumes of water would increase the concentration of contaminants. ▪ Any significant or long term changes in ground water levels may also affect woodland sites, either having a direct effect on species (canopy, basal flora or epiphytes) or indirectly by increasing stress and vulnerability to other factors. <p>Introduced/invasive species</p> <ul style="list-style-type: none"> ▪ Restoration and mitigation could potentially lead to the introduction or increased abundance of potential invasive species which could comprise an adverse impact on integrity of Natura 2000 sites. |
| Sand and gravel (land won) | <p>Extracted by hydraulic excavators following the stripping of soil.</p> <p>Minerals are generally screened and washed. Silt is disposed of within on-site lagoons.</p> <p>Transport is by road because of the small</p> | <ul style="list-style-type: none"> ▪ Higher land take from extraction and development of ancillary infrastructure (than crushed rock). Likely to impact on species populations and species movements. ▪ Noise levels relatively low (compared to hard rock quarries). ▪ Silt disposal capacity is important – water impacts. ▪ Soil stripping in summer can cause dust problems. ▪ Road transport impacts. |

| Environmental Impacts Associated with Minerals Extraction/ Materials | | |
|---|---|--|
| Material | Activities associated with minerals development | Potential Environmental Impacts |
| | amounts being transported and the fact that the material is relatively low value, bulk materials, for which transport costs make up a large proportion of the market price. | <ul style="list-style-type: none"> ▪ Sand and gravel quarries can be pumped dry which has potential impacts on mean water table levels and the associated issues surrounding cumulative impacts derived from multiple sites, working in close proximity, all pumping water. |
| Limestone – Building stone | Underground mining. Above ground extraction using rock breakers and excavators. | <ul style="list-style-type: none"> ▪ Noise and dust impacts during above ground excavation ▪ Road transport impacts. Vibration and occasional noise during underground excavation (dependant on the depth of working). |

4.3 Screening Method

The HRA Report for the Wiltshire and Swindon Minerals and Waste Core Strategies (February 2008) noted that different minerals and waste activities have different likelihoods of causing impacts and that the degree and mechanism of the impact depends on the specific European site sensitivities. In addition, it was recognised that the location of the activity relative to the European site will influence the likelihood of significant effect. The HRA Report also acknowledges that distance in itself is not a definitive guide to the likelihood or severity of an impact as factors such as the prevailing wind direction, river flow direction, and groundwater flow direction will all have a bearing on the relative distance at which an impact can occur. The assessment therefore considered minerals and waste activities (and their potential impacts) at a range of distances:

- Within the European site;
- 0 - 500m from the European site;
- 500m - 2km from the European site;
- 2km - 10km from the European site; and
- 10km+ from the European site.

The HRA for the Minerals and Waste Core Strategies took a risk based approach to determining effect on integrity, which considered available information on the European sites; the inherent uncertainties highlighted through the screening and AA method; and the limitations of effects prediction where the precise location of activities is unknown. The likelihood of significant effect was categorised as:

- Certain (> 95%);

- Likely (50-95%);
- Unlikely (5-50%); and
- Extremely unlikely (0-5%).

Using this risk based approach the assessment focused on whether the impacts of mineral extraction activities identified at screening could potentially affect the conservation objectives at each site. The findings of the assessment were captured in data proformas. An example of the assessment key (Table 4-2) and the findings (Table 4-3) are presented below.

Table 4-2: Assessment Key for the Minerals & Waste Core Strategies' HRA

| Summary Assessment Matrices: Key | |
|----------------------------------|--|
| Likelihood of effect | Certain (>95%) |
| | Likely (50-95%) |
| | Unlikely (5-50%) |
| | Extremely unlikely (0-5%) |
| Impact Types | Created by Waste Facilities only |
| | Created by Minerals Facilities only |
| | Created by Waste and Minerals Facilities |
| | Not applicable |

Table 4-3: Minerals and Waste Core Strategies AA: Summary Assessment Matrix

| Summary Assessment Matrix: Site Bath and Bradford on Avon Bats | | | | | | | | | |
|--|------|--|-------------------------------------|-----------------------------|------------|--------------------|--------------------|--------------------|--------------------|
| Impact type | Code | Potential impacts on conservation objectives (Conservation Objectives Codes as in assessment tables) | Could it cause a significant effect | Positive (P) or Adverse (A) | Within SAC | 0-500m | 500m-2km | 2-10km | 10km+ |
| Emissions / Particulates | A | Potential impacts on AB1.1 | Y | A | Unlikely | Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely |
| Dust | B | Potential impacts on AB1.1 | Y | A | Unlikely | Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely |
| Noise / Light | C | Potential impacts on AB1.1 | Y | A | Likely | Likely | Unlikely | Extremely Unlikely | Extremely Unlikely |
| Odour | D | None | N | | | | | | |
| Litter | E | Potential impacts on AB1.1 | Y | A | Unlikely | Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely |
| Liquid pollutant / Water pollution | F | Potential impacts on AB1.1 | Y | A | Unlikely | Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely |
| Spores (non-native) release | G | Potential impacts on AB1.1 | Y | A | Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely |
| Land take / Habitat fragmentation | H | Potential impacts on AB1.1 | Y | A | Certain | Likely | Likely | Unlikely | Extremely Unlikely |
| Topography alterations | J | Potential impacts on AB1.1 | Y | A | Likely | Likely | Unlikely | Extremely Unlikely | Extremely Unlikely |
| Contamination / Accumulation of toxic substances | K | Potential impacts on AB1.1 | Y | A | Unlikely | Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely |
| Attraction of vermin / invasive / alien species | L | Potential impacts on AB1.1 | Y | A | Unlikely | Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely |
| Restoration potential for wildlife | M | Potential impacts on AB1.1 | Y | P | Likely | Likely | Likely | Likely | Unlikely |
| Alteration of hydrology | N | Potential impacts on AB1.1 | Y | A | Unlikely | Unlikely | Unlikely | Extremely Unlikely | Extremely Unlikely |
| Potential for combustion | O | Potential impacts on AB1.1 | Y | A | Unlikely | Unlikely | Extremely Unlikely | Extremely Unlikely | Extremely Unlikely |

The findings for each European site identified a distance for which it cannot be certain that a likely significant effect will not result from the siting and operation of a mineral site (Table 4-4). The method of distance identification has been applied for the HRA Screening of the Aggregate Minerals Site Allocations DPD and accordingly to the European sites scoped into the assessment.

Table 4-4: Distance at which an aggregate extraction operation may adversely affect European sites

| European sites scoped into HRA Screening | Distance below which it cannot be certain that a likely significant effect will not result from the operation of a mineral site |
|--|---|
| Avon Valley SPA | Less than 500m |
| Avon Valley Ramsar site | Less than 500m |
| Bath & Bradford on Avon Bat SAC | Less than 2km |
| Chilmark Quarries SAC | Less than 500m |
| Mottisfont Bats SAC | Less than 500m |
| New Forest SAC | Less than 2km |
| New Forest SPA | Less than 500m |
| New Forest Ramsar site | Less than 500m |
| North Meadow and Clattinger Farm SAC | Less than 2km |
| Porton Down SPA | Less than 500m |
| River Avon SAC | Less than 2km |
| Salisbury Plain SAC | Less than 500m |
| Salisbury Plain SPA | Less than 500m |

In spring 2011 the Wiltshire County Ecologist carried out a 'Test of Likely Significance' on six aggregate minerals site allocations (or clusters of sites) that fell within the distances identified in Table 4-4 above, these distances being based on the findings of the Appropriate Assessment for the Minerals and Waste Core Strategies. The Tests of Likely Significance are appended to the Ecological Site Briefings undertaken as part of the evidence base for the Aggregate Minerals Site Allocations DPD. The findings of the tests for those sites that are now included in the Aggregate Minerals Site Allocations DPD are summarised in Section 4.6.

4.4 Screening Findings

The Aggregate Minerals Site Allocations Pre-submission DPD contains seven sites considered potentially suitable for minerals extraction (see Section 2.4). None of these sites are either within or immediately adjacent to a designated European site. However, based on the findings of the HRA for the Minerals and Waste Core Strategies, four of the seven proposed extraction sites are within the distance at which it cannot be certain that a likely significant effect will not result from the operation of a mineral site.

There is one potential mineral site (made up of two parcels) falling within 2km of the New Forest SAC and two that fall within 2km of North Meadow and Clattinger Farm SAC and which could therefore be likely to result in a significant adverse effect on the designated features of the European site.

The extraction site allocations within these distances are presented in Table 4-5.

Table 4-5: Mineral site allocations in proximity to European sites

| European sites scoped into HRA Screening | Distance below which it cannot be certain that a likely significant effect will not result from the operation of a mineral site | Sites proposed in the Aggregate Minerals Site Allocations Pre-submission DPD |
|--|---|--|
| Avon Valley SPA | Less than 500m | None |
| Avon Valley Ramsar site | Less than 500m | None |
| Bath & Bradford on Avon Bat SAC | Less than 2km | None |
| Chilmark Quarries SAC | Less than 500m | None |
| Mottisfont Bats SAC | Less than 500m | None |
| New Forest SAC | Less than 2km | SE2/SE3 – Land at Whiteparish |
| New Forest SPA | Less than 500m | None |
| New Forest Ramsar site | Less than 500m | None |
| North Meadow and Clattinger Farm SAC | Less than 2km | U7 – Land east of Calcutt U22 – Land west of Cotswold Community |
| Porton Down SPA | Less than 500m | None |
| River Avon SAC | Less than 2km | None |
| Salisbury Plain SAC | Less than 500m | None |
| Salisbury Plain SPA | Less than 500m | None |

4.5 European Site Sensitivities

The significance of impacts generated by mineral extraction activities will be dependent on the sensitivity of the designated habitats and / or species of the European sites. A summary of the sensitivities of the two European sites potentially affected is provided below, the information is determined from the detailed site characterisations provided in Appendix 1.

New Forest SAC, SPA & Ramsar

Inappropriate management has led to a decline in ancient semi-natural woodland by 40% since 1945, and many of the areas, which remain, are no longer of nature conservation importance due to management. Land managers are addressing these issues through the emerging SAC Management Plan, the proposed National Park, and supplementary

funding for restoration. Actions are being taken to carry out restoration measures over the next 20-50 years. Appropriate management of the SAC and RAMSAR habitats are key to maintaining populations of woodlark and Dartford warbler and this is achieved through the grazing, cutting and burning of gorse and heather to provide a diverse age structure and prevent succession to woodland.

Most of the valley mires in the Forest have been damaged in the past by drainage, which has caused drying out of the peat layers. Prevention of further erosion has already been tackled on some sites but a more extensive programme of infilling drainage ditches is currently being discussed with the landowners and commoners. The work to restore valley mires systems is expected to influence these bird populations in time. The SAC wetland habitats are potentially at threat from draining for improved grazing and forestry.

The New Forest is subject to recreational pressure, disturbance has been shown to adversely affect populations of woodlark elsewhere, which are protected under the SPA and RAMSAR. However, the population in the New Forest is currently at a high level and steps are being taken to deal with recreational pressures. A recent decline in waders, redshank, lapwing, curlew and snipe may in part be due to the effects of walkers and particularly those with dogs. The Forestry Commission is carrying out an exercise to educate the dog-walking public during the nesting season. The increase in disturbance could also have an adverse effect on the habitats and species designated under the New forest SAC.

North Meadow and Clattinger Farm SAC

The lowland hay meadow is dependent on traditional agricultural practices of hay-cutting with aftermath cattle grazing or seasonal cattle grazing. These management requirements are addressed in the National Nature Reserve (NNR) management plan and in a site management statement concerning the private land, which stipulates an appropriate regime. Development pressures could potentially lead to a change in grazing patterns, which could adversely impact the site.

It is imperative that a damp environment be maintained on the site. Adjacent extraction and renovation of gravel workings are a potential threat to water levels and are subject to monitoring and mitigation measures. NE have also indicated that the site is being adversely affected by recreational pressure (football is changing the nature of the habitat).

4.6 Test of Likely Significance

As described in Section 4.3 above the Wiltshire County Ecologist carried out a 'Test of Likely Significance' on proposed mineral sites that fell within the distances identified in Table 4-4. This test took the format of a pro forma, which is used by Wiltshire Council's Ecologists for all planning applications that have the potential to result in an adverse effect on a European site. The pro forma is accepted by Natural England as suitable procedure for this purpose.

The criteria for determining significant effect is based on the likelihood of the predicted impacts for each of the designated features of a particular

European site actually occurring, when taking into account all other biotic and abiotic factors.

As identified in Table 4-5 three of the currently proposed aggregate mineral extraction sites are located close enough to a European designated site to require a test to determine whether or not the proposal could be likely to have a significant adverse effect on the designated features of the site. These sites are:

- Site U7 - Land East of Calcutt;
- Site U22 - Land at Cotswold Community; and
- Site SE2/SE3 - Extension to Brickworth Quarry.

The conclusions of the Test of Likely Significance for the three sites prepared by the Wiltshire County Ecologist are provided below.

NB: these conclusions are extracts from the Ecological Site Briefing document. The full 'Test of Likely Significant Effects' pro formas are available in the Ecological Site Briefing document that is available on the Wiltshire Council website 'Minerals and Waste Policy' pages. In order to obtain a full understanding of how these conclusions have been reached this briefing document should be referred to.

Where it is stated that there will be no likely significant effect on the designated features of a European site the following decision making criteria have been taken into account:

- It is clear that there is no mechanism for impact; or
- The impact is so slight as to be insignificant;
- The conclusion of no likely significant effect has been reached after consideration of available mitigation that will remove the potential adverse impacts.

Where mitigation is crucial to the mineral operation continuing without risk of adverse impact, recommendations for the inclusion of this mitigation have been provided in the pro formas.

Site U7 - Land East of Calcutt

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

*a) Alone? **No.** There is no mechanism for impact on the SAC as a result of mineral extraction at this potential site, since the two are in separate catchments, are not hydraulically connected and the SAC is to the north west of the potential mineral site and therefore cannot be affected by aeolian deposition carried on the prevailing winds.*

*b) In combination with other plans or projects? **No.** Although there are other mineral sites already operational in the immediate vicinity of the potential mineral site, the separation of hydrology into two catchments and the direction of groundwater flow ensure that operation of this site will not combine with the operation of other sites to result in a significant adverse impact on the features of the SAC. Other minerals sites operating in the immediately adjacent area will also be subject to a robust mitigation strategy that will reduce adverse impacts to an insignificant level.*

No other plans or projects have been identified that could combine with the effects of this potential mineral site to result in a significant adverse impact on the features of the SAC.

Conclusion: Is the proposal likely to have a significant effect on a European Site? **No.** It will be possible to design mitigation that will remove or substantially reduce impacts to a level where they would be insignificant.

Recommendations: The production and submission of a robust Construction Method Statement to be agreed by the County Ecologist will be necessary to inform the planning application and to ensure that suitable measures are in place to mitigate for the possible impacts described above.

Site U22 - Land at Cotswold Community

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

a) Alone? **No.** The potential mineral site is at a sufficient distance from the SAC that it is very unlikely that water quality or water resource will be reduced within the European site. Precautionary measures are available to ensure that local groundwater is protected from impact. In addition, measures are available to prevent impact from dust deposition, pollution or increased siltation from run off reaching the SAC.

b) In combination with other plans or projects? **No.** Although there are other mineral sites already operational in the immediate vicinity of the potential mineral site, these are all at a greater distance from the SAC and are located to the south east and north east of both the SAC and the potential mineral site at Cotswold Community. It is unlikely that operation of this site will combine with the operation of other sites to result in a significant adverse impact on the features of the SAC, for the reasons already stated above, i.e. that groundwater flows in the opposite direction and the prevailing wind blows away from the SAC rather than into it from these sites. Other minerals sites operating in the immediately adjacent area will also be subject to a robust mitigation strategy that will reduce adverse impacts to an insignificant level.

No other plans or projects have been identified that could combine with the effects of this potential mineral site to result in a significant adverse impact on the features of the SAC.

Conclusion: Is the proposal likely to have a significant effect on a European Site? **No.** It will be possible to design mitigation that will remove or substantially reduce impacts to a level where they would be insignificant.

Recommendations: The production and submission of a robust Construction Method Statement to be agreed by the County Ecologist will be necessary to inform the planning application and to ensure that suitable measures are in place to mitigate for the possible impacts described above.

Site SE2/SE3 - Extension to Brickworth Quarry

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

*a) Alone? **No.** The potential mineral site is sufficiently distant from the European site that most of the potential impacts listed above would not result in any significant adverse effect on the designated features of the site. There is mechanism for the transport of polluted waters to reach the European site via the connectivity of streams and ditches between the two sites, however, a robust Construction Method Statement can be agreed with the County Ecologist that will ensure sufficient mitigation can be put in place to prevent impact on the designated species.*

*b) In combination with other plans or projects? **No.** It is unlikely that all three parts of this site (SE1⁶, SE2 and SE3) will be worked at the same time as these will in effect be extensions of the current works at Brickworth Quarry, since SE2 and SE3 are immediately adjacent to Brickworth and SE1 is only a short distance away to the north east. Mitigation for each site to prevent transport of pollution via watercourses reaching the New Forest SAC, would ensure that there will be no cumulative effect on the features of the SAC. The number of mineral sites operational within close proximity to each other at any one time should be taken into consideration at the planning application stage and the order of phasing and rate of restoration carefully assessed as part of the planning decision.*

There is currently no mechanism for this site to add to any cumulative effect on the New Forest SAC in combination with other plans and projects.

*Conclusion: Is the proposal likely to have a significant effect on a European Site? **No.** The three components of this site are sufficiently far from the European site that their operation for mineral extraction will not result in any significant adverse impact on the designated features of the site. There is mechanism for water pollution to reach the N2K site via hydrological connectivity, however this can be effectively mitigated against by the use of sedimats and filters.*

Recommendations: A robust Construction Method Statement for each component part of the site must address the use of mitigation to prevent pollutants reaching the European site. Special consideration should be given to phasing of both extraction and restoration to ensure that large parts of the collective sites are not actively worked together at any one time.

4.7 Other Plans and Projects in Combination

It is a requirement of Article 6(3) of the Habitats Directive that HRA examines the potential for plans and programmes to have a significant effect either individually or 'in combination' with other plans and programmes (PPs). In practice the 'in-combination' test is most relevant in situations where the effects of the plan or project alone are unlikely to have a significant effect, but when combined with the effects of other plan or project, would be likely to be significant. Identifying and assessing

⁶ NB: Site SE1 has not been taken forward into the Pre-Submission DPD

other PPs requires a pragmatic approach (given the extensive range of PPs underway in the region). For this screening, the consideration of other PPs has focused on those likely to lead to significant infrastructure / development changes with related impacts.

The potential for other plans and projects to act in combination with future mineral extraction activities has been an ongoing consideration for the HRA of the Minerals and Waste Development Framework (MWDF) - to date the Minerals Core Strategy and Development Control Policies DPDs.

In addition to the plans and projects considered at these earlier stages of the MWDF the key plans and projects considered to have the potential to act in combination with the Aggregate Minerals Site Allocations DPD are as follows:

- Swindon Borough Core Strategy and Development Management Policies 2026 (March 2011)
- Draft Wiltshire Core Strategy 2011
- New Forest National Park Core Strategy Submission (February 2010)
- South Gloucestershire Council Core Strategy Pre-submission Publication Draft (August 2010)
- Wiltshire Local Transport Plan 3 (2011 – 2026)
- Swindon Local Transport 3 (2011 - 2026)
- Oxfordshire Local Transport Plan 3 2011 - 2030
- Gloucestershire Local Transport Plan 3 2011 - 2026
- Hampshire Local Transport Plan 3 2011 - 2031
- Wiltshire and Swindon Minerals Core Strategy 2006 - 2026 (adopted 2009)
- Wiltshire and Swindon Waste Core Strategy 2006 - 2026 (adopted 2009)
- Gloucestershire County Council Waste Core Strategy - Pre-submission (Dec 2010)
- Hampshire Minerals and Waste Plan (November 2011)

Where possible the review of in-combination effects from other plans and projects was informed by the results of any existing HRA process, where HRA has already been undertaken for those plans or projects.

The assessment with other plans and projects did not find any mechanisms for the extraction of minerals at the sites (which met the distance criteria set by the HRA of the Core Strategy) to act in combination with the other plans and projects.

The Tests of Likely Significance carried out by the Wiltshire County Ecologist also considered the potential for in-combination effects with other plans (see Section 4.6). In all the tests it was concluded that extraction would not have significant effect on the related European site, either alone or in combination with other plans or projects.

4.8 Screening Summary

Table 4-6 summarises the results of the HRA screening, considering the effect of the Aggregate Minerals Site Allocations DPD, alone and in combination with other plans and projects for each European site. The assessment should be revisited in the light of any significant changes to the plan.

Table 4-6: HRA Screening Summary

| European Sites | Designation | AA required alone? × No ✓ Yes ? Uncertain | AA required in combination? × No ✓ Yes ? Uncertain |
|----------------------------------|-------------------|--|---|
| New Forest | SAC, SPA & Ramsar | × | × |
| North Meadow and Clattinger Farm | SAC | × | × |

The findings of this plan level HRA does not obviate the need for individual mineral extraction developments to undertake project level HRA/AA where specific sensitivities have been identified and it is considered there is potential for significant effect on one or more European Sites. The findings of this HRA/AA should be used to inform any future assessment work.

4.9 Progression of Core Strategy & Development Control Policies HRA

The HRA for the Minerals and Waste Core Strategies made recommendations for policy and management measures based on the findings of the Appropriate Assessment (AA). The recommendations related to the known sensitivities of the sites assessed and the likelihood of significant impacts arising from minerals and waste activities. The HRA Screening for the DC Policies DPD found that these recommendations had been effectively progressed through the development of DC Policies.

The selection and appraisal of aggregate minerals site allocations has followed a progressive 'sieving' process where areas of land have been assessed against a set of objectives to determine their potential for supplying aggregates. This includes objectives to ensure that sites proposed in the Aggregate Minerals Site Allocations DPD adhere to Core Strategy Policies that direct the location of future mineral extraction.

Future extraction activities will also have to adhere to the criteria set out in the adopted DC Policies DPD. The DC Policies seek to address impacts generated from minerals extraction, such as impacts on amenity, visual aspects, noise and light emissions, vibration, transport, air emissions and climate change, the water environment, and agricultural land. These impacts have also been considered through the minerals site selection and appraisal process to ensure that the most suitable sites are put forward from the areas available.

5 Conclusions and Future Work

This report outlines the methods used and the findings arising from the screening stage of the Habitats Regulations Assessment for Wiltshire and Swindon's Aggregate Minerals Site Allocations DPD. The screening took forward the Minerals and Waste Core Strategies and Development Control Policies HRA findings and ensured that the recommendations were effectively applied to the Aggregate Minerals Site Allocations DPD.

In total 13 European sites were scoped into the HRA Screening for the Aggregate Minerals Site Allocations DPD based on the findings of the HRA for the Minerals and Waste Core Strategies (see Table 4-4). These findings also influenced the method used for this HRA Screening.

The Aggregate Minerals Site Allocations Pre-submission DPD contains seven sites considered potentially suitable for providing future aggregate needs. None of these sites are either within or immediately adjacent to a designated European site; however, based on the findings of the HRA for the Minerals and Waste Core Strategies, three of the seven proposed extraction sites are within a distance to European sites at which it cannot be certain that a likely significant effect will not result from the operation of a mineral site.

These three sites were then assessed by the Wiltshire County Ecologist to determine the likelihood for minerals extraction activities to have significant effects on European sites. The assessment concluded that the proposed extraction at these sites will not have likely significant effects on the identified European sites, either alone or in combination. It was considered that appropriate site level mitigation is available to address the potential impacts of extraction activities on European sites.

The findings of this plan level HRA does not take away the need for individual minerals extraction proposals to undertake project level HRA/AA, as the detailed nature and scale of extraction activities at a particular site will only be known at the planning application stage. This assessment should be revisited in the light of any significant changes to the plan and this screening opinion is subject to consultation and advice from the statutory body Natural England and other key stakeholders.

5.1 Monitoring and Review

While monitoring in relation to plans or projects is not specified by the Habitats Directive⁷ it is good practice, and guidance suggests that monitoring the effects of plan implementation in relation to any issues identified by the HRA is undertaken. Monitoring is an established requirement of the planning system and monitoring for biodiversity is advised by Government, who include changes to the status of European Sites as a core indicator in examining the effects of local plan

⁷ Article 11 requires that 'Member States shall undertake surveillance of the conservation status of the natural habitats and species referred to in Article 2 with particular regard to priority natural habitat types and priority species. In England this surveillance is undertaken by NE in their statutory nature conservation role.

implementation on biodiversity⁸. European sites are, by definition, the key biodiversity resources within the Plan area and monitoring should be employed in support of the HRA findings and mitigation recommendations.

The SA/SEA Adoption Statements for the Minerals Core Strategy and Development Control Policies set out targets and suggested indicators for monitoring. Those relevant to HRA include indicators that monitor the potential effects on biodiversity as well as increased water consumption and pollution levels. It is appropriate that monitoring for HRA is aligned with the SA/SEA requirements, and that this links to the authorities' Annual Monitoring Reports on the implementation of their spatial plans. As well as the targets and indicators set out in the SA/SEA Adoption Statements for the Minerals Core Strategy and Development Control Policies it is recommended that an additional indicator is incorporated into the monitoring framework. Monitoring the condition status of European sites⁹ within Wiltshire and Swindon will allow the Council's to determine if the Plan is performing as anticipated.

This HRA report forms part of the evidence base for the Wiltshire Council and Swindon Borough Council Minerals and Waste Development Framework (Core Strategies, Development Control Policies and Site Allocations DPDs) and provides a record of how the plan is consistent with national planning policy on biodiversity protection.

⁸ Local Development Framework Monitoring: A Good Practice Guide, ODPM, 2005.

⁹ Condition status is a key indicator for European sites. This information is determined and reported by NE.

Appendix 1: European Site Characterisations

Special Areas of Conservation

| New Forest SAC | |
|---------------------|---|
| Location Grid Ref | SU225075 |
| JNCC Site Code | UK0012557 |
| Size (ha) | 29262.36 |
| Qualifying Features | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> ■ 3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) ■ 3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the Isoëto-Nanojuncetea ■ 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> ■ 4030 European dry heaths ■ 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) ■ 7150 Depressions on peat substrates of the Rhynchosporion ■ 9120 Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>) ■ 9130 Asperulo-Fagetum beech forests ■ 9190 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains ■ 91D0 Bog woodland ■ 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) <p>Annex II habitats qualifying feature:</p> <ul style="list-style-type: none"> ■ 7140 Transition mires and quaking bogs ■ 7230 Alkaline fens <p>Annex II Species primary reason for selection:</p> <ul style="list-style-type: none"> ■ 1044 Southern damselfly (<i>Coenagrion mercuriale</i>) ■ 1083 Stag beetle (<i>Lucanus cervus</i>) <p>Annex II Species qualifying feature:</p> |

New Forest SAC

| <p>Conservation Objectives</p> | <ul style="list-style-type: none"> ■ 1166 Great crested newt (<i>Triturus cristatus</i>) <p>The Conservation Objectives below are for the New Forest SSSI. The SPA and Ramsar Site boundaries are the pre-1996 SSSI boundary less the main roads. The SAC includes most of The New Forest SSSI as well as Landford Bog SSSI, Langley Wood and Homan's Copse SSSI, Loosehanger Copse and Meadows SSSI, Roydon Woods SSSI and Whiteparish Common SSSI.</p> <p>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.</p> <p>Habitat Types represented (Biodiversity Action Plan categories)</p> <ul style="list-style-type: none"> ■ Broadleaved, yew and mixed woodland ■ Acid grassland ■ Neutral grassland ■ Fen, Marsh and Swamp ■ Dwarf shrub heath ■ Standing open water and canals <p>Geological features (Geological Site Types)</p> <ul style="list-style-type: none"> ■ INLAND OUTCROPS AND STREAM SECTIONS (EO) ■ DISUSED QUARRIES, PITS AND CUTTINGS (ED) ■ UNIQUE MINERAL, FOSSIL OR OTHER GEOLOGICAL SITE (IM) ■ ACTIVE PROCESS GEOMORPHOLOGICAL SITES (IA) <p>(*) or restored to favourable condition if features are judged to be unfavourable.</p> <p>Standards for favourable condition are defined with particular reference to the specific designated features, and are based on a selected set of attributes for features which most economically define favourable condition.</p> | | | | | | | | | | | |
|---------------------------------------|--|--------|--------|--------|------------------|--|----------------|--------|--------|--------|--------|------------------|
| <p>Condition Assessment</p> | <p>No condition assessment is currently available for the New Forest SAC, therefore, the condition status of the component SSSIs are provided below.</p> <table border="1" data-bbox="607 1385 2060 1420"> <thead> <tr> <th data-bbox="607 1385 846 1420">% Area meeting</th> <th data-bbox="846 1385 1086 1420">% Area</th> <th data-bbox="1086 1385 1326 1420">% Area</th> <th data-bbox="1326 1385 1565 1420">% Area</th> <th data-bbox="1565 1385 1805 1420">% Area</th> <th data-bbox="1805 1385 2060 1420">% Area destroyed</th> </tr> </thead> </table> | | | | | | % Area meeting | % Area | % Area | % Area | % Area | % Area destroyed |
| % Area meeting | % Area | % Area | % Area | % Area | % Area destroyed | | | | | | | |

| New Forest SAC | | | | | | |
|---|------------|-------------------------|------------------------|------------------------|------------------|--|
| PSA ¹⁰ target | favourable | unfavourable recovering | unfavourable no change | unfavourable declining | / part destroyed | |
| Roydon Woods SSSI condition summary ¹¹ (compiled 01 November 2010). | | | | | | |
| 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| Whiteparish Common SSSI condition summary ¹² (compiled 01 November 2010). | | | | | | |
| 93.11% | 1.27% | 91.84% | 6.90% | 0.00% | 0.00% | |
| Loosehanger Copse and Meadows SSSI condition summary ¹³ (compiled 01 November 2010). | | | | | | |
| 100.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | |
| Langley Wood and Homan's Copse SSSI condition summary ¹⁴ (compiled 01 November 2010). | | | | | | |
| 98.87% | 0.00% | 98.87% | 1.13% | 0.00% | 0.00% | |
| The New Forest SSSI condition summary ¹⁵ (compiled 01 November 2010). | | | | | | |
| 98.69% | 33.18% | 65.51% | 0.34% | 0.96% | 0.01% | |
| Landford Bog SSSI condition summary ¹⁶ (compiled 01 November 2010). | | | | | | |

¹⁰ PSA target - The Government's Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010.

¹¹ Natural England SSSI condition summary. Available [online]:
<http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?report=sdr18&category=S&reference=1003197>

¹² Natural England SSSI condition summary. Available [online]:
<http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?report=sdr18&category=S&reference=1003134>

¹³ Natural England SSSI condition summary. Available [online]:
<http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?report=sdr18&category=S&reference=1005817>

¹⁴ Natural England SSSI condition summary. Available [online]:
<http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?report=sdr18&category=S&reference=1003920>

¹⁵ Natural England SSSI condition summary. Available [online]:
<http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?report=sdr18&category=S&reference=1003036>

¹⁶ Natural England SSSI condition summary. Available [online]:
<http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?report=sdr18&category=S&reference=1003189>

| New Forest SAC | | | | | | |
|------------------------|--|--------|--------|-------|-------|-------|
| | 100.00% | 27.76% | 72.24% | 0.00% | 0.00% | 0.00% |
| Vulnerabilities | <p>Drainage - Potential threat to wetland habitats from draining for improved grazing and forestry.</p> <p>Site Level Management - Afforestation of heathland habitats with conifers and other non-native species and essential grazing by commoners' animals is vulnerable to current economic trends. Inappropriate Management has led to a decline in ancient semi-natural woodland by 40% since 1945, and many of the areas which remain are no longer of nature conservation importance due to management. Land managers are addressing these issues through the emerging SAC Management Plan, through the proposed National Park, and through supplementary funding for restoration, e.g. LIFE funding. Actions are being taken to carry out restoration measures over the next 20-50 years.</p> <p>Disturbance - Increase in recreational or other activities are likely to damage features of interest.</p> | | | | | |

| North Meadow and Clattinger Farm SAC | | | | | | |
|--------------------------------------|--|--------------------------|---------------------------------------|--------------------------------------|--------------------------------------|--|
| Location Grid Ref | SU014934 | | | | | |
| EU Site Code | UK0016372 | | | | | |
| Size (ha) | 104.88 | | | | | |
| Qualifying Features | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 6510 Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) | | | | | |
| Conservation Objectives | <p>The Conservation Objectives below are for North Meadow SSSI, which is wholly contained in North Meadow and Clattinger Farm SAC.</p> <p>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).</p> <p>Habitat Types represented (Biodiversity Action Plan categories)</p> <ul style="list-style-type: none"> Lowland neutral grassland <p>Geological features (Geological Site Types)</p> <p>(*) or restored to favourable condition if features are judged to be unfavourable.</p> <p>Standards for favourable condition are defined with particular reference to the specific designated features, and are based on a selected set of attributes for features which most economically define favourable condition.</p> | | | | | |
| Condition Assessment | No condition assessment is currently available for the North Meadow and Clattinger Farm SAC, therefore, the condition status of the component SSSIs are provided below. | | | | | |
| | % Area meeting PSA¹⁷ target | % Area favourable | % Area unfavourable recovering | % Area unfavourable no change | % Area unfavourable declining | % Area destroyed / part destroyed |
| | North Meadow, Crickdale SSSI condition summary ¹⁸ (compiled 01 November 2010). | | | | | |

¹⁷ PSA target - The Government's Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010.

| North Meadow and Clattinger Farm SAC | | | | | | |
|--------------------------------------|---|---------|-------|-------|-------|-------|
| | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | Clattinger Farm SSSI condition summary ¹⁹ (compiled 01 November 2010). | | | | | |
| | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Vulnerabilities | <p>Grazing Patterns - The habitat is dependent on traditional agricultural practices of hay-cutting with aftermath cattle grazing or seasonal cattle grazing. These management requirements are addressed in the NNR management plan and in a site management statement concerning the private land which stipulates an appropriate regime.</p> <p>Reduced water levels - A damp environment must be maintained. Adjacent extraction and renovation of gravel workings are a potential threat to water levels and are subject to monitoring and mitigation measures.</p> <p>Recreational disturbance - increased footfall is changing the nature of the habitat.</p> | | | | | |

¹⁸ Natural England SSSI condition summary. Available [online]:
<http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?report=sdr18&category=S&reference=1002417>

¹⁹ Natural England SSSI condition summary. Available [online]:
<http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?report=sdr18&category=S&reference=1002547>