

**HERTFORDSHIRE MINERALS
LOCAL PLAN REVIEW**

APPROPRIATE ASSESSMENT

**DRAFT SCREENING REPORT
(Consultation Version)**

**Prepared for
Hertfordshire County Council**

**by
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I. INTRODUCTION

- 1.1. Hertfordshire County Council (HCC) is reviewing the Minerals Local Plan 1991-2006 (MLP), adopted in July 1998. The First Deposit Draft of the (Draft) Minerals Local Plan 2002-2016 (MLP) was published in September 2002, the Second Deposit Draft in September 2003. The review is being progressed, as far as practicable, in line with the Government's guidance on Sustainability Appraisal (SA). The (Draft) MLP is also being examined to determine whether or not any of the policies it contains are likely to have a significant effects on Nature 2000 sites, and thus decide if an Appropriate Assessment should be conducted prior to adoption of the (Draft) MLP.
- 1.2. Land Use Consultants (LUC) was appointed by Hertfordshire County Council in May 2006 to prepare an Appropriate Assessment Screening Report on the (Draft) MLP. The purpose of this Screening Report is to assist Hertfordshire County Council in coming to a decision regarding the need for a full Appropriate Assessment of the (Draft) MLP, in consultation with English Nature. This Report sets out initial work examining the potential effects of the (Draft) MLP on Nature 2000 sites. Should a full Appropriate Assessment be required, further investigations into the likely effects of the (Draft) MLP will be undertaken.

WHAT ARE NATURE 2000 SITES?

- 1.3. Natura 2000 is a Europe-wide network of sites of international importance for nature conservation established under the European Council Directive 'on the conservation of natural habitats and of wild fauna and flora' (92/43/EEC; 'Habitats Directive'). This has been transposed into UK law as the Conservation (Natural Habitats &c.) Regulations (1994; 'Habitats Regulations').
- 1.4. The network comprises Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). SPAs are classified under the European Council Directive 'on the conservation of wild birds' (79/409/EEC; 'Birds Directive') for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex I of the Birds Directive, and migratory species). SACs are designated under the Habitats Directive and target particular habitats (Annex I) and/or species (Annex II) identified as being of European importance.
- 1.5. In line with Government policy¹ this assessment also relates to Ramsar sites although these are not strictly part of Natura 2000. These sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).

WHAT IS APPROPRIATE ASSESSMENT?

- 1.6. Appropriate Assessment (AA) is an assessment of the potential effects of a proposed plan or project, which is not necessary for the management of the site and which is

¹ English Nature (1997) *Habitats Regulations Guidance Note 1: The Appropriate Assessment (Regulation 48)*. The Conservation (Natural Habitats &C) Regulations, 1994. English Nature

likely to have a significant effect, on one or more Nature 2000 sites. The ‘assessment’ proper is a statement which says whether a plan or project is likely to affect the integrity of a European site. However, the process of determining whether or not the plan will affect the site(s) is also commonly referred to as ‘Appropriate Assessment’. The assessment is termed ‘appropriate’ because it should be ‘appropriate’ to its purpose under the Habitats Regulations, namely to assess the implications of the plan in respect of the sites’ ‘conservation objectives’.

- 1.7. **Figure 1** shows the 4 stages to the Appropriate Assessment process required by the European Commission². Article 6(3) of the Habitats Directive relates to Stages 1 to 3 and Article 6(4) to Stage 4. This Screening Report addresses Stage 1 only of the Appropriate Assessment process.

WHAT IS A SIGNIFICANT EFFECT ON A NATURA 2000 SITE?

- 1.8. A judgement of the significance of effects on a Natura 2000 site should be undertaken in relation to the designated interest features and conservation objectives of the Natura 2000 site (see Sections 3 and 4) using sound judgement with a scientific basis where available. Any adverse impact on the conservation objectives of a Natura 2000 site should be treated as a significant impact³. If insufficient information is available to make a clear judgement, it should be assumed that a significant effect is possible in line with the precautionary principle.

STRUCTURE OF THE AA SCREENING REPORT

- 1.9. This Chapter introduces the Appropriate Assessment screening for the (Draft) MLP. The remainder of this report is structured into the following sections:

Chapter 2 – Hertfordshire Minerals Local Plan, describes the (Draft) MLP.

Chapter 3 – Appropriate Assessment Screening Methodology, sets out the approach used and the specific tasks undertaken.

Chapter 4 - Natura 2000 sites potentially affected by the Minerals Local Plan, identifies and describes the Natura 2000 sites that could potentially be affected by the (Draft) MLP including describing the conservation objectives for each site and the potential sensitivities of the sites to adverse effects.

Chapter 5 – Other relevant plans and projects, identifies and describes other plans which could have ‘in-combination’ effects when implemented in conjunction with the (Draft) MLP, and briefly sets out the potential effects of these on the Nature 2000 sites.

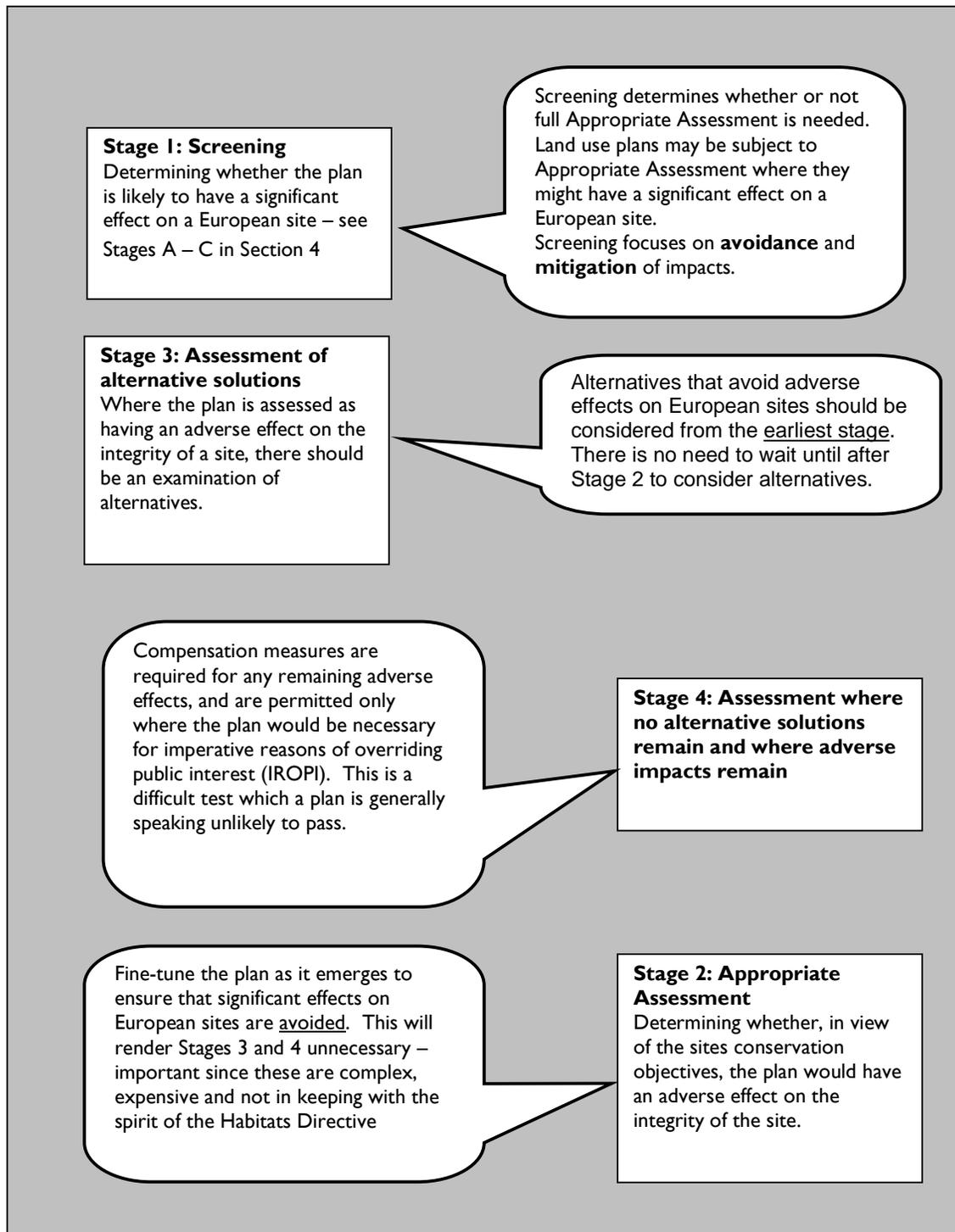
² *Assessment of plans and projects significantly affecting Nature 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*. Prepared for the European Commission Environment DG by the Impacts Assessment Unit, Oxford Brookes University, November 2001.

³ *Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij*, Case C127/02, European Court of Justice (Available at: <http://curia.europa.eu/jurisp/cgi-in/form.pl?lang=en&Submit=Submit&alldocs=alldocs&docj=docj&docop=docop&docor=docor&docjo=docjo&numaff=C-127%2F02&datefs=&datefe=&nomusuel=&domaine=&mots=&resmax=100>)

Chapter 6 - Screening assessment of the Minerals Local Plan, sets out the likely significance of the effects of the (Draft) MLP on Nature 2000 sites, alone and in-combination, and recommends amendments to the (Draft) MLP to avoid any significant adverse effects on the integrity of these sites.

Chapter 7 – Conclusions and next steps, summarises the findings of the Appropriate Assessment screening and sets out the next steps to be undertaken prior to adoption of the (Draft) MLP.

Figure 1: Stages in the Appropriate Assessment process



(Adapted from: *Appropriate Assessment of Plans: Discussion Paper*. Prepared by Scott Wilson, Levett-Therivel, Treweek Environmental Consultants and Land Use Consultants, June 2006.)

2. HERTFORDSHIRE MINERALS LOCAL PLAN

- 2.1. Hertfordshire's (Draft) MLP consists of four Chapters and a series of six appendices and related inset maps.
- 2.2. Chapter 1: Introduction, sets the context for the plan including descriptions of the planning system, minerals planning generally, minerals worked in Hertfordshire, the need for aggregates, national and regional minerals policy, and Hertfordshire's contribution to supply of aggregates. Chapter 1 also sets out need for a review of the existing Hertfordshire Minerals Local Plan and the timetable for this and identifies the 'stakeholders' in minerals planning for Hertfordshire.
- 2.3. Chapter 2 Minerals Planning in Hertfordshire, sets out the national aims and objectives for minerals planning and then describes the Hertfordshire Structure Plan Vision, Aims and Objectives. The Strategic Environmental Appraisal conducted during the MLP review is also explained in this Chapter. Chapter 2 also sets out the Hertfordshire MLP Review Aims and Objectives which have been examined as a part of this Appropriate Assessment screening.
- 2.4. Chapter 3: Strategic Policies, sets out the ten strategic minerals policies for Hertfordshire, along with supporting information. These policies include:
 - Minerals Policy 1 – Aggregates Supply
 - Minerals Policy 2 – Need for mineral working
 - Minerals Policy 3 – Sites for sand and gravel extraction and the working of preferred areas
 - Minerals Policy 4 – Applications outside preferred areas
 - Minerals Policy 5 – Minerals Sterilisation
 - Minerals Policy 6 – Other non-energy minerals
 - Minerals Policy 7 – Recycled and secondary aggregates
 - Minerals Policy 8 – Recycling facilities on mineral sites
 - Minerals Policy 9 – Contribution to bio-diversity
 - Minerals Policy 10 – Railheads and wharves
- 2.5. Chapter 4: Operational Policies, sets out the ten operational minerals policies for Hertfordshire, along with supporting information. These policies include:
 - Minerals Policy 11 - Cumulative impact
 - Minerals Policy 12 – Landscape
 - Minerals Policy 13 – Reclamation scheme

Minerals Policy 14 – Afteruse

Minerals Policy 15 - Landfill

Minerals Policy 16 - Transport

Minerals Policy 17 – General criteria for the control of mineral development

Minerals Policy 18 – Operational criteria for the control of mineral development

Minerals Policy 19 – Applications for new conditions

Minerals Policy 20 - Enforcement of planning control

2.6. The (Draft) MLP appendices include:

Appendix 1: Function, Period and Scope of Plan of the Minerals Local Plan Review

Appendix 2: Annual sales of sand and gravel in Hertfordshire since 1990

Appendix 3: Minerals Planning Guidance Notes (MPGs) and Planning Policy Guidance Notes (PPGs) of particular relevant to planning for minerals in Hertfordshire

Appendix 4: Summary of Hertfordshire’s Characteristics

Appendix 5: Specific sites for sand and gravel extraction

Appendix 6: Glossary

Appendix 7: Bibliography

Appendix 8: Inset maps including Preferred Areas

2.7. The (Draft) MLP relates to the whole of Hertfordshire and its provisions cover the period 2002-2016. Although it deals specifically with sand and gravel, which occur mainly in the south of the County, many of the (Draft) MLP’s extraction and restoration policies are also relevant to the other two minerals worked in the County (i.e. chalk and brick clay), even though these are generally on a smaller scale. The policies concerning alternative materials, whether through recycling or importation via rail freight depots, are also applicable throughout the County.

2.8. The (Draft) MLP identifies ‘specific sites’ and ‘preferred areas’ to guide the location of new mineral working in the County. These are shown in **Figure 3.1**.

2.9. The likely key implications of the (Draft) MLP include:

- Minimising the number and size of extraction sites and associated transport.
- Increasing requirements for recycling and secondary aggregate processing facilities, while minimising requirements for these on greenfield sites.
- Increasing extraction at environmentally acceptable locations.

- Providing alternative mineral extraction sites, extensions to existing sites and use of borrow pits.
- Increasing chalk and brick clay abstraction.
- Minimising the potential mineral industry footprint through re-use of mineral sites for recycling/secondary processing facilities.
- Minimising development likely to sterilise minerals.
- Increasing vehicular transport and associated pollution both within and outside Hertfordshire, including on identified routes (including least environmentally damaging), associated with recycling and alternative sites, and local traffic generation at transport terminals.
- Increasing non-road transport infrastructure and use to limit increases in road transport and related pollution.
- Potentially requiring new rail and/or water-based transport facilities such as terminals.
- Preserving and enhancing the environment and biodiversity, including during working and restoration.
- Protecting critical environmental assets, with the degree of protection relating to the international, national or local status of the assets, including mitigation where appropriate and protection of water quantity and quality.
- Consideration of potential operational and restoration impacts with protection and enhancement of environmental quality where appropriate (e.g. minimising noise, air and water pollution; using appropriate buffers associated with sensitive land uses).
- Avoiding unnecessary cumulative impacts.
- Protecting and enhancing landscape character and distinctiveness.
- Reclaiming land following operation to an appropriate land use without detrimental environmental impact (e.g. agriculture, forestry, amenity, nature conservation and recreation).
- Restoring extraction sites for landfill, where appropriate.
- Enforcing planning control conditions and remediating failures.

3. APPROPRIATE ASSESSMENT SCREENING METHODOLOGY

- 3.1. The Appropriate Assessment of Hertfordshire's (Draft) MLP has been undertaken in line with the European Commission's guidance on the 'Assessment of plans and projects significantly affecting Nature 2000 sites', and seeks to meet the requirements of the Habitat's Directive. The tasks undertaken in preparing this Appropriate Assessment Screening Report are described in detail below.

Task 1: Identification of the Natura 2000 sites which may be affected by the Minerals Local Plan and the factors contributing to and defining the integrity of these sites

- 3.2. An initial investigation was undertaken to identify Natura 2000 sites within or adjacent to Hertfordshire with potential to be affected by the (Draft) MLP. This involved use of GIS data (nature on the map, English Nature) as well as consultation with the English Nature's local team (Essex, Herts and London⁴) and Hertfordshire County Council. In line with the precautionary approach sites at relatively great distances from the Hertfordshire boundary were included in the study. The Natura 2000 sites identified as potentially affected by the (Draft) MLP are shown on **Figure 3.1** and comprise:

- Chilterns Beechwoods SAC
- Wormley Hoddesdonpark Woods SAC
- Lea Valley SPA and Ramsar site
- Epping Forest SAC
- Burnham Beeches SAC
- Eversden and Wimpole Woods SAC

- 3.3. The attributes of these sites which contribute to and define their integrity were identified and described (including the conservation objectives and citations for the sites: see **Section 4** for further details). Information collated was appropriate to inform a screening decision.

Task 2: Description of the Minerals Local Plan

- 3.4. A description of the (Draft) MLP was prepared, setting out the size, scale, location, area and landtake expected, physical changes that will flow from the (Draft) MLP (e.g. excavation, construction, drainage, restoration, aftercare), resource requirements, emissions and waste, transport requirements, and plan implementation periods. These are summarised in **Section 2** and set out in more detail in **Appendix 1**.

⁴ Ms. S. Hamley, Peterborough Regional Office: 28 April 2006, 13:30
Mr. G. Wyatt, Colchester Local Office: 03 May 2006, 10:00

Task 3: Identification of other plans and projects which may have ‘in-combination’ effects

- 3.5. Other plans and projects which could lead to potentially significant ‘in-combination’ effects when implemented together with the (Draft) MLP were identified. These included local, county, sub-regional and regional level plans covering Hertfordshire as well as those covering adjoining administrative areas. For example, consideration was given to the potential ‘in-combination’ effects of existing saved plans and emerging local development documents and regional spatial strategies. **Appendix 2** sets out in detail the potential effects of these other plans on the Natura 2000 sites.

Task 4: Completion of the ‘Assessment of the Significance of the Impacts’ matrix for the MLP for the purposes of screening

- 3.6. An ‘Assessment of the Significance of the Impact’ matrix was completed for the (Draft) MLP, with particular consideration given to the possible pathways for effects to be transmitted from activities associated with the (Draft) MLP to features contributing to the integrity of the Natura 2000 sites (e.g. groundwater, air, catchments etc). A risk-based approach involving application of the precautionary principle was adopted in the assessment of likely effects, such that an assessment of ‘no significant effect’ was only made where it was considered unlikely, based on current knowledge and information available, that the (Draft) MLP could have a significant effect on the integrity of the Natura 2000 site(s). The examination of potential effects involved an examination of potential ‘in-combination’ effects of the (Draft) MLP and other plans and programmes. The assessment focused on examining the effects of the aims and objectives, strategic policies and operational policies set out in the (Draft) MLP.

Task 5: Preparation of the Appropriate Assessment Screening Report

- 3.7. The findings of Tasks 1 to 4 have been set out in this Appropriate Assessment Screening Report. HCC is seeking the views of English Nature on the findings of this report. These findings and the consultation responses will then be taken into account by HCC in deciding whether or not to undertake a full Appropriate Assessment of the (Draft) MLP.

4. NATURA 2000 SITES POTENTIALLY AFFECTED BY THE MINERALS LOCAL PLAN

NATURA 2000 DESCRIPTIVE INFORMATION

- 4.1. To enable an initial assessment of the potential effects of the (Draft) MLP on the Natura 2000 sites, descriptive information was collated for each of the sites, including:
- Natura 2000 standard data forms
 - Component SSSI citations detailing their ecological interest
 - Conservation Objectives relating to the Natura 2000/component SSSI designated interest features
 - Definitions of favourable condition for the designated interest features
 - Site management plans and other miscellaneous information relating to management, condition assessments and English Nature's views on management
- 4.2. An analysis of the information sources enabled the identification of the Natura 2000 interest features as summarised below. More detailed information about each site is presented in **Appendix I**, including the Conservation Objectives⁵ for the sites and the associated definitions of favourable condition (see section *Detailed Natura 2000 descriptive information*). This information made it possible to identify those features of each site which determine site integrity, the specific sensitivities of the sites, and an analysis of how potential changes caused by the (Draft) MLP may impact upon site integrity.

SUMMARY OF THE NATURA 2000 INTEREST FEATURES

- 4.3. Five of the six Natura 2000 sites were designated on the basis of the semi-natural broad-leaved woodland habitats which formed their dominant habitat. Either the woodland habitats were the primary reason for their designation and/or a designated species was dependent on this habitat type.
- 4.4. Chilterns Beechwoods SAC, Epping Forest SAC and Burnham Beeches SAC were primarily designated for their ancient beech woods including overmature pollards of

⁵ The Conservation Objectives for the Natura 2000 sites relate to the maintenance of the designated interest feature(s) in a favourable condition⁵. The Conservation Objectives and definitions of favourable condition are provided for each component Site of Special Scientific Interest (SSSI) which form part of the Natura 2000 site. In some cases the sources of information provided definitions for Natura 2000 interest features only, whilst more recent definitions related to both the Natura 2000 and SSSI interest features. The information included in Appendix 2 is that which is of relevance to the Natura 2000 interest feature. In some cases the definitions of favourable condition were in draft form and are subject to consultation. No specific Conservation Objectives were available for Ramsar site but these boundaries and interest features related, at least in part, to the Natura 2000 site.

- outstanding interest. In particular these support diverse and notable invertebrate and bryophyte communities associated with veteran tree features such as dead wood, rot holes and sap runs. Chilterns Beechwoods SAC and Epping Forest SAC were also designated due to a significant presence of stag beetle (an Annex II species), whilst in addition Chiltern Beechwoods SAC supports small areas of box dominated scrub, and Epping Forest SAC, areas of wet and dry heaths, both Annex I habitats.
- 4.5. Wormley-Hoddesdonpark Woods SAC similarly comprises ancient semi-natural woodland, but of an oak-hornbeam assemblage (one of only two outstanding sites in the UK). This includes coppice and wood pastures with frequent mature oak and hornbeam pollards. Eversden and Wimpole Woods SAC also support areas of ancient woodland but in this case the designation is due to the presence of a barbastelle bat maternity roost within Wimpole Woods (high forest). The bats use the Eversden Wood (ancient coppice woodland with standards) for foraging.
- 4.6. The Lea Valley SPA forms the only non-woodland Natura 2000 site within the study area, comprising a series of man-made and semi-natural wetlands including reservoirs, gravel pits and sewage treatment lagoons. This area was designated as an SPA (and Ramsar site) due to populations of the overwintering wildfowl; bittern, gadwall and shoveler. These are reliant on mosaic of wetland habitats, including marginal communities (particularly reedbeds for bittern) and open water, with various water depths required for foraging.

Summary of the Natura 2000 site sensitivities

- 4.7. From the above analysis a number of common potential sensitivities can be identified which vary in magnitude from site to site, depending on:
- The type and severity of the threat;
 - The type, sensitivity and condition of the designated interest feature(s);
 - The presence and strength of pathways or linkages between the activity/operation and receptor.

Habitat management

- 4.8. The Conservation Objectives reflect the importance of appropriate management in retaining or enhancing the designated interest features on a site. This may increase resilience to other potential sensitivities, due in part to the semi-natural character of habitats in Britain, and the relatively small and isolated nature of the sites/habitats.
- 4.9. Conflicts with other land uses and management approaches often exist or have existed in the past. For example, many of the woodland sites and their interest features originally developed through relatively low intensity traditional management such as selective felling, coppicing and wood pasture management with pollarding. Over the past century such practices declined for a number of reasons, including economic. One outcome has been the outgrowth of coppice and pollard woodlands, with the formation of a denser more uniform canopy at the expense of the ground flora and tree regeneration, leading to a more uniform age structure within the woody component. Forestry practices may have also contributed to declining

interest features, including the removal of dead and dying trees, and felling of mature trees for timber. Management practices which are primarily to meet nature conservation objectives include the reinstatement of traditional management regimes as well as areas of non-intervention and the retention of dead wood components.

- 4.10. Similar issues are associated with habitats such as heathland and wetland with management required to keep in check natural colonisation, preventing succession to scrub or woodland. Management operations outside the Natura 2000 sites or associated with non-designated interest features may also impact upon the designated features, for example affecting foraging habitat, buffer integrity, or local hydrological regimes.

Land take/habitat loss

- 4.11. A common Conservation Objective is to maintain the extent of the designated habitats or habitats upon which designated species depend. Therefore any land take within a Natura 2000 site would be likely to have an adverse impact upon integrity.
- 4.12. This may also relate to non-designated habitat features. For example, at Eversden and Wimpole Woods SAC, any habitat fragmentation or habitat loss associated with Eversden Wood (SSSI designated feature), or significant areas of woodland and hedgerow in the vicinity, may have an adverse impact on barbastelle bats through the loss of foraging and commuting habitat. Similarly removal of habitat adjacent to or within the vicinity of a designated habitat may adversely affect that habitat, for example, through a reduction in buffering potential or due to changes in local hydrology.

Disturbance

- 4.13. Disturbance impacts may occur either from on-site or off-site activities, and may be either physical or non-physical in nature. For example on-site recreation use may cause the physical degradation of habitats with soil erosion on access routes and areas of high recreational use, particularly through vehicular and off-road access. Indeed low levels of recreation may be beneficial in maintaining a bare ground component in certain habitats.
- 4.14. The visual presence of visitors and noise may also cause disturbance, for example deterring designated species (e.g. bittern) from using certain areas, deterring prey species or reducing reproductive success. Such problems can be overcome through visitor management and the zoning of site usage/objectives, as seen at the Lea Valley Regional Park.
- 4.15. Off-site land uses may also lead to disturbance, for example through possible noise or light pollution with associated impacts on designated species.

Contamination/pollution

- 4.16. Contamination of habitats may occur from a number of sources on or off site, and may be toxic or non-toxic. Sources of ground water contamination at some distance from a site may potentially affect its integrity, depending on the presence and strength of pathways between the source and Natura 2000 site. Wetland habitats

may be particularly vulnerable to pollution with surface or ground water potentially transporting contaminants over great distances. This can have wide reaching impacts, for example through reductions in prey species (for example aquatic invertebrates, amphibians and fish which may be particularly vulnerable), bioaccumulation of toxins in the food chain or eutrophication and increased dominance of algal communities at the expense of higher plant communities (with resultant knock on effects).

- 4.17. Air pollution may also comprise a significant negative impact. In the past half a century smoke and sulphur dioxide pollution has declined significantly since the Clean Air Act (1956) was introduced, but pollutants from motor vehicles have come to prominence. The impacts of nitrogen (N) and nitrogen oxides (NO_x) deposition on vegetation growth are of particular concern, with 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. Due to species specific sensitivities it may also cause changes in species assemblages as seen, for example, in lichens. These changes may result in the reduced condition and integrity of Natura 2000 sites. Air pollution has been at least in part attributed to the failing condition of parts of Epping Forest SAC and Burnham Beeches SAC.
- 4.18. The World Health Organisation has developed critical levels for certain air pollutants above which adverse effects may occur on receptors, such as plants or ecosystems⁶. For example, critical levels of NO_x for these receptors have been established at an annual mean of 30µg/m³, and of airborne N at 15-20kg/ha/yr. Information presented on the Air Pollution Information System website⁷ enables an initial simple site-based assessment of the sensitivity of a site based on habitat type, existing levels of pollution and critical levels (data from 1999-2000). Evidence suggests that beyond 200m from a roadside, the increase in local pollution levels from vehicles is not significant⁸.
- 4.19. Other sources of contamination may include dust from adjacent works and increased sediment loads in water courses.

Water quantity

- 4.20. Decreased (for example as a result of abstraction) or increased (for example due to an impeded water flow or following restoration) ground or surface water levels may impact upon designated habitats depending on the hydraulic continuity between an activity or operation and the Natura 2000 site. This could impact upon the integrity of the site by causing alterations in the species composition or reducing the extent of target habitats.
- 4.21. Decreasing water levels may be a particular problem during drought years, given the increased pressure on water resources from domestic users, especially in the south east of England. Falling water levels in water courses and water bodies would have direct impacts, in particular on the wetland habitats of the Lea Valley and therefore the designated wildfowl populations of the SPA/Ramsar site. Increased seasonal

⁶ World Health Organisation (2000) *WHO Regional Publications, European Series No. 91: Air Quality Guidelines for Europe 2nd Edition*. WHO, Copenhagen

⁷ <http://www.apis.ac.uk/index.html>

⁸ Highways Agency (2003) *Design Manual for Roads and Bridges, Volume 11*. HA.

variation in water levels, for example with drought and periods of increased abstraction, may affect marginal habitats necessary for target species, such as the extent of reedbed available to bittern. Also, reduced volumes of water would increase the concentration of any contaminants.

- 4.22. 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 (such as re-pollarding or air pollution, and particularly for mature/over mature trees).

Introduced/invasive species

- 4.23. Introduced or invasive species were identified as a potential problem for all of the sites, including tree and plant species such as sycamore, turkey oak, rhododendron and Japanese knotweed with associated problems including out-competing native species and reductions in biodiversity. Problem fauna include grey squirrel which may be linked to reductions in regeneration. Any activity which led to the introduction, or increased abundance, of potential invasive species could comprise an adverse impact on the integrity of the Natura 2000 site.

5. OTHER RELEVANT PLANS OR PROJECTS

- 5.1. Article 6(3) of the Habitats Directive requires an Appropriate Assessment of ‘Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect there on, either individually or in combination with other plan or projects’. The first stage in identifying ‘in-combination’ effects involved identifying which other plans and projects may be affecting the Natura 2000 sites which were the focus of this assessment.
- 5.2. LUC has identified national, regional and local level plans which are likely to be affecting the Natura 2000 sites which are subject to this investigation, including current and likely future plans which apply to Hertfordshire County administrative area and adjoining areas where appropriate. There are a large number of potentially relevant plans, and **Appendix 2** lists these and their potential effects on the Natura 2000 sites. No projects were identified as being relevant to this screening assessment.
- 5.3. Plans identified as having potential effects on the Natura 2000 sites generally included spatial plans (Development Plan Documents and Regional Spatial Strategies), transport plans and water resources plans. In particular, proposals for large scale housing, employment and infrastructure development, set out in the (Draft) East of England Plan and emerging Local Development Frameworks (LDFs) have the potential for a range of impacts on Natura 2000 sites in and around Hertfordshire (depending on the location of development) including:
- Recreation impacts associated with housing development within close proximity (i.e. 5km) of Nature 2000 sites including Lee Valley SPA (Harlow proposals), Wormley-Hoddesdonpark Woods SAC (Hatfield/Welwyn or Harlow proposals), Chilterns Beechwoods SAC (Hemel Hempsted proposals), and Eversden and Wimpole Woods SAC (Cambridgeshire proposals).
 - Lowering of surface and groundwater levels, locally or further afield, and increasing the concentration of water pollution due to water abstraction for supply of growing communities.
 - Increased water pollution associated with urbanisation.
 - Landtake, disturbance and reduced water quality arising from increased waste water generation and demand for treatment and disposal.
 - Landtake, disturbance, and water pollution (e.g. leachate) arising from demand for treatment and disposal of increased volumes of waste.
 - Reduced air quality, land take, water contamination, disturbance and severage of habitats due to traffic generation and demand for additional transport infrastructure.
- 5.4. Future Local Transport Plans (LTPs) and water company Water Resources Plans (WRPs) are likely to include proposals which facilitate the implementation of

proposals in the (Draft) East of England Plan, particularly with regard to transport infrastructure improvements and increased water supply. As such, the potential in-combination effects of these are reflected to a large degree in the list above. These impacts may be mitigated by policies in the (Draft) East of England Plan and future LDFs, LTPs and WRPs which seek to protect and enhance nature conservation values. However, it is recognised that some residual effects on Natura 2000 sites are likely.

- 5.5. It should also be noted that the Upper Lea Valley Catchment Abstraction Management Strategy⁹ (CAMS) reflects a general presumption against issuing new licences for unconstrained consumptive abstraction from inland waters in the summer months for environmental, recreation and navigation reasons and to prevent derogation to the public water supply abstractions. This is significant given that the CAMS indicates that the two water resource management units within Hertfordshire which feed the Lea Valley SPA are already either 'over-abstracted' or 'over-licensed'. Information on the impacts of this 'over-abstraction' on the SPA was not available at the time of preparation of this Appropriate Assessment Screening Report.

⁹ *The Upper Lee Catchment Abstraction Management Strategy – Consultation Document*. Environmental Agency, January 2006.

6. SCREENING ASSESSMENT OF THE MINERALS LOCAL PLAN

INTRODUCTION

- 6.1. An assessment has been undertaken to identify potential significant impacts of the (Draft) MLP upon the integrity of Natura 2000 network, and in particular the six selected sites which were the focus of the assessment. This analysis has been set out in the form of a matrix (see **Appendix 3**) which includes a summary of the effects of the (Draft) MLP and the likely changes this may cause to the Natura 2000 sites, an assessment of the significance of these changes in relation to the integrity of the sites (particularly in relation to the designated interest features and Conservation Objectives), and subsequent recommendations for alterations to the plan which may make it possible to avoid any potential adverse impacts. The findings of the matrix are summarised below and in **Table 6.1**.

ASSESSMENT SUMMARY

- 6.2. The existing aims and policies of the (Draft) MLP are considered appropriate to avoid the majority of potential impacts on Natura 2000 sites (e.g. land take) from the minerals industry. For example, Aim 3 should '*ensure that the adverse impacts on the environment and people caused by mineral operations and the transport of minerals are kept, as far as possible, to an acceptable minimum*'. Likewise, Policies 17 and 18 also include criteria designed to protect critical environmental assets and to control mineral development.
- 6.3. However, in applying the precautionary approach, a small number of policies were identified as having the potential to impact on Natura 2000 sites. The precautionary principle was applied particularly where specific evidence was unavailable (e.g. relating to the location of a potential activity or impact); the likely significance of an impact on integrity was unknown; or the existence/ strength of pathways which would link the activity and the Natura 2000 site was unknown. Impacts were also considered in the context of potential in-combination effects, particularly associated with proposals for housing and employment growth and associated infrastructure, as well as environmental trends.
- 6.4. Two key potential impacts identified included:
- *Alterations to the hydrology of the Natura 2000 sites*, including water quantity and quality (particularly associated water abstraction/dewatering of mineral sites potentially affecting the wetland habitats of the Lea Valley SPA/Ramsar site as well as the woodland SAC sites).
 - *Decreases in air quality*, particularly associated with traffic generation resulting from mineral extraction, recycling/secondary aggregate facilities and after uses (with specific impacts on woodland habitats and regeneration as identified in the Epping Forest SAC and Wormley Hoddesdonpark Woods SAC, but also potential impacts on wetland habitats associated with declining water quality).

- 6.5. It was also noted that provision 3 under Aim 2 of the (Draft) MLP advocates the importation of sand and gravel, thereby potentially displacing the impacts of extraction activity into areas outside of Hertfordshire. On initial reading it was felt that this provision may result in impacts on Natura 2000 sites elsewhere in the East of England Region. However, following further review, it is apparent that the purpose of promoting importation is to enable more 'environmentally acceptable sources' of minerals to be utilised to supply sand and gravel needs in the County. As such, it is unlikely that any displacement of impacts as a result of importation would result in adverse effects on Natura 2000 sites (such an outcome would generally not be considered more 'environmentally acceptable'). However, some clarification within provision 3 of Aim 2 regarding this point would help avoid confusion.

RECOMMENDATIONS

- 6.6. To avoid any potential adverse effects from the aims or policies in the (Draft) MLP on the Natura 2000 sites, a number of minor amendments are recommended. The main amendments are to the supporting text of Policy 17, which aims to provide additional clarification and to bolster the level of consideration given to Natura 2000 sites under the existing (Draft) MLP, and to the wording of Policy 14, which aims to require greater consideration of Natura 2000 sites in the selection of appropriate after uses. The recommended amendments are as follows:

- Amend Aim 4 (paragraph 6) to include reference to '*international, national and local wildlife sites*' to ensure that Natura 2000 sites are considered.
- Amend Aim 2 (paragraph 3) to read '*Reducing the reliance on locally won sand and gravel, where more environmentally acceptable sources are available (through recycling and where appropriate, facilitating an increase in importation), while still meeting the County's appropriate contribution to the Region's needs.*'
- Amend bullet point (vii) in Policy 14 to say: '*support and enhance national, regional and local biodiversity action plan objectives and sites of nature conservation importance, especially Special Protection Areas, Special Areas of Conservation and Ramsar sites.*'
- Insert a further paragraph after paragraph 4.8.3 (above Policy 17) which says:
'In the case of Natura 2000 sites (that is, Special Areas of Conservation, Special Protection Areas) and Ramsar sites, mineral extraction and related activities (including afteruses) should not have any temporary or permanent adverse effects on the integrity of these assets. For example, in assessing potential effects on these Natura 2000 and Ramsar sites, regard should be had to possible changes to hydrology and air quality (particularly associated with drawdown or water abstraction and transport related emissions) and disturbance which could have an adverse impact on the integrity of these internationally designated sites. In assessing effects on these sites consideration should be given to potential effects on Natura 2000 and Ramsar sites both within and outside of Hertfordshire County.'
- Amend Policy 17 to say '*All proposals for mineral extraction and related development (including after-uses).*'

- Update the description of environmental assets in Appendix 4 to include reference to the three internationally designated sites within Hertfordshire:
 - Chilterns Beechwoods SAC
 - Wormley Hoddesdonpark Woods SAC
 - Lea Valley SPA and Ramsar site
- 6.7. Consideration was also given to the need to amend Policy 18 to incorporate explicit provision relating to the protection of the integrity of sites of nature conservation importance, particularly Natura 2000 sites. However, in LUC's view provisions within Policy 17 should ensure that this issue is adequately addressed.

Table 6.1: Assessment of the impact of Hertfordshire MLP on the integrity of the Natura 2000 sites, including in-combination with other plans and projects.

Natura 2000 site	Designated interest feature(s)	Features supporting site integrity in relation to Conservation Objectives and Favourable Condition	Possible impacts from other plans and projects	Possible impacts from the MLP	Risk of effect on site integrity?	Amendments recommended to ensure any potential adverse effects on Nature 2000 sites are avoided
<p>Lea Valley SPA and Ramsar site</p>	<ul style="list-style-type: none"> Overwintering bittern. Overwintering gadwall and shoveler. 	<ul style="list-style-type: none"> Acceptable levels of disturbance. Extent of habitat. Wetland habitat quality, structure and diversity. Prey availability. 	<ul style="list-style-type: none"> Increased development including residential and employment related development, with associated infrastructure, resource abstraction (e.g. water and minerals), waste generation, water pollution, air pollution, noise nuisance and recreational requirements/ issues. 	<ul style="list-style-type: none"> Increased mineral extraction and recycling/reuse of aggregates. Associated infrastructure requirements/traffic generation. Afteruse and changes in type and intensity of land use. Possible impacts (dependent on location) include increased air pollution (mineral traffic), water abstraction and pollution, and disturbance (direct and indirect). SPA/Ramsar site specifically sensitive to changes in water availability therefore (Draft) MLP may affect wetland habitat quality and abundance. Decrease in water quality, including from atmospheric deposition, may affect habitat quality and prey 	<ul style="list-style-type: none"> In line with precautionary principle potential impacts have been identified associated with water and air quality, although the risk of these effects occurring is low. 	<ul style="list-style-type: none"> Include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in water resources and air quality. Amend Policy 14 to include reference to protection of Natura 2000 sites.

¹⁰ Hanson Aggregates (2006) *Rickney's Quarry Eastern Extension: Environmental Statement*

Natura 2000 site	Designated interest feature(s)	Features supporting site integrity in relation to Conservation Objectives and Favourable Condition	Possible impacts from other plans and projects	Possible impacts from the MLP	Risk of effect on site integrity?	Amendments recommended to ensure any potential adverse effects on Nature 2000 sites are avoided
				<p>abundance. Designated bird species also vulnerable to disturbance.</p> <ul style="list-style-type: none"> Preferred Area 2: Land adjoining Rickneys Quarry, near Hertford, is within approximately 5km of the SPA/Ramsar site and within the River Lea catchment. An Environmental Impact Assessment for the current proposals¹⁰ identified no or negligible impacts on hydrology. Environmental impacts addressed by existing Aims and Policies within MLP. 		
Chilterns Beechwoods SAC	<ul style="list-style-type: none"> Beechwoods (NVC type W12 and W14). Box dominated scrub Stag beetle 	<ul style="list-style-type: none"> Habitat extent. Maintenance of structural diversity and natural processes. Maintenance of characteristic features such as veteran trees, 	<ul style="list-style-type: none"> Increased development including residential and employment related development, with associated infrastructure, resource abstraction (e.g. water and minerals), waste generation, water 	<ul style="list-style-type: none"> Increased mineral extraction and recycling/reuse of aggregates. Associated infrastructure requirements/traffic generation. Afteruse and changes in type and intensity of land use. Possible impacts (dependent on location) include increased air pollution 	<ul style="list-style-type: none"> In line with precautionary principle potential impacts have been identified associated with water and air quality, although the risk of these effects 	<ul style="list-style-type: none"> Include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in air quality and water resources.

Natura 2000 site	Designated interest feature(s)	Features supporting site integrity in relation to Conservation Objectives and Favourable Condition	Possible impacts from other plans and projects	Possible impacts from the MLP	Risk of effect on site integrity?	Amendments recommended to ensure any potential adverse effects on Nature 2000 sites are avoided
		<p>deadwood.</p> <ul style="list-style-type: none"> • Regeneration potential and diverse age structure. 	<p>pollution, air pollution, noise nuisance and recreational requirements/ issues.</p>	<p>(mineral traffic), water abstraction and pollution, and disturbance (direct and indirect).</p> <ul style="list-style-type: none"> • Potential impacts of air pollution on woodland regeneration have been recognised at Epping Forest and Burnham Beeches. Also any impacts of drought on woodland may be exacerbated by increased abstraction. Increased air pollution and drought conditions may impact upon characteristic features such as species assemblages (e.g. lichen) and mature trees (e.g. increased sensitivity to re-pollarding). • Environmental impacts addressed by existing Aims and Policies within MLP. 	<p>occurring is low.</p>	
Wormley Hoddesdon-park Woods SAC	<ul style="list-style-type: none"> • Oak-Hornbeam woodland 	<ul style="list-style-type: none"> • Habitat extent. • Maintenance of structural diversity and natural 	<ul style="list-style-type: none"> • Increased development including residential and employment related development, with 	<ul style="list-style-type: none"> • Increased mineral extraction and recycling/ reuse of aggregates. Associated infrastructure requirements/traffic 	<ul style="list-style-type: none"> • In line with precautionary principle potential impacts have been identified 	<ul style="list-style-type: none"> • Include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to

Natura 2000 site	Designated interest feature(s)	Features supporting site integrity in relation to Conservation Objectives and Favourable Condition	Possible impacts from other plans and projects	Possible impacts from the MLP	Risk of effect on site integrity?	Amendments recommended to ensure any potential adverse effects on Nature 2000 sites are avoided
		<p>processes.</p> <ul style="list-style-type: none"> Maintenance of characteristic features. Regeneration potential and diverse age structure. 	<p>associated infrastructure, resource abstraction (e.g. water and minerals), waste generation, water pollution, air pollution, noise nuisance and recreational requirements/ issues.</p>	<p>generation.</p> <ul style="list-style-type: none"> Afteruse and changes in type and intensity of land use. Possible impacts (dependent on location) include increased air pollution (minerals transport), water abstraction and pollution, and disturbance (direct and indirect). Potential impacts of air pollution on woodland regeneration have been recognised at Epping Forest SAC and Burnham Beeches SAC. Also any impacts of drought on woodland may be exacerbated by increased abstraction. Increased air pollution and water abstraction/ decreased water quality may impact upon characteristic features such as woodland streams and mature trees (e.g. increased sensitivity to re-pollarding). Environmental impacts addressed by existing Aims 	<p>associated with water and air quality, although the risk of these effects occurring is low.</p>	<p>consider impacts arising from changes in water resources and air quality.</p> <ul style="list-style-type: none"> Amend Policy 14 to include reference to protection of Natura 2000 sites.

Natura 2000 site	Designated interest feature(s)	Features supporting site integrity in relation to Conservation Objectives and Favourable Condition	Possible impacts from other plans and projects	Possible impacts from the MLP	Risk of effect on site integrity?	Amendments recommended to ensure any potential adverse effects on Nature 2000 sites are avoided
				and Policies within MLP.		
Epping Forest SAC	<ul style="list-style-type: none"> • Beech woodland • Dry heaths • Wet heaths • Stag beetle 	<ul style="list-style-type: none"> • Habitat extent (including ancient woodland). • Maintenance of natural processes and structural development/diversity (including within heaths). • Woodland regeneration potential and age structure. • Characteristic and notable species, and characteristic habitat features including for stag beetle. 	<ul style="list-style-type: none"> • Increased development including residential and employment related development, with associated infrastructure, resource abstraction (e.g. water and minerals), waste generation, water pollution, air pollution, noise nuisance and recreational requirements/ issues. 	<ul style="list-style-type: none"> • Increased mineral extraction and recycling/reuse of aggregates. Associated infrastructure requirements/traffic generation. • Afteruse and changes in type and intensity of land use. • Possible impacts (dependent on location) include increased air pollution (mineral transport), water abstraction and pollution, and disturbance (direct and indirect). • Air pollution identified as a particular issue at Epping Forest SAC with links to regeneration failure. This has been linked mostly to pollution from London due to the prevailing wind direction, but also major roads such as the M25. Also any impacts of drought on woodland may be exacerbated by increased 	<ul style="list-style-type: none"> • In line with precautionary principle potential impacts have been identified associated with water and air quality, although the risk of these effects occurring is low. 	<ul style="list-style-type: none"> • Include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in water resources and air quality.

Natura 2000 site	Designated interest feature(s)	Features supporting site integrity in relation to Conservation Objectives and Favourable Condition	Possible impacts from other plans and projects	Possible impacts from the MLP	Risk of effect on site integrity?	Amendments recommended to ensure any potential adverse effects on Nature 2000 sites are avoided
				<p>abstraction. Increased air pollution and water abstraction/ decreased water quality may impact upon characteristic features such as bryophytes and mature trees (e.g. increased sensitivity to re-pollarding).</p> <ul style="list-style-type: none"> • Environmental impacts addressed by existing Aims and Policies within MLP. 		
Burnham Beeches SAC	<ul style="list-style-type: none"> • Oak and beech woodland (NVC type W10, W14 and W15) 	<ul style="list-style-type: none"> • Habitat extent. • Maintenance of natural process and structural development. • Species, habitats and features characteristic of the site, such as veteran trees and associated lichen/ invertebrates. • Regeneration potential. 	<ul style="list-style-type: none"> • Increased development including residential and employment related development, with associated infrastructure, resource abstraction (e.g. water and minerals), waste generation, water pollution, air pollution, noise nuisance and recreational requirements/ issues. 	<ul style="list-style-type: none"> • Increased mineral extraction and recycling/reuse of aggregates. Associated infrastructure requirements/traffic generation. • Afteruse and changes in type and intensity of land use. • Direct impacts unlikely due to distance from Hertfordshire although impacts could include increased air pollution (minerals transport), and water abstraction and pollution. • Air pollution identified as a 	<ul style="list-style-type: none"> • Due to distance, effects unlikely. Any effect would be addressed by recommendations as above. • In line with precautionary principle potential impacts have been identified associated with water and air quality, 	<ul style="list-style-type: none"> • Include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in water resources and air quality.

Natura 2000 site	Designated interest feature(s)	Features supporting site integrity in relation to Conservation Objectives and Favourable Condition	Possible impacts from other plans and projects	Possible impacts from the MLP	Risk of effect on site integrity?	Amendments recommended to ensure any potential adverse effects on Nature 2000 sites are avoided
				<p>particular issue at Burnham Beeches SAC with links to regeneration failure. Also any impacts of drought on woodland may be exacerbated by increased abstraction. Increased air pollution and water abstraction/ decreased water quality may impact upon characteristic features such as lichen and mature trees (e.g. increased sensitivity to re-pollarding).</p> <ul style="list-style-type: none"> • Environmental impacts addressed by existing Aims and Policies within MLP. 	<p>although the risk of these effects occurring is low .</p>	
Eversden and Wimpole Woods SAC	<ul style="list-style-type: none"> • Barbastelle bat maternity roost 	<ul style="list-style-type: none"> • Use of area by Barbastelle bat. • Extent of ancient woodland. • Maintenance of features of value to bat, including tree roost and other areas of woodland for foraging. 	<ul style="list-style-type: none"> • Increased development including residential and employment related development, with associated infrastructure, resource abstraction (e.g. water and minerals), waste generation, water 	<ul style="list-style-type: none"> • Increased mineral extraction and recycling/ reuse of aggregates. Associated infrastructure requirements/traffic generation. • Afteruse and changes in type and intensity of land use. • Direct impacts unlikely due to distance from Hertfordshire although 	<ul style="list-style-type: none"> • Due to distance, effects unlikely. Any effect would be addressed by recommendations as above. 	<ul style="list-style-type: none"> • Include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in water resources and air quality.

Natura 2000 site	Designated interest feature(s)	Features supporting site integrity in relation to Conservation Objectives and Favourable Condition	Possible impacts from other plans and projects	Possible impacts from the MLP	Risk of effect on site integrity?	Amendments recommended to ensure any potential adverse effects on Nature 2000 sites are avoided
		<ul style="list-style-type: none"> Acceptable levels of disturbance. 	<p>pollution, air pollution, noise nuisance and recreational requirements/ issues.</p>	<p>impacts could include increased air pollution (minerals transport), and water abstraction and pollution.</p> <ul style="list-style-type: none"> Environmental impacts addressed by existing Aims and Policies within MLP. 		
Wider implications on Natura 2000 sites	Not applicable	Not applicable	<ul style="list-style-type: none"> Increased development including residential and employment related development, with associated infrastructure, resource abstraction (e.g. water and minerals), waste generation, water pollution, air pollution, noise nuisance and recreational requirements/ issues. 	<ul style="list-style-type: none"> Increased mineral extraction and recycling/reuse of aggregates. Associated infrastructure requirements/traffic generation. Facilitates importation of minerals from outside Hertfordshire may cause displacement of impacts to other Natura 200 sites elsewhere in the region. Possible impacts (dependent on location) include increased air pollution (mineral traffic), water abstraction and pollution, and disturbance (direct and indirect). 	<ul style="list-style-type: none"> In line with precautionary principle potential impacts have been identified associated with water and air quality, although the risk of these effects occurring is low. 	<ul style="list-style-type: none"> Suggest altering wording in Aim 2, provision 3 to qualify that importation of sand and gravel is only appropriate where this offers more environmentally acceptable sources. In supporting text to Policy 17, include reference to the protection of Natura 2000 sites outside of Hertfordshire.

7. CONCLUSIONS AND NEXT STEPS

- 7.1. Hertfordshire's (Draft) Minerals Local Plan incorporates a number of aims, objectives and policies which are designed to protect the integrity of Natura 2000 sites in the County from the potential impacts of minerals operations (including extraction, processing and transport). As such it is considered unlikely that proposals in the (Draft) MLP will have significant effects on the integrity of these sites in isolation. When considered in the context of other relevant plans, and applying the precautionary principle, it is recognised that some adverse effects on Natura 2000 sites either in or around Hertfordshire could result, particularly in relation to impacts on air quality and ground and surface waters. This Appropriate Assessment Screening Report includes a small number of recommendations, which if implemented through amendments to the (Draft) MLP, would provide a high degree of certainty that any potential adverse effects on these sites could be avoided.
- 7.2. In accordance with The Nature Conservation (Natural Habitats, &c) Regulations, English Nature will be consulted on this Appropriate Assessment Screening Report to obtain their views on the likely effects of the (Draft) MLP on the Natura (2000) network. A final Screening Report will then be prepared, taking account of English Nature's response to the consultation.
- 7.3. If it is agreed, following consultation with English Nature, that further Appropriate Assessment is not required, then it is suggested that Hertfordshire County Council make the final Appropriate Assessment Screening Report available to the public to provide an opportunity for the public to consider the Screening Report before the (Draft) MLP is adopted.

Land Use Consultants
17th July 2006

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APPENDIX I

Natura 2000 site descriptions

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Table 1: Lea Valley SPA and Ramsar site

Table 2: Chilterns Beechwoods SAC

Table 3: Wormley Hoddesdonpark Woods SAC

Table 4: Epping Forest SAC

Table 5: Burnham Beeches SAC

Table 6: Eversden and Wimpole Woods SAC

Table 1: Lea Valley SPA and Ramsar site

Site description	
<p>The Lea Valley SPA and Ramsar site comprises a series of wetlands including man-made, semi-natural and floodplain habitats such as open water, reedbeds and marginal communities associated with embanked reservoirs, flooded gravel extraction pits and sewage treatment lagoons. These support wintering wildfowl in numbers of European importance and outstanding assemblages of breeding birds. Areas of reedbed also support significant numbers of bittern. Other habitats include small areas of fen, scrub and woodland, and larger areas of grassland such as associated with reservoir embankments.</p> <p>These habitats support an important invertebrate assemblage, including notable dragonflies, damselflies, grasshoppers and bush crickets. Mammal, amphibian and reptile populations are associated with the sites, including water vole and grass snake.</p>	
Component SSSI(s)	<ul style="list-style-type: none"> • Amwell Quarry • Rye Meads • Turnford and Cheshunt Pits • Walthamstow Reservoirs
SPA Designated interest feature(s)	<ul style="list-style-type: none"> • Overwintering bittern (population of Annex I species of European importance) • Overwintering gadwall and shoveler (population of migratory species of European importance)
SPA Conservation Objectives	<ul style="list-style-type: none"> • To maintain in favourable condition the habitats for the populations of bittern, gadwall and shoveler with particular reference to open water and surrounding marginal habitats.
Summary of standards defining favourable condition of SAC interest feature	
Bittern	<ul style="list-style-type: none"> • Disturbance with no significant reduction or displacement of wintering birds between Oct-March. • Extent and distribution of habitat with no significant deviation from reference level. • Maintain area of reedbeds and ditches as suitable for overwintering bittern. • Maintain habitat structure/features including reedbeds, large areas of open water, and appropriate water level to provide shallow water in reeds, with frequent deep pools and dykes. • Food availability with sufficient fish and amphibians.
Gadwall and shoveler	<ul style="list-style-type: none"> • Disturbance with no significant reduction or displacement of wintering birds between Oct-March.

	<ul style="list-style-type: none"> • Extent and distribution of habitat with no significant deviation from reference level. • Maintenance of water level to provide extensive shallow water (feeding). • Food availability including vegetation cover, aquatic plants and invertebrates.
Ramsar designated interest feature(s)	<ul style="list-style-type: none"> • Overwintering gadwall and shoveler • Whorled watermilfoil (nationally scarce plant) • <i>Micronecta minutissima</i> (rare/vulnerable waterboatman)
Other possible management issues (various sources including Natura 2000 standard data form, SSSI Views About Management, SSSI Condition assessments, Management Plans etc.)	
<ul style="list-style-type: none"> • Habitat management: control of natural colonisation/succession to maintain wetlands. • Water quality: includes nutrient and sediment loads. Eutrophic water quality is to be addressed by AMP3 funding under the Urban Waste Water Treatment Directive. • Water quantity: sympathetic management of water levels required including on site with problems from low/high/variable levels relating to vegetation management. Potential problems of over abstraction particularly during droughts. • Recreational pressure: potential disturbance but currently well controlled by zoning of Lea Valley Regional Park and its waterbodies. • Majority in Favourable/Unfavourable Recovering condition with localised compartments Unfavourable Declining due to fluctuating water levels. 	

Table 2: Chilterns Beechwoods SAC

Site description	
<p>The Chilterns Beechwoods SAC comprises a series of SSSIs on the escarpment, plateau and dip slopes of the Chiltern Hills. The dominant habitats are broad-leaved deciduous woodland, particularly beechwoods (NVC W12, W14), including areas of ancient semi-natural, secondary and plantation woodland. The woodlands display varied canopy, understorey and basal flora diversity. Areas of secondary and mixed plantations are also present.</p> <p>Other habitats include scrub (including juniper and box dominated communities); calcareous grassland; wetlands including small ponds, wet woodlands and wet rides; and small remnants of acid heathland.</p> <p>These habitats support diverse faunal assemblages, including birds (in particular Ashridge Commons and Woods SSSI) and invertebrates (particularly associated with the ancient woodlands).</p>	
Component SSSI(s)	<ul style="list-style-type: none"> • Hollowhill and Pullingshill Woods • Bradenham Woods, Park Wood and The Coppice • Bisham Woods • Ellesborough and Kimble Warrens • Naphill Common • Windsor Hill • Ashridge Commons and Woods • Tring Woodlands • Aston Rowant Woods
SAC Designated interest feature(s)	<ul style="list-style-type: none"> • Beechwoods (NVC type W12 and W14) • Box dominated scrub • Stag beetle
SAC Conservation Objectives	<p>Maintain the lowland mixed broadleaf woodland/beechness woodland including yew, and box dominated scrub in favourable condition, with particular reference to the designated interest features.</p>
Summary of standards defining favourable condition of SAC interest feature	
Beechwoods (NVC type W12 and W14) including box dominated scrub.	<ul style="list-style-type: none"> • No loss in extent of woodland (may be acceptable if to extend box scrub). • Maintenance of natural processes and structural development. • Species composition with particular reference to the native/non-native ratio and damage from non-native fauna.

	<ul style="list-style-type: none"> • Positive indicators – species, habitats and structures characteristic of the site, including basal flora composition, notable species, veteran trees and associated lichen/invertebrate assemblages, associated habitats and transitional habitats. • Regeneration potential with minimum levels of planting.
Stag beetle	<ul style="list-style-type: none"> • Confirmation of presence (or presence of suitable habitat, see below). • Maintenance of existing number (at a minimum) of old trees. • Distribution of age structure from seedlings and saplings to ancient and dead trees. • Proportion of large trees with signs of internal decay/hollowing. • Stability/increase in volume of fallen deadwood. Low disturbance to deadwood component. • Position of old trees/stumps with proportion in suitable areas.
Other possible management issues (various sources including Natura 2000 standard data form, SSSI Views About Management, SSSI Condition assessments, Management Plans etc.)	
<ul style="list-style-type: none"> • Past management and resulting uniformity of age and structural classes. • Sustainability of long term management in relation to financial incentives (including retention of mature trees). • Lack of natural regeneration of juniper and poor ability to compete. • Majority in Favourable/Unfavourable Recovering condition. 	

Table 3: Wormley Hoddesdonpark Woods SAC

Site description	
<p>The site supports broadleaf deciduous woodland with sessile oak standards dominant over coppiced hornbeam. Ancient oak and hornbeam pollards often mark the woodland boundaries. Pedunculate oak, ash and birch are also frequent within the canopy. Areas of base rich soils include a more diverse shrub layer (including hazel, elder, field maple and dogwood), and basal flora. Wild service tree is also found as well as other indicators of ancient woodland.</p> <p>Other habitats include wetlands, with a marsh, ponds and streams, and neutral to acid unimproved grassland. This diversity of habitats supports a diverse assemblage of plants, invertebrates and birds including a number of notable species.</p>	
Component SSSI(s)	<ul style="list-style-type: none"> • Wormley Hoddesdonpark Wood North • Wormley Hoddesdonpark Wood South
SAC Designated interest feature(s)	<ul style="list-style-type: none"> • Oak – Hornbeam woodland
SAC Conservation Objectives	<ul style="list-style-type: none"> • To maintain in favourable condition the oak-hornbeam woodland
Summary of standards defining favourable condition of SAC interest feature	
Oak – Hornbeam woodland.	<ul style="list-style-type: none"> • No loss in extent of ancient semi-natural woodland. • Maintenance of natural processes and structural development. • Species composition. Areas of minimum intervention; and areas of high forest, coppice and wood pasture with reference to the native/non-native ratio, damage from non-native fauna and external unnatural factors (including pollution). • Species, habitats and structures characteristic of the site, including basal flora composition, and distinctive elements maintained at current levels and current locations (e.g. patches of ancient woodland indicator species, stream channels and bryophytes). • Regeneration potential. Includes areas of non-intervention, high forest and wood pasture with successful coppicing/pollarding and maximum acceptable levels of planting.
Other possible management issues (various sources including Natura 2000 standard data form, SSSI Views About Management, SSSI Condition assessments, Management Plans etc.)	
<ul style="list-style-type: none"> • Inappropriate management in the past including neglect, planting of conifers and distortion of the age structure. • Majority in Favourable/Unfavourable Recovering condition with localised areas in Unfavourable condition due to recreational use. 	

Table 4: Epping Forest SAC

Site description	
<p>Epping Forest is dominated by ancient semi-natural woodland and forms one of the largest remaining examples of ancient woodland pasture, supporting three of the main wood-pasture types found in the country: pedunculate oak-beech, pedunculate oak-hornbeam and lowland birch-pedunculate oak. These include frequent over-mature pollards. Shrub components include abundant holly with species such as hazel and rowan less frequent. The cessation of pollarding and resultant dense woodland canopy creates a relatively sparse basal flora.</p> <p>Features associated with the ancient pollards are of particular importance for invertebrates including dead and rotting wood, sap runs, water holes and bracket fungi. The invertebrate community of the forest is of outstanding national importance both in terms of the diversity and numbers of notable species.</p> <p>The habitat diversity of the woodland is enhanced by open areas, including acid and neutral grassland, with heathland, and wetland habitats including bogs, pools and ponds. These support a number of notable plant species. The wetland habitats are also of considerable importance for invertebrates as well as for amphibians, whilst the forest also supports four reptile species (adder, slow worm, grass snake and lizard). Notably diverse bryophyte and bird communities are also supported, again due to the size and diversity of the semi-natural habitats.</p>	
Component SSSI(s)	<ul style="list-style-type: none"> Epping Forest
SAC Designated interest feature(s)	<ul style="list-style-type: none"> Beech forests with holly and yew in the shrub layer Dry heaths Wet heaths Stag beetle
SAC Conservation Objectives	Maintain in favourable condition the beech forest, dry heaths, wet heaths and the habitats for the population of stag beetle.
Summary of standards defining favourable condition of SAC interest feature	
Beech woodland with and without heath (NVC type W12 and W14) including box dominated scrub.	<ul style="list-style-type: none"> No loss in extent of ancient woodland and the highest quality recent semi-natural woodland. Maintenance of natural processes and structural development. Species composition. Areas of minimum intervention; and areas of high forest with reference to the native/non-native ratio and damage from non-native fauna and external unnatural factors (including pollution). Positive indicators – species, habitats and structures characteristic of the site, including basal flora composition, notable species including bryophytes

	<p>and fungi, associated habitats and transitional habitats.</p> <ul style="list-style-type: none"> • Regeneration potential. Includes areas of non-intervention, high forest and wood pasture with reinstatement of pollarding, and maximum acceptable levels of planting.
Dry heaths	<ul style="list-style-type: none"> • Maintain existing areas. • Maintenance of natural bare ground and but limiting ground disturbance from recreation. • Vegetation structure of <i>Calluna vulgaris</i> including different life stages, and frequency of characteristic dry heath species. • Negative indicators, for example excess degenerate/dead <i>Calluna vulgaris</i>, Rhododendron, tree/shrub/bramble colonisation, signs of overgrazing.
Wet heaths	<ul style="list-style-type: none"> • Maintain existing areas. • Maintenance of natural bare ground and but limiting ground disturbance from recreation. • Vegetation structure with cover of <i>Molinia caerulea</i>, ericoids and sphagnum; frequency of characteristic/rare wet heath species. • Negative indicators including cover of tree/scrub.
Stag beetle	<ul style="list-style-type: none"> • Confirmation of presence of breeding population. • Maintenance of existing number (at a minimum) of old trees. • Distribution of age structure from seedlings and saplings to ancient and dead trees. • Proportion of large trees with signs of internal decay/hollowing. • Abundant fallen deadwood of an appropriate size. • Position of old trees/stumps with proportion in suitable areas.
<p>Other possible management issues (various sources including Natura 2000 standard data form, SSSI Views About Management, SSSI Condition assessments, Management Plans etc.)</p>	
<ul style="list-style-type: none"> • Restoration of management components integral to enhancement of condition, e.g. pollarding, wood pasture management. Possible problems associated with vulnerability of old neglected pollards to re-pollarding. • Air pollution cited by EN as a possible significant problem effecting the integrity of the SAC, in particular NO_x and N deposition. Relates to position of Forest downwind 	

from London and motor vehicle pollution (including M25 to North).

- Majority of the SSSI stated as in Favourable/Favourable Recovering condition although significant proportion of compartments in Unfavourable/Unfavourable Declining condition. Poor health amongst mature trees and failure of regeneration linked to air pollution.
- Some improvements in air quality (reduced SO₂) since the Clean Air Act 1956 as well as re-pollarding and wood pasture management cited as causes for improvements in bryophyte populations.
- Recreational pressure as possible problem although addressed in part by Management Plan.
- Non-native species control required e.g. Rhododendron, turkey oak, sycamore.
- Drought years potentially contributing to declining tree health in some areas.
- High sensitivity of habitats to inorganic fertilisers and pesticides.

Table 5: Burnham Beeches SAC

Site description	
<p>The Burnham Beeches SAC is dominated by beech and oak. This includes high forest with ancient pollards which provides an almost unique habitat. Other woodland habitats include oak with hazel coppice, with birch and pine invading heathland areas. Plantations with pine, spruce and larch are located in the northern part. The broad-leaved woodland basal flora is mostly dominated by bracken and bramble, with a sparse cover of other woodland species where these two are less frequent.</p> <p>Other habitats within the site include dry and wet heathland, the former including mature juniper, and wetlands including ponds, springlines, wet flushes and swallow holes. The extent of heathland is in decline due to bracken/scrub and/or woodland invasion.</p> <p>This complex of habitats includes associated diverse assemblages of plants, birds, invertebrates and bryophytes, including species of regional and national importance.</p>	
Component SSSI(s)	<ul style="list-style-type: none"> • Burnham Beeches
SAC Designated interest feature(s)	<ul style="list-style-type: none"> • Oak and beech woodland (NVC type W10, W14 and W15)
SAC Conservation Objectives	Maintain the lowland mixed broadleaf woodland in favourable condition, with particular reference to the designated interest features.
Summary of standards defining favourable condition of SAC interest feature	
Oak and beech woodland (NVC type W10, W14 and W15)	<ul style="list-style-type: none"> • Maintenance of extent except for restoration of heath, mire and acid grassland, and localised clearance to benefit veteran and near veteran trees. • Maintenance of natural processes and structural development. • Species composition with particular reference to the native/non-native ratio and damage from non-native fauna and external factors (no evidence of any to date). • Positive indicators – species, habitats and structures characteristic of the site, including basal flora composition, veteran trees and associated lichen/invertebrate assemblages, associated habitats and transitional habitats. • Regeneration potential with natural regeneration within gaps and new pollarding, with no significant planting.
Other possible management issues (various sources including Natura 2000 standard data form, SSSI Views About Management, SSSI Condition assessments, Management Plans etc.)	
<ul style="list-style-type: none"> • Reinstatement of pollarding and wood pasture management underway. • East Burnham Quarry to south west of the SAC has measures in place to reduce 	

possible impacts including monitoring of ground water levels, dust and air pollution.

- Evidence suggests levels of Sulphur and Nitrogen oxides in the area exceed criteria levels for sensitive vegetation. Traffic through site an issue.
- Recreation pressure and disturbance a potential issue.
- All in Favourable condition.

Table 6: Eversden and Wimpole Woods SAC

Site description	
<p>The site (approximately 66ha) supports two interconnected areas of semi-natural broadleaved woodland comprising ancient coppice woodland (Eversden Wood) and more recently developed high forest (Wimpole Woods). Trees within Wimpole Woods support a colony of Barbastelle bat, with summer maternity roosts within tree crevices, and foraging/commuting routes within the woodland. Another five species of bat have also been recorded. Eversden Wood forms one of the largest areas of species-rich ash-field maple-dog's mercury woodland in Cambridgeshire. The woodland supports a diverse basal flora with species indicative of an ancient origin.</p>	
Component SSSI(s)	<ul style="list-style-type: none"> Eversden and Wimpole Woods SSSI.
SAC Designated interest feature(s)	<ul style="list-style-type: none"> Barbastelle bat maternity roost.
SAC Conservation Objectives	Maintain in favourable condition the broadleaved, mixed and yew woodland, with particular reference to the designated interest feature.
Summary of standards defining favourable condition of SAC interest feature	
The maternity roost of Barbastelle bat.	<ul style="list-style-type: none"> Continued use of area by Barbastelle bat. No loss of woodland. No loss or damage to trees known to support maternity roosts and maintain significant population of mature oak providing opportunities for roosts. Control human access to roost areas and no increase in disturbance including from off-site.
<p>Ancient woodland: wet ash-maple (NVC type W8)</p> <p>Note: This is an SSSI interest feature associated with Eversden Woods. It provides foraging habitat for Barbastelle bat and therefore a reduction in integrity may also impact upon SAC condition.</p>	<ul style="list-style-type: none"> No loss of ancient woodland. Maintenance of natural processes and structural development including age/size class, open space, veteran trees and fallen and standing dead wood. Regeneration potential with natural regeneration within gaps and coppicing, with <10% regeneration by planting of native stock only. Species composition with particular reference to characteristic canopy and shrub layer, and damage from non-native fauna and external factors (including pollution). Species, habitats and structures characteristic of the site including ground flora type and distinctive/desirable species and assemblages such as lime, locally uncommon species, veteran trees and invertebrates.
Other possible management issues (various sources including Natura 2000 standard data	

form, SSSI Views About Management, SSSI Condition assessments, Management Plans etc.)

- Barbastelle bat have been recorded feeding at woodlands up to 11km away (radio-tracking studies). Understorey particularly important for foraging. The bats use multiple trees as roosts.
- Disturbance potentially an important issue.
- All currently in Favourable condition.

APPENDIX 2

Review of other relevant plans and projects

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
Regional level plans	
East of England	
East of England Plan, Draft revision to the Regional Spatial Strategy (RSS) for the East of England (2006) – Panel Report (including the Regional Transport Strategy for the East of England)	
<p>This document sets out the East of England Plan, a draft spatial strategy to guide development in the East of England for at least the next 20 years and sets out plans on housing, economic development, the environment, transport, sport and recreation, waste development, mineral extraction.</p>	<p>Proposals for 83,200 new dwellings, employment and accompanying infrastructure have the potential to have adverse effects on Natura 2000 sites in Hertfordshire and beyond. Key areas of development in Hertfordshire include Stevenage (14,400), Hemel Hempstead (12,000) and Welwyn/Hatfield. Potential effects and impacts on Nature 2000 sites include:</p> <ul style="list-style-type: none"> • Recreation impacts associated with housing development within close proximity (5km) of Nature 2000 sites including Lee Valley SPA (Harlow proposals), Wormley Hoddesdonpark Woods SAC (Hatfield/Welwyn or Harlow proposals), Chilterns Beechwoods SAC (Hemel Hempstead proposals), and Eversden and Wimpole Woods SAC (Cambridgeshire proposals). • Water abstraction for supply of growing communities resulting in concentration of pollution and lowering of surface and groundwater levels locally or further afield. • Urbanisation resulting in diffuse water pollution associated with urban run-off. • Waste water generation and demand for treatment and disposal resulting in landtake, disturbance and reduced water quality. • Demand for treatment and disposal of increased volumes of waste potentially resulting in landtake, disturbance, and water pollution (e.g. leachate). • Traffic generation and demand for additional transport infrastructure resulting in reduced air quality, land take, water contamination, disturbance and severage of habitats <p>These impacts may be mitigated by policies in the (Draft) East of England Plan which seek to</p>

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
	protect and enhance nature conservation values.
Integrated Regional Strategy (2005)	
<p>'The integrated Regional Strategy (IRS) presents a Vision and a series of high level outcomes for the East of England. The high level outcomes for the IRS are:</p> <ul style="list-style-type: none"> • 'An exceptional knowledge base and a dynamic economy in the Region. • Opportunities for everyone to contribute to – and benefit from – the Region's economic dynamism. • Strong, inclusive, healthy and culturally rich communities. • A high quality and diverse natural and built environment. • A more resource-efficient region.' <p>The IRS brings together the regional strategies for the East of England into a inter-related series of strategies and highlights the key issues arising from proposals within each.</p>	<p>Policies in the IRS which promote housing, employment and infrastructure development have the potential for a range of effects on the Natura 2000 sites in and around Hertfordshire in a similar way to the (Draft) East of England.</p>
East of England Regional Waste Management Strategy (2002)	
<p>The Regional Waste Management Strategy give guidance on the land use planning aspects of waste management, by considering what quantities of waste needs to be treated by different methods, and what this means in terms of the scale of waste management needs, up to 2021.</p>	<p>Impacts associated with the treatment and disposal of increased volumes of waste in the region have the potential to include impacts associated with waste facilities and waste transport. Potential effects include: air pollution, water contamination (e.g. leachate), disturbance, and landtake.</p>
Sustainable Development Framework for the East of England (2001)	
<p>The Sustainable Development Framework (RSDF) represents the region's response to the 1999 UK Sustainable Development Strategy 'A Better Quality of Life'.</p> <p>It is a template for guiding partner organisations in the region when drawing up their own Strategies and Action Plans. In particular, its relationship with Regional Planning Guidance, the East of England Development Agency's Regional Economic Strategy, other Integrated Regional and Local Authority strategies is crucial.</p> <p>The central aim of the partners is to improve the quality of life for all the people of the region.</p>	<p>Policies in the Sustainable Development Framework which promote housing, employment and infrastructure development have the potential for a range of effects on the Natura 2000 sites in and around Hertfordshire in a similar way to the (Draft) East of England. These potential effects may be mitigated against by other policies which seek to protect and enhance nature conservation sites in the region.</p>
Sustainable Communities in the East of England – Building for the future (2004)	

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
<p>Long-term programme for action for delivering sustainable communities in both urban and rural areas. It aims to tackle housing supply issues in the South East, low demand in other parts of the country, and the quality of our public spaces.</p>	<p>Policies in 'Sustainable Communities in the East of England' which promote housing, employment and infrastructure development have the potential for a range of effects on the Natura 2000 sites in and around Hertfordshire in a similar way to the (Draft) East of England. These potential effects may be mitigated against by other policies which seek to protect and enhance nature conservation sites in the region.</p>
<p>A shared Vision: the regional economic strategy for the East of England (2004)</p>	
<p>As an economic strategy, the RES focuses on issues of growth, business and prosperity (measured in GVA). Regional planning, transport, the environment etc. are thus viewed here in the context of being a party to this growth / expansion of the region's economy – with growth being the central and overarching aim.</p>	<p>The RES's projected job growth of 64,700 jobs in the East of England between 2001 and 2021 has the potential for effects on Natura 2000 sites in and around Hertfordshire. Potential impacts include: landtake, disturbance, air pollution, water contamination (e.g. run-off and waste water disposal), and water abstraction.</p>
<p>Revised Regional Housing Strategy for the East of England: Strategy Document 2005-2010 (2005)</p>	
<p>The Regional Housing Strategy sets out a vision, strategic aims, and objectives to guide the provision of housing in the Region. Key issues addressed by the Strategy include, providing the right amount of homes, of the right types, in the right place and at the right price, to meet regional needs.</p>	<p>Proposals for housing under the Regional Housing Strategy for the East of England have been superseded by housing proposals set out in the (Draft) East of England Plan.</p>
<p>Towns and Cities Strategy and Action Plan: Urban Renaissance in the East of England</p>	
<p>This strategy and action plan is the East of England's response to the national policy as set out in the Urban White Paper and the Sustainable Communities Plan. Across the whole region, the strategy strives to make the most of the vital assets that are the region's towns and cities – and the people who live, work, play and invest in them. Its purpose is to bring about urban renaissance in the East of England.</p>	<p>This strategy is intended to assist in the delivery of the development set out in the Sustainable Communities Plan in such a way that an urban renaissance is achieved. The strategy looks to implement these plans in a sustainable manner and as such may assist in mitigating some of the potential impacts of growth proposals on the Natura 2000 network.</p>
<p>Culture: A catalyst for change: A strategy for cultural development in the East of England</p>	
<p>A catalyst for change is the East of England's first integrated cultural strategy. The aim of the document is to champion culture in the East of England by building on existing richness and putting culture at the heart of communities.</p>	<p>Amongst other objectives, this plan seeks to contribute to the process of regeneration and renewal in the East of England through culture based projects and proposals. Cultural events and proposals arising from this strategy have the potential to impact on Natura 2000 sites through disturbance and landtake, although it seems likely that any impacts would be negligible.</p>

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
'Our Environment, Our Future' The Regional Environmental Strategy for the East of England (2003)	
<p>This Regional Environment Strategy is based on a vision of a prosperous and socially inclusive East of England that recognises the value of the environment as an integral part of the region's current and future sustainable development:</p> <p>"The Strategy sets out an ambitious agenda for celebrating, protecting and enhancing our natural, historic and built environment. It highlights the importance of the environment to the broader improvement of quality of life for everyone in the region.</p>	<p>This strategy seeks to promote the enhancement of environmental capital within the East of England Region and has the potential for beneficial contributions to the Natura 2000 network, including sites in and around Hertfordshire. However, competing priorities for nature conservation and recreation will need to be addressed, otherwise disturbance impacts associated with promotion of community access to natural spaces could occur.</p>
Woodland for Life Regional Woodland Strategy for East of England [2004]	
<p>The Regional Woodland Strategy for the East of England provides a number of strategies for the enhancement, over the next 20 years, of the benefits that trees and woodlands bring to the people who live and work in the region. With the active participation of woodland owners, the woodlands and trees of the East of England provide a wide range of benefits that have been divided into six broad themes: quality of life, spatial planning, economic development, renewable energy, education and learning, and natural environment. The Strategy has been drafted to reflect these six themes. The basis of all themes is sustainable woodland management.</p>	<p>The Regional Woodland Strategy has potential for mixed effects. The strategies policies on promoting recreational access has the potential to increase impacts associated with disturbance. However, proposals to establish new woodlands in areas where access to woodlands is currently poor may help to mitigate impacts on Natura 2000 sites.</p>
Adjoining Regions	
The London Plan – Spatial Development Strategy. Greater London Authority, 2004.	
<p>The London Plan provides a spatial strategy for the development of London. It addresses the greatest single challenge facing the city: how to accommodate substantial growth in London's economy and population at the same time as creating a more open and equitable society and preserving and improving London's heritage and environment. The objectives of the London Plan are:</p> <ul style="list-style-type: none"> • To accommodate London's growth within its boundaries without encroaching on open spaces. • To make London a better city for people to live in. • To make London a more prosperous city with strong and diverse economic growth. • To promote social inclusion and tackle deprivation and discrimination. • To improve London's accessibility. • To make London a more attractive, well-designed and green city. 	<p>Proposals for significant quantities of housing, employment and infrastructure development within London have the potential to have both direct and indirect effects on Natura 2000 sites in Hertfordshire and around Hertfordshire. Potential effects and impacts on Nature 2000 sites include:</p> <ul style="list-style-type: none"> • Recreation impacts associated with housing development within close proximity of Nature 2000 sites such as Epping Forest SAC and Lee Valley SPA. • Water abstraction for supply of growing communities resulting in concentration of pollution and lowering of surface and groundwater levels locally or further afield.

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
	<ul style="list-style-type: none"> • Waste water generation and demand for treatment and disposal resulting in landtake, disturbance and reduced water quality. • Demand for treatment and disposal of increased volumes of waste potentially resulting in landtake, disturbance, and water pollution (e.g. leachate). • Traffic generation and demand for additional transport infrastructure resulting in reduced air quality, landtake, water contamination, disturbance and severage of habitats. <p>These impacts may be mitigated by policies in the London Plan which seek to protect and enhance nature conservation values.</p>
Rethinking Rubbish: in London: The Mayor's Municipal Waste Management Strategy. GLA September 2003	
<p>The Mayor's Municipal Waste Management Strategy provides a Strategy for the management of London's municipal waste, which is collected by the London boroughs from households, including litter from the streets and some of the waste from businesses. The Mayor's Vision for Waste in London is that by 2020, municipal waste should no longer compromise London's future as a sustainable city. This is to be achieved through a range of mechanisms including increased re-use, recycling and recovery of waste.</p>	<p>The Mayor's Municipal Waste Management Strategy envisages that waste will continue to be exported from London due to the limited capacity of the city to treat and dispose of its own waste. This has the potential to impact on Natura 2000 sites within Hertfordshire by increasing the demand for waste facilities and disposal within the County. Potential impacts associated with this strategy on Natura 2000 sites in and around Hertfordshire include landtake, disturbance, and water pollution (e.g. leachate and run-off) associated with waste infrastructure and transport.</p>
A clear vision for the South East – The South East Plan (March 2006)	
<p>The Draft South East Plan provides a framework for the development of the region for the next 20 years to 2026. It brings together policies for development with other policies and programmes that influence the nature of places and how they function, including those governing health, social issues, the economy, culture, skills and the environment.</p>	<p>It is possible that proposals for housing, employment and infrastructure growth within the South East Region could result in indirect effects on Natura 2000 sites within and around Hertfordshire, although these effects are expected to be negligible.</p>
South East, Regional Waste Management Strategy. No Time to Waste. March 2004	
<p>The Regional Waste Management Strategy provides a strategy for the management of waste in the South East and is based on the need for a change in the approach to waste management in the region - change in the facilities for management waste and change in behaviour</p>	<p>It is possible that waste management proposals within the South East Region could result in indirect effects on Natura 2000 sites within and around Hertfordshire, although these effects are expected to be negligible.</p>

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
so that the community produces less waste.	
County level plans	
<i>Hertfordshire</i>	
Hertfordshire Structure Plan (Adopted 1998)	
<p>The Hertfordshire Structure Plan sets out the broad directions in which Hertfordshire should develop in the future. It is a key part of the overall development plan for the County, providing a framework for the preparation of more detailed local plans by district and borough councils. It also sets out the overall framework for transportation, minerals and waste planning by the County Council itself.</p>	<p>The existing Hertfordshire Structure Plan makes allowance for the construction of 65,000 dwellings in the County including 5,400 dwellings at in Broxbourne, 7,200 dwellings Dacorum, 11,100 dwellings in East Hertfordshire, 4,600 dwellings in Hertsmere, 10,400 dwellings in North Hertfordshire, 6,300 dwellings in St Albans, 5,700 dwellings in Stevenage, 4,000 dwellings in Three Rivers, 4,700 dwellings in Watford, and 5,600 dwellings in Welwyn Hatfield. In addition, employment site are identified in the Structure Plan at Leavesden Studios; British Aerospace, Hatfield; Essex Road, Hoddesdon; Centennial Park, Elstree; Three Cherry Trees Lane, Hemel Hempstead; Park Plaza, Waltham Cross; The land at Three Cherry Trees Lane, Hemel Hempstead; and Park Plaza, Waltham Cross. On the basis of development envisaged in the Structure Plan the following potential effects on Natura 2000 sites should be considered:</p> <ul style="list-style-type: none"> • Recreation impacts associated with housing development within close proximity to Nature 2000 sites such as Wormley-Hoddesdonpark Woods SAC (Broxbourne and Hatfield/Welwyn proposals), Lea Valley SPA (Broxbourne, East Hertfordshire proposals), and Chilterns Beechwoods SAC (Dacorum proposals). • Water abstraction for supply of growing communities resulting in concentration of pollution and lowering of surface and groundwater levels locally or further afield. • Waste water generation and demand for treatment and disposal resulting in landtake, disturbance and reduced water quality. • Demand for treatment and disposal of increased volumes of waste potentially resulting in landtake, disturbance, and water pollution (e.g. leachate).

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
	<ul style="list-style-type: none"> • Traffic generation and demand for additional transport infrastructure resulting in reduced air quality, landtake, water contamination, disturbance and severage of habitats. <p>These impacts may be mitigated by policies in the Structure Plan which seek to protect and enhance nature conservation values.</p>
Hertfordshire Waste Local Plan (1995-2005)	
<p>'The Hertfordshire Waste Local Plan 1995-2005 is part of the development plan for the county. It is produced and kept under review by the County Council and was adopted in January 1999. The purpose of the plan is to:</p> <ul style="list-style-type: none"> • set out the broad guidelines for developments that deal with waste disposal (other than mineral waste); • develop, in detail, the waste planning policies in the County Structure Plan, particularly the policies concerning the handling, transfer, treatment and disposal of waste; • ensure that the effect of waste management facilities on land is considered including mitigation of any generated environmental impacts; • recognises the need for sufficient facilities in Hertfordshire to dispose of the county's own waste; • identify existing waste management sites with spare capacity as well as new sites and other broad possible areas; • contains detailed development control criteria that will be used when considering planning applications for waste management operations; • promote the use of recycled waste as useful materials'. 	<p>The Hertfordshire Waste Local Plan includes a large number of sites for use for waste management facilities of various types as well as policies relating to waste transport. Potential impacts associated with waste proposals on the Natura 2000 sites in and around Hertfordshire include: landtake, disturbance, water contamination (via leachate or run-off), and air quality. These impacts may be mitigated by policies in the Waste Local Plan which seek to protect and enhance nature conservation values.</p>
Hertfordshire Waste Development Plan Documents	
<p>Hertfordshire County Council is currently reviewing the Hertfordshire Waste Local Plan 1995-2005 in accordance with recent changes to the planning system. Under the new system the policy will be replaced by a suite of documents, including Waste Development Plan Documents and Supplementary Planning Documents.</p>	<p>The Hertfordshire Waste Development Plan Documents are likely to include a number of sites for use for waste management facilities of various types as well as policies relating to waste transport. Potential impacts associated with waste proposals on the Natura 2000 sites</p>

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
<p>Preparation of these new documents has now begun and will include:</p> <ul style="list-style-type: none"> • Waste Core Strategy • Waste Development Policies • Waste Site Allocations and Site Specific Policies • Waste Proposals Map <p>The plan will propose a vision and objectives for waste management in Hertfordshire. The plan will also involve researching and locating areas where potential new waste management facilities could be located, including reviewing the 77 sites identified in the current plan.</p>	<p>in and around Hertfordshire include: landtake, disturbance, water contamination (via leachate or run-off), and air quality. These impacts are likely to be mitigated by policies in the Waste Development Plan Documents which seek to protect and enhance nature conservation values.</p>
<p>Hertfordshire Local Transport Plan 2006/7-2010/11 – Published and submitted to Government in 2006</p>	
<p>The Hertfordshire Local Transport Plan 2006/07 - 2010/11 sets the framework for achieving the vision for a better transport system for all. This plan will build upon the success of the first Local Transport Plan and focus on delivering the shared priorities of tackling congestion, delivering accessibility, providing safer roads, improving air quality and improving the quality of life for residents. Through these themes, and a series of daughter documents (including a Bus Strategy, Rail Strategy, Road Safety Plan, Accessibility Strategy, Rights of Way Improvement Plan) the plan will continue to tackle the complex transport problems that face Hertfordshire.</p>	<p>Proposals in Hertfordshire's Local Transport Plan for the potential to have a range of impacts on Natura 2000 sites in Hertfordshire including disturbance, air pollution, water contamination and perhaps in some cases landtake. These impacts may be mitigated by policies in the Local Transport Plan which seek to reduce the environmental effects of transport proposals protect and enhance nature conservation values, particularly through efforts to improve air quality.</p>
<p><i>Buckinghamshire</i></p>	
<p>Buckinghamshire Structure Plan</p>	
<p>The current Structure Plan was adopted by the County Council in March 1996. Its main elements are</p> <ul style="list-style-type: none"> • Concentration of most new urban development at Milton Keynes City, Aylesbury Town and in the High Wycombe area • 64,000 new homes in Buckinghamshire from 1991-2011 • The maintenance of a buoyant local economy, with new employment-generating development in appropriate locations • Positive management of urban fringe areas to 	<p>Proposals for significant quantities of housing, employment and infrastructure development within Buckinghamshire have the potential to have both direct and indirect effects on Natura 2000 sites. Potential effects and impacts on Nature 2000 sites include:</p> <ul style="list-style-type: none"> • Recreation impacts associated with housing development within close proximity of Nature 2000 sites such as Burnham Beeches SAC and Chiltern Beechwoods SAC. • Water abstraction for supply of growing communities resulting in concentration of

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
<p>improve their environmental and amenity value</p> <ul style="list-style-type: none"> • Continued protection of established planning constraints, such as the Green Belt, the Chilterns Area of Outstanding Natural Beauty, other cherished landscapes, high quality farmland, important biological and geological features and the man-made heritage • Tight controls on sporadic development in the open countryside, but with sufficient provision for it to become more attractive, economically viable, ecologically diverse and publicly accessible • Encouragement for the re-use and recycling of physical resources 	<p>pollution and lowering of surface and groundwater levels locally or further afield.</p> <ul style="list-style-type: none"> • Waste water generation and demand for treatment and disposal resulting in landtake, disturbance and reduced water quality. • Demand for treatment and disposal of increased volumes of waste potentially resulting in landtake, disturbance, and water pollution (e.g. leachate). • Traffic generation and demand for additional transport infrastructure resulting in reduced air quality, landtake, water contamination, disturbance and severage of habitats. <p>These impacts may be mitigated by policies in the Structure Plan which seek to protect and enhance nature conservation values.</p>
Buckinghamshire Local Transport Plan 2001-2006	
<p>The Buckingham LTP is a fully comprehensive and integrated plan that draws together all of the County's transport policies and initiatives under a coherent overarching strategy to help address the problems associated with the County's transport system, such as congestion, and make the most of the opportunities for improving it.</p>	<p>Proposals in the Buckinghamshire Local Transport Plan have potential to have a range of impacts on Natura 2000 sites including disturbance, air pollution, water contamination and perhaps in some cases landtake. These impacts may be mitigated by policies in the Local Transport Plan which seek to reduce the environmental effects of transport proposals protect and enhance nature conservation values.</p>
Buckinghamshire Minerals and Waste Local Plan 2004 - 2006	
<p>This plan provides a <i>planning policy framework to 2006</i> for mineral working and waste management within Buckinghamshire (excepting the Milton Keynes area).</p>	<p>The Buckingham Minerals and Waste Local Plan could result in indirect effects on the Natura 2000 sites within and around Hertfordshire, although these effects are expected to be minor or negligible effects associated with transport impacts on air quality. More direct effects may occur with regard to Chilterns Beechwoods SAC and Burnham Beeches SAC.</p>
Essex	
Essex and Southend-on-Sea Replacement Structure Plan	

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
<p>The plan sets out a broad framework for development taking into account national and regional policy and planning guidance. Although the structure plan can't decide how much growth there is going to be in total, it can decide, in general terms, how many homes and how much employment must be provided in each part of the plan area. District and borough councils must then decide exactly where to locate the homes and employment. The plan covers the period up to 2001.</p>	<p>It is possible that proposals for housing, employment and infrastructure growth within the South East Region could result in indirect effects on Natura 2000 sites within and around Hertfordshire, although these effects are expected to be negligible.</p>
<p>Essex and South End-on Sea Waste Local Plan (2001)</p>	
<p>'The Essex and South End on Sea Waste plan was adopted in 2001 and covers the period of 1997-2010. The Plan seeks to ensure that the combined Southend and Essex area is self-sufficient in the disposal of waste and seeks to reduce the proportion of London's waste to be accommodated from the traditional 50% to some 12% over the plan period. Beyond 2010 only the landfilling of some residues may continue, although this will be reconsidered in the emerging RSS for the East of England (RSS14) and subsequent Waste Local Development Documents for Essex and Southend on Sea.' *</p>	<p>It is possible that waste management proposals within the Essex and South End-on-Sea Waste Local Plan could result in indirect effects on the Natura 2000 sites within and around Hertfordshire, although these effects are expected to be minor or negligible effects associated with transport impacts on air quality.</p>
<p>Essex Minerals Plan Review - 1st Deposit Draft (2003)</p>	
<p>The aims of the minerals local plan are to:</p> <ul style="list-style-type: none"> • Provide a sustainable planning framework allowing for the supply of basic raw materials at least cost to the environment of Essex • Provide policies and proposals for non-land won supply • Ensure extraction is matched by a high standard of restoration/site clearance 	<p>It is possible that minerals proposals within the Essex Minerals Plan could result in indirect effects on the Natura 2000 sites within and around Hertfordshire, although these effects are expected to be minor or negligible effects associated with transport impacts on air quality.</p>
<p>Essex Minerals Development Document - Core Strategy Issues & Options (March 2005)</p>	
<p>The emerging Essex Minerals Development Plan will seek to achieve the right balance between two important objectives of the Essex Approach:</p> <ul style="list-style-type: none"> • using natural resources wisely and without wastage; and, • respecting the environment for today and tomorrow. <p>Essex will seek to provide appropriate amounts of minerals in the most sustainable way based on social,</p>	<p>The emerging Essex Minerals Development Plan could result in indirect effects on the Natura 2000 sites within and around Hertfordshire, although these effects are expected to be minor or negligible effects associated with transport impacts on air quality.</p>

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
environmental, and economic considerations, and ensure high standards of restoration and appropriate after uses.	
Essex Local Transport Plan (July 2000)	
The Local Transport Plan is a long term plan which sets out Essex County Council's plans and policies for the future of transport in Essex. The first Local Transport Plan was a document containing the five-year programme from 2001-2006. The second Local Transport Plan contains the five-year programme from 2006-2011.	The emerging Essex Local Transport Plan could result in indirect effects on the Natura 2000 sites within and around Hertfordshire, although these effects are expected to be minor or negligible effects associated with transport impacts on air quality
Local level plans	
<i>Hertfordshire</i>	
North Hertfordshire District Local Plan (1996)	
This will be the local development plan until 'at least September 2007'. This Local Plan for North Hertfordshire gives a framework for guiding and controlling changes within the area, and it seeks improvements within the environment and to the appearance of existing buildings, private and public open spaces and rural areas.	Proposals for development within the North Hertfordshire District Local Plan have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.
North Hertfordshire Core Strategy Development Plan Document Options (September 2005)	
The emerging North Hertfordshire Core Strategy will provide the overall vision and strategy for the development of North Hertfordshire until 2021, consistent with the (Draft) East of England Plan.	Proposals for development within the emerging North Hertfordshire Core Strategy have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.
City and District of St Albans Local Plan (Adopted 1994)	
This Local Plan for the City and District of St Albans gives a framework for guiding and controlling changes within the area. It seeks improvements to the environment and to the appearance of existing buildings, private and public open spaces and rural areas.	Proposals for development within the emerging St Albans Local Plan have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.
Welwyn Hatfield District Plan, (2005)	
This is the Local Plan for the district of Welwyn Hatfield for the period up to 2011. It replaces the current statutory local plan, the Welwyn Hatfield District Plan Alterations No.1. It contains the local	Proposals for development within Welwyn Hatfield District Plan have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
<p>planning framework, policies and proposals, which will guide the development and use of land in the district over the next 10 years and against which the Council will consider planning applications.</p>	<p>traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>
<p>Stevenage Local Plan (adopted December 2004)</p>	
<p>The Local Plan for Stevenage was adopted in December 2004 and sets out the policies and proposals for controlling and allocating development and for protecting and enhancing the environment in Stevenage.</p>	<p>Proposals for development within Stevenage Local Plan have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>
<p>East Hertfordshire Local Plan 1986-2001, adopted December 1999.</p>	
<p>The East Hertfordshire Local Plan contains the land use strategies and policies that shape the future of the District and forms the basis upon which planning applications are considered. The theme of the Plan is to make provision for modest growth in housing and employment, whilst retaining their quality and market town 'feel'. It's about encouraging a sense of community, economic development and prosperity, at the same time as protecting the District's countryside and rich heritage of built environment'.</p>	<p>Proposals for housing development within East Hertfordshire have the potential to have indirect impacts on the Natura 2000 sites in Hertfordshire via recreation impacts (e.g. on Lee Valley SPA and Worley-Hoddesdonpark Woods SAC). Housing and employment development in East Hertfordshire also have potential for effects via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>
<p>Borough of Broxbourne Local Development Plan 2001-2011</p>	
<p>Broxbourne Local Development Plan sets out the policies and proposals for controlling and allocated development and for protection and enhancing the environment in the Borough of Broxbourne .</p>	<p>Proposals for housing development within Broxbourne have the potential to have indirect impacts on the Natura 2000 sites in Hertfordshire via recreation impacts (e.g. on Lee Valley SPA and Worley-Hoddesdonpark Woods SAC). Housing and employment development in Broxbourne also have potential for effects via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>
<p>Watford District Plan 2000 (adopted 2003)</p>	
<p>The purpose of the Watford District Plan is to:</p> <ul style="list-style-type: none"> • Provide a detailed policy framework to protect and enhance Watford's environment, to meet the development needs of its community and to reconcile potential conflicts between land uses in the public interest in accordance with sustainability principles. • Encourage and guide development to the right locations, encourage economic growth and vitality and to prevent development which is not 	<p>Proposals for development within Watford have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
<p>environmentally, socially and economically sustainable.</p> <ul style="list-style-type: none"> • Reflect the planning and land use aspirations of the people of Watford, to present policies of relevance to all and not to discriminate against any section of the community. • Interpret the policies of the Hertfordshire Structure Plan to meet local circumstances • Provide a firm basis for rational and consistent decisions for determining planning applications. 	
Three Rivers Local Plan 1996-2011	
<p>The Three Rivers Local Plan is the framework for guiding, controlling and facilitating development within Three Rivers District, for the period 1996 to 2011.</p>	<p>Proposals for development within Three Rivers Local Plan have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>
Hertsmere Local Plan, Adopted 2003	
<p>The Hertsmere Local Plan is the framework for guiding, controlling and facilitating development within Hertsmere, for the period through to 2011.</p>	<p>Proposals for development within Hertsmere Local Plan have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>
Dacorum Borough Local Plan 1999-2011 (Adopted 2004)	
<p>The Dacorum Borough Local Plan deals primarily with land use, the physical environment and traffic issues, but it also facilitates some of the Council's wider intentions in respect of matters such as social, community and economic development.</p>	<p>Proposals for housing development within Dacorum have the potential to have indirect impacts on the Natura 2000 sites in Hertfordshire via recreation impacts (e.g. on Lee Valley SPA and Worley-Hoddesdonpark Woods SAC). Housing and employment development in Broxbourne also have potential for effects via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>
Dacorum Core Strategy Issues and Options paper (2006)	
<p>'The Core Strategy focuses on the strategic pattern of development over the next 20 years, setting out the broad areas for development and the overall planning strategy. It does not deal with specific sites or detailed development control issues as these will be covered in other parts of the LDF i.e. the Site Allocations Development Plan Document (DPD), Development</p>	<p>Proposals for housing development within the emerging St Albans Local Plan have the potential for minor indirect impacts on the Natura 2000 sites in Hertfordshire via contributions to traffic generation and accompanying impacts on air quality,</p>

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
Control Policies DPD and the Action Area Plan for East Hemel Hempstead Town Gateway'.	disturbance and water contamination.
<i>Essex</i>	
Harlow Local Plan (1986-2001)	
The Harlow Local Plan sets out the policies and proposals for future development and land use in Harlow District for the period up to 2011. It provides a detailed basis for determining planning applications and also provides the framework for coordinating, directing and promoting development and the use of land, both public and private.	Proposals for housing development within Harlow have the potential to have indirect impacts on the Natura 2000 sites via recreation impacts (e.g. Epping Forrest SAC, Lee Valley SPA). Housing and employment development in Harlow also have potential for effects via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.
Epping Forest Local Plan	
Epping Forest Local Plan sets out the council's policies for the control of development (and hence guides most planning decisions). It also aims to make proposals for the development and use of land, and allocate land for specific purposes such as housing and community facilities.	Proposals for housing development within Epping Forest have the potential to have indirect impacts on the Natura 2000 sites via recreation impacts (e.g. Epping Forrest SAC, Lee Valley SPA). Housing and employment development in Epping Forest also have potential for effects via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.
Waltham Forest Unitary Development Plan (2006)	
<p>The primary objectives of the Plan are:</p> <ul style="list-style-type: none"> • to improve the quality and accessibility of the physical environment; • to secure the best use of land and buildings to meet the wishes and needs of the community; • to foster continuing economic regeneration and ensure that all the Borough's residents have an opportunity to share in the benefits of increasing economic prosperity; and • to ensure that Waltham Forest contributes to London's development as a World City. 	Proposals for housing development within Waltham Forest have the potential to have indirect impacts on the Natura 2000 sites via recreation impacts (e.g. Epping Forrest SAC). Housing and employment development in Epping Forest also have potential for effects via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.
<i>Buckinghamshire</i>	
South Bucks Local Plan	
The South Bucks Local Plan sets out the council's policies for the control of development (and hence guides most planning decisions). It also aims to make proposals for the development and use of land, and allocate land for specific purposes such as housing and community facilities.	Proposals for housing development within South Bucks have the potential to have indirect impacts on the Natura 2000 sites via recreation impacts (e.g. Burnham Beeches SAC). Housing and employment development in South Bucks also have potential for effects via contributions to traffic generation and accompanying impacts on air quality, disturbance and water

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
	contamination.
<i>London</i>	
Redbridge Borough Unitary Development Plan	
<p>The Redbridge Borough Local Plan sets out the council's policies for the control of development (and hence guides most planning decisions). It also aims to make proposals for the development and use of land, and allocate land for specific purposes such as housing and community facilities.</p>	<p>Proposals for housing development within Redbridge have the potential to have indirect impacts on the Natura 2000 sites via recreation impacts (e.g. Epping Forrest SAC). Housing and employment development in Epping Forest also have potential for effects via contributions to traffic generation and accompanying impacts on air quality, disturbance and water contamination.</p>
Lee Valley Regional Park Plan (1998)	
<p>The vision of the Lee Valley Regional Park Plan is:</p> <ul style="list-style-type: none"> • To be a cohesive, sustainable and valued regional green lung. • To be an area of enhanced and protected natural biodiversity for the enjoyment of all. • To achieve full utilisation of the unique land and water assets of the Regional Park for specialist leisure and recreational facilities developed in accordance with principles of sustainability and design excellence. • To be an accessible and permeable, integrated visitor attraction to serve the region which will include local communities. 	<p>The Lee Valley Regional Park Plan includes measures to enable recreational use of the park while protecting the biodiversity of the Lea Valley. It is unlikely that this plan would have adverse effects on the SPA.</p>
Water Resource Plans & Catchment Abstraction Management Plans	
Thames Water Resource Plan (2004)	
<p>The Thames Water WRP details how Thames Water plans to balance water supply with demand to ensure a secure supply for all their customers. The plan looks forward as far as 2030 and details specific measures that will be implemented over this period.</p>	<p>Thames Water currently abstract water from the chalk aquifer underpinning Hertfordshire. Excessive water abstraction from this aquifer has the potential to have adverse effects on Natura 2000 sites in Hertfordshire including the Lea Valley SPA and woodland SACs. According to the Upper Lee CAMS, the water resource management units in the Upper Lee are currently either 'over-abstracted' or 'over-licensed'. While there is no evidence suggesting this is currently having an adverse effects on the Natura 2000 sites, a precautionary approach should be taken with regard to potential in-combination effects associated with</p>

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
	impacts on water quantity and water pollution.
Cambridge Water - Water Resources Plan (2003)	
Cambridge Water's WRP takes a strategic view of the Company's overall supply / demand balance over the next 25 years, up until 2029/30.	Cambridge Water ¹¹ currently abstract water from the chalk aquifer underpinning Hertfordshire. Excessive water abstraction from this aquifer has the potential to have adverse effects on Natura 2000 sites in Hertfordshire including the Lea Valley SPA and woodland SACs. According to the Upper Lee CAMS, the water resource management units in the Upper Lee are currently either 'over-abstracted' or 'over licenced'. While there is no evidence suggesting this is currently having an adverse effects on the Natura 2000 sites, a precautionary approach should be taken with regard to potential in-combination effects associated with impacts on water quantity and water pollution.
Veolia Water Resources Plan (also known as Three Valleys Water)	
Veolia Water WRP details how Veolia Water plans to balance water supply with demand to ensure a secure supply for all their customers. The plan looks forward as far as 2030 and details specific measures that will be implemented over this period.	Veolia Water ¹² (also known as Three Valleys Water) currently abstract water from the chalk aquifer underpinning Hertfordshire. Excessive water abstraction from this aquifer has the potential to have adverse effects on Natura 2000 sites in Hertfordshire including the Lea Valley SPA and woodland SACs. According to the Upper Lee CAMS, the water resource management units in the Upper Lee are currently either 'over-abstracted' or 'over licenced'. While there is no evidence suggesting this is currently having an adverse effects on the Natura 2000 sites, a precautionary approach should be taken with regard to potential in-combination effects associated with impacts on water quantity and water pollution.
Anglian Water Resources Plan	
Anglian Water's WRP 2004 details how Anglian Water plans to balance water supply with demand to ensure a secure supply for all their customers in on of the driest regions in the country. The plan looks forward as far as 2030 and details specific measures that will be implemented over this period.	Anglian Water do not presently abstract water from the chalk aquifer underpinning Hertfordshire ¹³ . For this reason, it is unlikely that Anglian Water's current WRP will have an adverse effects on Natura 2000 sites which rely on Hertfordshire's chalk aquifer.
The Upper Lee Catchment Abstraction Management Strategy	

¹¹ Telephone conversation with Brian Elliot (Cambridge Water), 5th May, 2006.

¹² Letter from Alex Black (Hydrogeologist, Veolia Water) to LUC, received 11th May 2006.

¹³ Telephone conversation with Dave Harcker of Anglian Water – 5th May, 2006.

Overall aim or purpose of the document	Possible elements of the plan that could contribute to 'in-combination' effects
<p>The Upper Lee CAMS is a strategy for management of water resources at a local level. It makes information on water resources and licensing practice publicly available and allow the balance between the needs of abstractors, other water users and the aquatic environment to be considered in consultation with the local community and interested parties.</p>	<p>The Upper Lee CAMS sets out a proposed licensing strategy for the abstraction of water from the Upper Lee catchment. According to the Upper Lee CAMS, the water resource management units in the Upper Lee are currently either 'over-abstracted' or 'over licenced'. The CAMS also indicates that the Environment Agency is unlikely to licence any new consumption abstractions in the Upper Lee catchment.</p> <p>While there is no evidence suggesting this is currently having an adverse effects on the Natura 2000 sites, a precautionary approach should be taken with regard to potential in-combination effects associated with impacts on water quantity and water pollution.</p>

APPENDIX 3
Likely effects matrix

CONTENTS

Matrix 1 – All Natura 2000 sites

Matrix 2 – Policy 3 Preferred areas: Lea Valley SPA and Ramsar site

Matrix 3 – Policy 3 Preferred areas: Chilterns Beechwoods SAC

Matrix 4 – Policy 3 Preferred areas: Wormley and Hoddesdonpark Woods SAC

Matrix 5 – Policy 3 Preferred areas: Epping Forest SAC

Matrix 6 – Policy 3 Preferred areas: Burnham Beeches SAC

Matrix 7 – Policy 3 Preferred areas: Eversdeon and Wimpole Woods SAC

Matrix I – All Natura 2000 sites

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
Aims & Objectives					
<p>Aim 1: to encourage the efficient use of materials, particularly maximising the use of recycled and secondary aggregates and reducing the use of primary aggregates, thereby reducing reliance on land won sources of material.</p>	<ul style="list-style-type: none"> • Minimising number/size/activity of extraction sites including transport. • Increased requirements for recycling and secondary aggregate processing facilities. • Increased vehicular transport associated with recycling. • Cumulative impacts associated with increased residential and employment development, with associated infrastructure, resource 	<ul style="list-style-type: none"> • Dependent on relative location of recycling/secondary aggregate facilities potential for increased disturbance from traffic. • Dependent on transport routes possible increases in air pollution within vicinity of Natura 2000 sites. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. • In part addressed by Aim 3, and Policies 7, 16, 17 and 18. 	<ul style="list-style-type: none"> • Potential increased disturbance to species. • Potential decrease in habitat quality (through decreased vegetation health and/or water quality). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species or degradation of designated habitats or habitats supporting designated species. 	<ul style="list-style-type: none"> • As a precaution, include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in air quality and water resources.

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
	abstraction, waste and recreation requirements/issues.				
<p>Aim 2: to identify and safeguard mineral resources to ensure that there are sufficient environmentally acceptable sources to maintain an appropriate level of current and future supply in accordance with Government guidance and to prevent the unnecessary sterilisation of mineral resources.</p>	<ul style="list-style-type: none"> • Increase in extraction levels at environmentally acceptable locations. • Increased transport demand potential and environmental impacts on sites outside of Herts. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Changes unlikely to occur to the Natura 2000 site unless at acceptable levels (for example low/negligible negative impacts or beneficial impacts only). • Dependent on location localised increases in traffic may lead to increased disturbance from noise, and air pollution associated with traffic. • In part addressed by Aim 3, and Policies 7, 16, 17 and 18. 	<ul style="list-style-type: none"> • Potential increased disturbance to species. • Potential decrease in habitat quality (through decreased vegetation health and/or water quality). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species or degradation of designated habitats or habitats supporting designated species. 	<ul style="list-style-type: none"> • (Draft) MLP could be more explicit as to how environment acceptable sources are to be identified. • Suggest altering wording in Aim 2, provision 3 to qualify that importation of sand and gravel is only appropriate where this offers more environmentally acceptable sources. • As a precaution,

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
					include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in air quality and water resources.
Aim 3: to ensure that the adverse impacts on the environment and people caused by mineral operations and the transport of minerals are kept, as far as possible, to an acceptable minimum.	<ul style="list-style-type: none"> • Potential to require new rail or water based facilities. • Minimising adverse effects including from traffic, cumulative impacts, and those on designated sites. • Cumulative impacts 	<ul style="list-style-type: none"> • Depending on location of new infrastructure potential for disturbance from noise, air and water pollution. • In part addressed by Policies 16, 17 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> • Potential increased disturbance to species. • Potential decrease in habitat quality (through decreased vegetation health and/or water quality). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species, or degradation of designated habitats or 	<ul style="list-style-type: none"> • As a precaution, include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
	as above.			habitats supporting designated species (dependent on traffic routes, volumes of traffic and local hydrology).	impacts arising from changes in air quality and water resources.
Aim 4: to ensure sensitive working, reclamation and aftercare practises so as to preserve or enhance the overall quality of the environment and promote biodiversity where appropriate.	<ul style="list-style-type: none"> To preserve and enhance the environment and biodiversity including during working and restoration. 	<ul style="list-style-type: none"> Would benefit Natura 2000 sites if adjacent, including as a buffer to other land uses. 	<ul style="list-style-type: none"> Potential for increased robustness of sites, for example through enhanced buffers or connectivity. 	<ul style="list-style-type: none"> None or beneficial depending on location. 	<ul style="list-style-type: none"> Aim 4 (6): make more specific as to protection and enhancement of <i>international, national and local</i> wildlife sites.
Aim 5: to enable stakeholders to contribute to planning for mineral supply in	<ul style="list-style-type: none"> Increase in stakeholder participation. 	<ul style="list-style-type: none"> Potentially greater and more effective protection of Natura 2000 sites through better communication and 	<ul style="list-style-type: none"> Potential beneficial, for example, enhanced 	<ul style="list-style-type: none"> None or beneficial depending on location. 	None suggested

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
Hertfordshire.		understanding.	protection of sites.		
Strategic Policies					
Minerals Policy 1 – Aggregates Supply	<ul style="list-style-type: none"> • Increase number/size/ activity of extraction sites. • Increased transport requirements. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Depending on location potential for land take, disturbance, air/water pollution and reductions in water availability. • Mitigated by Policies 16, 17 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> • Decreases in habitat area very unlikely due to Policy 17. • Potential increased disturbance to species. • Potential decreased habitat quality (decreased vegetation health, or water quality/ quantity). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species, or degradation of designated habitats or habitats supporting designated species (dependent on traffic routes, volumes of traffic, water abstraction/pollution and local 	As a precaution, include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in air quality and water resources.

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
Minerals Policy 2 – Need for mineral working	<ul style="list-style-type: none"> • Increase number/size/ activity of extraction sites. • Increased transport requirements. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Depend on location potential for land take, disturb, air and water pollution. • Addressed by Policies 17 as well as 16 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> • Decreases in habitat area very unlikely due to Policy 17. • Potential increased disturbance to species. • Potential decreased habitat quality (decreased vegetation health, or water quality/ quantity). 	<p>hydrology).</p> <ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species, or degradation of designated habitats or habitats supporting designated species (dependent on traffic routes, volumes of traffic, water abstraction/pollution and local hydrology). 	As above.
Minerals Policy 3 –	<ul style="list-style-type: none"> • See Matrices 2-7 				

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
Sites for sand and gravel extraction and the working of preferred areas					
Minerals Policy 4 – Applications outside preferred areas	<ul style="list-style-type: none"> • Provision of alternative mineral extraction sites, extensions to existing sites and use of borrow pits. • Traffic generation associated with alternative sites. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Potential for land take disturbance, air and water pollution, and reductions in water availability. • Addressed by Policies 16, 17 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> • Decreases in habitat area very unlikely due to Policy 17. • Potential increased disturbance to species. • Potential decreased habitat quality (decreased vegetation health, or water quality/ quantity). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species, or degradation of designated habitats or habitats supporting designated species (dependent on traffic routes, volumes of traffic, water abstraction/pollut 	As above.

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
				ion and local hydrology).	
Minerals Policy 5 – Aggregates Supply	<ul style="list-style-type: none"> Minimising development likely to sterilise minerals. 	<ul style="list-style-type: none"> No Impact. 	<ul style="list-style-type: none"> None likely. 	<ul style="list-style-type: none"> None likely. 	None suggested
Minerals Policy 6 – Other non-energy minerals	<ul style="list-style-type: none"> Potential for additional chalk and brick clay abstraction. Increased transport requirements. Cumulative impacts as above. 	<ul style="list-style-type: none"> Potential for land take disturbance, air and water pollution, and reductions in water availability. In particular addressed by Policies 17 as well as 16 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> Decreases in habitat area very unlikely due to Policy 17. Potential increased disturbance to species. Potential decreased habitat quality (decreased vegetation health, or water quality/ quantity). 	<ul style="list-style-type: none"> Low potential for impacts on site integrity associated with disturbance to designated species, or degradation of designated habitats or habitats supporting designated species (dependent on traffic routes, volumes of traffic, water 	<ul style="list-style-type: none"> As a precaution, include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in air quality and water resources.

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
				abstraction/pollution and local hydrology).	
Minerals Policy 7 – Secondary and recycled materials	<ul style="list-style-type: none"> • Minimising number/size/activity of extraction sites including transport. • Increased requirements for recycling and secondary aggregate processing facilities. • Increased vehicular transport associated with recycling. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Dependent on relative location of recycling/secondary aggregate facilities potential for increased disturbance from noise and pollution associated with traffic. • In part addressed by Policies 7, 16, 17 and 18. 	<ul style="list-style-type: none"> • Potential increased disturbance to species. • Potential decreased habitat quality (through decreased vegetation health, or water quality). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species, or degradation of designated habitats or habitats supporting designated species (dependent on traffic routes, volumes of traffic, water abstraction/pollution and local 	As above.

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
Minerals Policy 8 – Recycling facilities on mineral sites	<ul style="list-style-type: none"> Minimises requirements for recycling and secondary aggregate processing facilities on greenfield sites. Minimising the potential mineral industry footprint. 	<ul style="list-style-type: none"> Potential for continued disturbance through construction, operation and transport including noise and air pollution. In part addressed by Policies 16, 17 and 18. 	<ul style="list-style-type: none"> Potential increased disturbance to species. Potential decreased habitat quality (through decreased vegetation health). 	<p>hydrology).</p> <ul style="list-style-type: none"> Low potential for impacts on site integrity associated with disturbance to designated species or degradation of designated habitats or habitats supporting designated species (dependent on traffic routes and volumes of traffic). 	As above.
Minerals Policy 9 – Contribution to biodiversity	<ul style="list-style-type: none"> Protection and enhancement of biodiversity. 	<ul style="list-style-type: none"> Depending on location no impact or enhanced biodiversity value of Natura 2000 site. 	<ul style="list-style-type: none"> Potential for increased robustness of sites, for example 	<ul style="list-style-type: none"> None or beneficial depending on location. 	None suggested

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
			through enhanced buffers or connectivity.		
Minerals Policy 10 – Railheads and wharves	<ul style="list-style-type: none"> • Potential additional rail and water transport terminals. • Overall decrease road transport and related pollution. • Locally increased traffic generation and associated pollution relating to terminals. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Dependant on location potential disturb including noise and air pollution. • In part addressed by Policies 16, 17 and 18. 	<ul style="list-style-type: none"> • Potential increased disturbance to species. • Potential decreased habitat quality (through decreased vegetation health). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species or degradation of designated habitats or habitats supporting designated species (dependent on traffic routes and volumes). 	As a precaution, include specific wording in Policy 17 to address potential impacts on Natura 2000 sites. Include supporting text emphasising the need to consider impacts arising from changes in air quality and water resources.
Operational Policies					
Minerals Policy 11 - Cumulative impact	<ul style="list-style-type: none"> • Avoidance of unnecessary 	<ul style="list-style-type: none"> • Depending on location either no change or protection of 	<ul style="list-style-type: none"> • Potential for increased 	<ul style="list-style-type: none"> • None or beneficial 	None suggested

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
	cumulative impacts.	Natura 2000 site from cumulative impacts.	robustness of sites.	depending on location	
Minerals Policy 12 – Landscape	<ul style="list-style-type: none"> Protection and enhancement of landscape character and distinctiveness. 	<ul style="list-style-type: none"> Depending on location no change likely or potential protection/enhancement of landscape elements of value to Natura 2000 sites. 	<ul style="list-style-type: none"> Potential for increased robustness of sites, for example through enhanced buffers or connectivity. 	<ul style="list-style-type: none"> None or beneficial depending on location and landscape type. 	None suggested
Minerals Policy 13 – Reclamation scheme	<ul style="list-style-type: none"> The reclamation of land following operation to an appropriate land use without detrimental environmental impact, including agriculture, forestry, amenity and nature conservation. 	<ul style="list-style-type: none"> Potential to benefit adjacent Natura 2000 sites if appropriate. 	<ul style="list-style-type: none"> Potential for increased robustness of sites, for example through enhanced buffers or connectivity. 	<ul style="list-style-type: none"> None or beneficial depending on location. 	None suggested
Minerals Policy 14 – Afteruse	<ul style="list-style-type: none"> Return of the extraction site to a sustainable after-use including recreation 	<ul style="list-style-type: none"> Depending on location potential to complement habitats on the Natura 2000 site, including as a buffer to 	<ul style="list-style-type: none"> Potential for increased robustness of sites, for example 	<ul style="list-style-type: none"> Potentially none or beneficial depending on location and after 	<ul style="list-style-type: none"> As a precaution include afteruse as well as ‘<i>extraction and</i>

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
	and nature conservation.	other land uses. <ul style="list-style-type: none"> Depending on location increased recreation/amenity use may potentially increase use and disturbance to nearby Natura 2000 sites. Conversely may reduce visitor pressure on sites. In part addressed by Policy 17. 	through enhanced buffers or connectivity. <ul style="list-style-type: none"> Potential increased disturbance to species and habitat degradation. 	use. <ul style="list-style-type: none"> Low potential for impacts on site integrity associated with disturbance to designated species, or degradation of designated habitats or habitats supporting designated species (dependent on after use). 	<i>related development</i> in Policy 17(i), and state in Policy 14 that after-uses will not adversely impact upon Natura 2000 sites.
Minerals Policy 15 - Landfill	<ul style="list-style-type: none"> Where appropriate to fulfil restoration proposals use of extraction sites for landfill. Associated traffic 	<ul style="list-style-type: none"> Potential negative impacts include air pollution from transport and groundwater contamination from landfill. Addressed by Policies 13, 16, 17, 18 (including 17 (iv)) 	<ul style="list-style-type: none"> Potential decrease in habitat quality (through decreased vegetation health, water quality or 	<ul style="list-style-type: none"> Low potential for impacts on site integrity associated with degradation of designated 	<ul style="list-style-type: none"> As a precaution include specific wording in Policy 17 to address potential impacts on Natura 2000

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
	<p>generation.</p> <ul style="list-style-type: none"> • Cumulative impacts as above. 	<p>relating to hydrology).</p>	<p>quantity).</p>	<p>habitats or habitats supporting designated species.</p>	<p>sites. Include supporting text emphasising the need to consider impacts arising from changes in air quality and water resources.</p>
Minerals Policy 16 - Transport	<ul style="list-style-type: none"> • Potential increase in non-road transport infrastructure and use. • Potential increased traffic on identified routes (including least environmentally damaging). • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Potential disturbance associated with construction and operation of non-road infrastructure. • Depending on location potential disturbance and pollution associated with increased road transport, including to and from non-road links. • In part addressed by Policies 17 and 18. 	<ul style="list-style-type: none"> • Potential increased disturbance to species. • Potential decreased habitat quality (through decreased vegetation health, water quality or quantity). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with disturbance to designated species or degradation of designated habitats or habitats supporting designated species (dependent on 	<ul style="list-style-type: none"> • As above.

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
				traffic routes and volumes of traffic).	
Minerals Policy 17 – Criteria for the control of mineral development to protect critical capital and other environmental assets	<ul style="list-style-type: none"> Protection of critical environmental assets, with degree of protection relating to international, national or local status, including mitigation where appropriate and protection of water quantity/ quality. 	<ul style="list-style-type: none"> Depending on location protection of the integrity of Hertfordshire’s Natura 2000 sites including from off site impacts on hydrology. 	<ul style="list-style-type: none"> Potential for increased protection and robustness of sites, for example through enhanced buffers or connectivity. 	<ul style="list-style-type: none"> None or beneficial depending on location. 	<ul style="list-style-type: none"> Include for the protection of Natura 2000 sites outside of Hertfordshire.
Minerals Policy 18 – Operational criteria for the control of mineral development	<ul style="list-style-type: none"> Consideration of potential operational and restoration impacts with protection/ enhancement of environmental 	<ul style="list-style-type: none"> Depending on location protection and enhancement of Natura 2000 site biodiversity value. 	<ul style="list-style-type: none"> Potential for increased protection and robustness of sites, for example through enhanced buffers or 	<ul style="list-style-type: none"> None or beneficial depending on location. 	None suggested

Element of the MLP	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Impacts on site integrity	Comments & Suggestions
	quality where appropriate, including noise, air and water, use of appropriate buffers associated with sensitive land uses.		connectivity.		
Minerals Policy 19 – Enforcement of planning control	<ul style="list-style-type: none"> Enforcement of planning control/ conditions and remediation of failures. 	<ul style="list-style-type: none"> Enforcement of any planning conditions relating to mitigation/ protection of Natura 2000 sites. 	<ul style="list-style-type: none"> Potentially beneficial, for example, enforcement of conditions requiring protection or monitoring of condition. 	<ul style="list-style-type: none"> None or beneficial depending on location. 	None suggested

Matrix 2 – Policy 3 Preferred areas: Lea Valley SPA and Ramsar site

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments & Suggestions
Land at former British Aerospace, Hatfield	<ul style="list-style-type: none"> • Development of a new sand/gravel extraction site adjacent to existing sites. After use as potential recreation/amenity land with woodland planting and extension of Watling Chase Community Forest. Approximately 17km from the Natura 2000 site. • Cumulative impacts associated with increased residential and employment development, with 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow: <ul style="list-style-type: none"> - Limited information available relating to groundwater flow. The preferred area falls within the Upper Lee Catchment which is over abstracted and subject to summer drought¹⁴. Therefore there would be potential for any changes in ground/surface water levels to have an impact on the SPA/Ramsar with associated changes in water levels and quality. - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> • Low potential for decrease in habitat quality (through decreased vegetation health or water quality). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with degradation of habitats supporting designated species. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

¹⁴ Environment Agency (2006) *The Upper Lee Catchment Abstraction Management Strategy: Consultation document 2006*. EA

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments & Suggestions
	associated infrastructure, resource abstraction, waste and recreation requirements/issues.				
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • Low potential for increased disturbance to species. 	<ul style="list-style-type: none"> • Low potential for impacts associated with disturbance to designated species. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.
		<ul style="list-style-type: none"> • Contamination - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction. - Dependent on transport routes 	<ul style="list-style-type: none"> • Low potential for decreased habitat quality (through decreased vegetation 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with degradation of habitats 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments & Suggestions
		<p>possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts relating to water quality, for example, prey availability. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone.</p> <ul style="list-style-type: none"> - Addressed in part by Policies 17 and 18. 	<p>health and prey availability).</p>	<p>supporting designated species.</p>	
		<ul style="list-style-type: none"> • Changes in visitor numbers from recreation after use - No increase due to distance from the Natura 2000 site or possible reduction in visitor pressure on SPA/Ramsar site. 	<ul style="list-style-type: none"> • None or possible beneficial due to reduced disturbance and habitat degradation. 	<ul style="list-style-type: none"> • None or very low potential for beneficial effects. 	<p>None suggested</p>

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments & Suggestions
Land adjoining Rickneys Quarry, near Hertford	<ul style="list-style-type: none"> Extension to the existing Rickneys Quarry for gravel/sand extraction. Over 5km from the site. Cumulative impacts as above. 	<ul style="list-style-type: none"> Alterations to local hydrological regime through dewatering, extraction or impeding of flow - Environmental Impact Assessment for current proposals¹⁵ identified no or negligible impacts on hydrology due to depth of the water table and proposed mitigation measures. 	<ul style="list-style-type: none"> Low potential for decrease in habitat quality (through decreased vegetation health or water quality). 	<ul style="list-style-type: none"> Low potential for impacts on site integrity associated with degradation of habitats supporting designated species. 	<ul style="list-style-type: none"> Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.
		<ul style="list-style-type: none"> Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> Low potential for increased disturbance to species. 	<ul style="list-style-type: none"> Low potential for impacts associated with disturbance to designated species. 	<ul style="list-style-type: none"> Emphasise the importance of minimising impacts on Nature 2000 sites in supporting text to Policy 17.
			<ul style="list-style-type: none"> Contamination 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> Low

¹⁵ Hanson Aggregates (2006) *Rickney's Quarry Eastern Extension: Environmental Statement*

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments & Suggestions
		<ul style="list-style-type: none"> - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction. - Dependent on transport routes possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts relating to water quality, for example, prey availability. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. - Addressed in part by Policies 17 and 18. 	<p>potential for decrease in habitat quality (through decreased vegetation health and prey availability).</p>	<p>potential to affect site integrity through degradation of habitats supporting designated species.</p>	<p>importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.</p>
Land at Coursers Road,	<ul style="list-style-type: none"> • Extension to the 	<ul style="list-style-type: none"> • Alterations to local hydrological 	<ul style="list-style-type: none"> • Low 	<ul style="list-style-type: none"> • Low 	<ul style="list-style-type: none"> • Emphasise the

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments & Suggestions
near London Colney	<p>existing Tyttenhanger Quarry for gravel/sand extraction. Restoration back to agricultural land and possible contribution to Watling Chase Community Forest. Over 15km from the site.</p> <ul style="list-style-type: none"> • Cumulative impacts as above. 	<p>regime through dewatering, extraction or impeding of flow:</p> <ul style="list-style-type: none"> - Limited information as to groundwater flow. The preferred area falls within the Upper Lee Catchment which is over abstracted and subject to summer drought¹⁶. Therefore there would be potential for any changes in ground/surface water levels to have an impact on the SPA/Ramsar with associated changes in water levels and quality. - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to hydrology). 	<p>potential for habitat degradation</p>	<p>potential to affect site integrity through reduction in habitat quality and quantity for designated species.</p>	<p>importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.</p>
		<ul style="list-style-type: none"> • Disturbance from construction, operation and traffic (noise) - Likely no change due to distance from the Natura 2000 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	<p>None suggested</p>

¹⁶ Environment Agency (2006) *The Upper Lee Catchment Abstraction Management Strategy: Consultation document 2006*. EA

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments & Suggestions
		<p>site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18.</p>			
		<ul style="list-style-type: none"> • Contamination - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction and possibly agricultural afteruse. - Dependent on transport routes possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. - Addressed in part by Policies 17 	<ul style="list-style-type: none"> • Low potential for decrease in habitat quality (through decreased vegetation health and prey availability). 	<ul style="list-style-type: none"> • Low potential to affect site integrity through degradation of habitats supporting designated species. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments & Suggestions
		<p>and 18.</p> <ul style="list-style-type: none"> • Changes in visitor numbers from recreation after use - No increase due to distance from the Natura 2000 site or possible reduction in visitor pressure on SPA/Ramsar site. 	<ul style="list-style-type: none"> • None or possible beneficial with reduced disturbance to species and habitat degradation. 	<ul style="list-style-type: none"> • None or very low potential for beneficial effects. 	

Matrix 3 – Policy 3 Preferred areas: Chilterns Beechwoods SAC

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
Land at former British Aerospace, Hatfield	<ul style="list-style-type: none"> • Development of a new sand/gravel extraction site adjacent to existing sites. After use as potential recreation/amenity land with woodland planting and extension of Watling Chase Community Forest. Approximately 18km from the Natura 2000 site. • Cumulative impacts associated with increased residential and employment development, with 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow: <ul style="list-style-type: none"> - Limited information as to groundwater flow although generally away from the SAC). The preferred area falls within the Upper Lee Catchment which is over abstracted and subject to summer drought¹⁷. Therefore there would be potential for any changes in ground/surface water levels to have an impact on the SAC with associated changes in water levels and quality. - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> • Low potential for habitat degradation. 	<ul style="list-style-type: none"> • Very low potential to affect site integrity through degradation of designated habitat. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

¹⁷ Environment Agency (2006) *The Upper Lee Catchment Abstraction Management Strategy: Consultation document 2006*. EA

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
	associated infrastructure, resource abstraction, waste and recreation requirements/issues.				
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
		<ul style="list-style-type: none"> • Contamination - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction. - Dependent on transport routes possible increases in traffic 	<ul style="list-style-type: none"> • Very low potential for habitat degradation. 	<ul style="list-style-type: none"> • Very low potential to affect site integrity through degradation of designated habitats. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<p>within vicinity of Natura 2000 sites with associated risk of air pollution impacts, for example, woodland regeneration. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone.</p> <ul style="list-style-type: none"> - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to hydrology). 			
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
		<ul style="list-style-type: none"> • Changes in visitor numbers from recreation afteruse 	<ul style="list-style-type: none"> • None or possible 	<ul style="list-style-type: none"> • None or very low 	None suggested

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<ul style="list-style-type: none"> - No increase due to distance from the Natura 2000 site or possible reduction in visitor pressure on SPA/Ramsar site. 	beneficial with reduced disturbance to species and habitat degradation.	potential for beneficial effects	
Land adjoining Rickneys Quarry, near Hertford	<ul style="list-style-type: none"> • Extension to the existing Rickneys Quarry for gravel/sand extraction. Over 36km from the site. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • No change likely to the Natura 2000 site given the distance, lack of significant pathways and plan policies. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
Land at Coursers Road, near London Colney	<ul style="list-style-type: none"> • Extension to the existing Tyttenhanger Quarry for gravel/sand extraction. 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow: - Limited information as to groundwater flow although generally southerly (not towards 	<ul style="list-style-type: none"> • Very low potential for habitat degradation. 	<ul style="list-style-type: none"> • Very low potential to affect site integrity through degradation 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
	<p>Restoration back to agricultural land and possible contribution to Watling Chase Community Forest. Over 19km from the site.</p> <ul style="list-style-type: none"> • Cumulative impacts as above. 	<p>the SAC). The preferred area falls within the Upper Lee Catchment which is over abstracted and subject to summer drought¹⁸. Therefore there would be potential for any changes in ground/surface water levels to have an impact on the SAC with associated changes in water levels and quality.</p> <ul style="list-style-type: none"> - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to hydrology). 		of designated habitat.	Policy 17.
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested

¹⁸ Environment Agency (2006) *The Upper Lee Catchment Abstraction Management Strategy: Consultation document 2006*. EA

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<ul style="list-style-type: none"> • Contamination - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction. - Dependent on transport routes possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts, for example, woodland regeneration. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. - Addressed in part by Policies 17 and 18. 	<ul style="list-style-type: none"> • Very low potential for habitat degradation. 	<ul style="list-style-type: none"> • Very low potential to affect site integrity through degradation of designated habitats. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.
		<ul style="list-style-type: none"> • Changes in visitor numbers from recreation after use 	<ul style="list-style-type: none"> • None or possible 	<ul style="list-style-type: none"> • None or very low 	None suggested

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<ul style="list-style-type: none"> - No increase due to distance from the Natura 2000 site or possible reduction in visitor pressure on SPA/Ramsar site. 	reduced disturbance to species and habitat degradation	potential for beneficial effects.	

Matrix 4 – Policy 4 Preferred areas: Wormley Hoddesdonpark Woods SAC

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
Land at former British Aerospace, Hatfield	<ul style="list-style-type: none"> • Development of a new sand/gravel extraction site adjacent to existing sites. After use as potential recreation/amenity land with woodland planting and extension of Watling Chase Community Forest. Approximately 17km from the Natura 2000 site. • Cumulative impacts associated with increased residential and 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow: <ul style="list-style-type: none"> - Limited information as to groundwater flow. The preferred area falls within the Upper Lee Catchment which is over abstracted and subject to summer drought¹⁹. Therefore there would be potential for any changes in ground/surface water levels to have an impact on the SAC with associated changes in water levels and quality. - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to 	<ul style="list-style-type: none"> • Very low potential for habitat degradation. 	<ul style="list-style-type: none"> • Very low potential to affect site integrity with potential degradation of designated habitat. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

¹⁹ Environment Agency (2006) *The Upper Lee Catchment Abstraction Management Strategy: Consultation document 2006*. EA

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
	employment development, with associated infrastructure, resource abstraction, waste and recreation requirements/issues.	hydrology).			
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
		<ul style="list-style-type: none"> • Contamination - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of 	<ul style="list-style-type: none"> • Very low potential for habitat degradation. 	<ul style="list-style-type: none"> • Very low potential to affect site integrity through 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<p>ground water contamination due to extraction.</p> <ul style="list-style-type: none"> - Dependent on transport routes possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts, for example, woodland regeneration. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to hydrology). 		degradation of designated habitats.	air quality in supporting text to Policy 17.
		<ul style="list-style-type: none"> • Changes in visitor numbers 	<ul style="list-style-type: none"> • None or possible 	<ul style="list-style-type: none"> • None or very 	<ul style="list-style-type: none"> • None suggested

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<p>from recreation after use</p> <ul style="list-style-type: none"> - No increase due to distance from the Natura 2000 site or possible reduction in visitor pressure on SAC. 	reduced disturbance to species and habitat degradation.	low potential for beneficial effects.	
Land adjoining Rickneys Quarry, near Hertford	<ul style="list-style-type: none"> • Extension to the existing Rickneys Quarry for gravel/sand extraction. Over 5km from the site. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow - Environmental Impact Assessment for current proposal²⁰ identified no or negligible impacts on hydrology due to depth of the water table and proposed mitigation measures. 	<ul style="list-style-type: none"> • Low potential for decrease in habitat quality (through decreased vegetation health or water quality). 	<ul style="list-style-type: none"> • Low potential for impacts on site integrity associated with degradation of habitats supporting designated species. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested

²⁰ Hanson Aggregates (2006) *Rickney's Quarry Eastern Extension: Environmental Statement*

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<p>operation and traffic.</p> <ul style="list-style-type: none"> - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 			
		<ul style="list-style-type: none"> • Contamination - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction. - Dependent on transport routes possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts, for example, woodland regeneration. However, 	<ul style="list-style-type: none"> • Very low potential for habitat degradation. 	<ul style="list-style-type: none"> • Very low potential to affect site integrity through degradation of designated habitats. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<p>dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone.</p> <ul style="list-style-type: none"> - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to hydrology). 			
Land at Coursers Road, near London Colney	<ul style="list-style-type: none"> • Extension to the existing Tyttenhanger Quarry for gravel/sand extraction. Restoration back to agricultural land and possible contribution to 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow: - Limited information as to groundwater flow. The preferred area falls within the Upper Lee Catchment which is over abstracted and 	<ul style="list-style-type: none"> • Very low potential for habitat degradation. 	<ul style="list-style-type: none"> • Very low potential to affect site integrity with potential degradation of designated habitat. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
	<p>Watling Chase Community Forest. Over 15km from the site.</p> <ul style="list-style-type: none"> Cumulative impacts as above. 	<p>subject to summer drought²¹. Therefore there would be potential for any changes in ground/surface water levels to have an impact on the SPA/Ramsar with associated changes in water levels and quality.</p> <ul style="list-style-type: none"> Addressed by Policies 17 and 18 (including 17 (iv) relating to hydrology). 			
		<ul style="list-style-type: none"> Disturbance with increased noise from construction, operation and traffic. Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> Very likely no change. 	<ul style="list-style-type: none"> Very likely no change. 	<ul style="list-style-type: none"> None suggested
		<ul style="list-style-type: none"> Contamination 	<ul style="list-style-type: none"> Very low potential for 	<ul style="list-style-type: none"> Very low 	<ul style="list-style-type: none"> Emphasise the

²¹ Environment Agency (2006) *The Upper Lee Catchment Abstraction Management Strategy: Consultation document 2006*. EA

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<ul style="list-style-type: none"> - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction and possibly agricultural afteruse. - Dependent on transport routes possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts, for example, woodland regeneration. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. 	habitat degradation.	potential to affect site integrity through degradation of designated habitats.	importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<ul style="list-style-type: none"> - Addressed in part by Policies 17 and 18 (including 17 (iv) relating to hydrology). 			
		<ul style="list-style-type: none"> • Changes in visitor numbers from recreation after use - No increase due to distance from the Natura 2000 site or possible reduction in visitor pressure SAC. 	<ul style="list-style-type: none"> • None or possible reduced disturbance to species and habitat degradation. 	<ul style="list-style-type: none"> • None or very low potential for beneficial effects 	None suggested

Matrix 5 – Policy 3 Preferred areas: Epping Forest SAC

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
Land at former British Aerospace, Hatfield	<ul style="list-style-type: none"> • Development of a new sand/gravel extraction site adjacent to existing sites. After use as potential recreation/amenity land with woodland planting and extension of Watling Chase Community Forest. Approximately 17km from the Natura 2000 site. • Cumulative impacts associated with increased residential and employment development, with 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow: <ul style="list-style-type: none"> - Limited information as to groundwater flow. The preferred area falls within the Upper Lee Catchment which is over abstracted and subject to summer drought²². Therefore there would be potential for any changes in ground/surface water levels to have an impact on the SAC with associated changes in water levels and quality. - Addressed by Policies 17 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> • Low potential for habitat degradation. 	<ul style="list-style-type: none"> • Low potential for reduction in designated habitat quality. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

²² Environment Agency (2006) *The Upper Lee Catchment Abstraction Management Strategy: Consultation document 2006*. EA

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
	associated infrastructure, resource abstraction, waste and recreation requirements/issues.				
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
		<ul style="list-style-type: none"> • Contamination - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction. - Dependent on transport routes possible increases in traffic 	<ul style="list-style-type: none"> • Low potential for habitat degradation. 	<ul style="list-style-type: none"> • Low potential to affect site integrity through degradation of designated habitats. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<p>within vicinity of Natura 2000 sites with associated risk of air pollution impacts. Air quality identified as a particular site sensitivity, for example, impacts on woodland regeneration. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. Also key source of pollution is London, with prevailing North East wind.</p> <ul style="list-style-type: none"> - Addressed by Policies 17 and 18 (including 17 (iv) relating to hydrology). 			
		<ul style="list-style-type: none"> • Changes in visitor numbers from recreation after use - No increase due to distance from the Natura 2000 site or possible reduction in visitor 	<ul style="list-style-type: none"> • None or possible reduced disturbance to species 	<ul style="list-style-type: none"> • None or very low potential for beneficial effects 	None suggested

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		pressure on SAC.	and habitat degradation		
Land adjoining Rickneys Quarry, near Hertford	<ul style="list-style-type: none"> • Extension to the existing Rickneys Quarry for gravel/sand extraction. Over 5km from the site. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow - Environmental Impact Assessment for current proposals²³ identified no or negligible impacts on hydrology due to depth of the water table and proposed mitigation measures. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
		<ul style="list-style-type: none"> • Contamination 	<ul style="list-style-type: none"> • Very low 	<ul style="list-style-type: none"> • Very low 	<ul style="list-style-type: none"> • Emphasise the

²³ Hanson Aggregates (2006) *Rickney's Quarry Eastern Extension: Environmental Statement*

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<ul style="list-style-type: none"> - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction. - Dependent on transport routes possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts. Air quality identified as a particular site sensitivity with, for example, impacts on woodland regeneration. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. Also key source of pollution is London, with prevailing North East wind 	potential for habitat degradation.	potential to affect site integrity through degradation of designated habitats.	importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<p>direction.</p> <ul style="list-style-type: none"> - Addressed by Policies 17 and 18 (including 17 (iv) relating to hydrology). 			
Land at Coursers Road, near London Colney	<ul style="list-style-type: none"> • Extension to the existing Tyttenhanger Quarry for gravel/sand extraction. Restoration back to agricultural land and possible contribution to Watling Chase Community Forest. Over 15km from the site. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • Alterations to local hydrological regime through dewatering, extraction or impeding of flow: - Limited information as to groundwater flow. The preferred area falls within the Upper Lee Catchment which is over abstracted and subject to summer drought²⁴. Therefore there would be potential for any changes in ground/surface water levels to have an impact on the SPA/Ramsar with associated changes in water levels and quality. - Addressed in part by Policies 17 and 18. 	<ul style="list-style-type: none"> • Low potential for habitat degradation. 	<ul style="list-style-type: none"> • Low potential for reduction in designated habitat quality. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

²⁴ Environment Agency (2006) *The Upper Lee Catchment Abstraction Management Strategy: Consultation document 2006*. EA

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<ul style="list-style-type: none"> • Disturbance with increased noise from construction, operation and traffic. - Likely no change due to distance from the Natura 2000 site although possible localised increase in traffic. Addressed in part by Policy 16, 17 and 18 (including 17 (iv) relating to hydrology). 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
		<ul style="list-style-type: none"> • Contamination - Likely no change in dust levels due to distance from the Natura 2000 site. - Potential increased risk of ground water contamination due to extraction. - Dependent on transport routes possible increases in traffic within vicinity of Natura 2000 sites with associated risk of air pollution impacts. Air quality identified as a particular site 	<ul style="list-style-type: none"> • Low potential for habitat degradation. 	<ul style="list-style-type: none"> • Low potential to affect site integrity through degradation of designated habitats. 	<ul style="list-style-type: none"> • Emphasise the importance of minimising impacts on groundwater and air quality in supporting text to Policy 17.

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in-combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
		<p>sensitivity with, for example, impacts on woodland regeneration. However, dependent on the length of road adjacent to/within a Natura 2000 site this may not have a significant impact on overall integrity given a 200m wide impact zone. Also key source of pollution is London, with prevailing North East wind direction.</p> <ul style="list-style-type: none"> - Addressed by Policies 17 and 18 (including 17 (iv) relating to hydrology). 			
		<ul style="list-style-type: none"> • Changes in visitor numbers from recreation after use - No increase due to distance from the Natura 2000 site or possible reduction in visitor pressure SAC. 	<ul style="list-style-type: none"> • None or possible reduced disturbance to species and habitat degradation 	<ul style="list-style-type: none"> • None or very low potential for beneficial effects 	None suggested

Matrix 6 – Policy 3 Preferred areas: Burnham Beeches SAC

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
Land at former British Aerospace, Hatfield	<ul style="list-style-type: none"> • Development of a new sand/gravel extraction site adjacent to existing sites. After use as potential recreation/amenity land with woodland planting and extension of Watling Chase Community Forest. Approximately 31km from the Natura 2000 site. • Cumulative impacts associated with increased residential and employment development, with associated infrastructure, 	<ul style="list-style-type: none"> • No changes likely to the Natura 2000 site given the distance from the preferred area and lack of significant pathways. Very low chance of increased traffic within the vicinity of the SAC dependent on proposed routes but unlikely to be significant. Addressed by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested

	resource abstraction, waste and recreation requirements/issues.				
Land adjoining Rickneys Quarry, near Hertford	<ul style="list-style-type: none"> • Extension to the existing Rickneys Quarry for gravel/sand extraction. Approximately 45km from the site. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • No changes likely to the Natura 2000 site given the distance from the preferred area and lack of significant pathways. Very low chance of increased traffic within the vicinity of the SAC dependent on proposed routes but unlikely to be significant. Addressed by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	As above
Land at Coursers Road, near London Colney	<ul style="list-style-type: none"> • Extension to the existing Tyttenhanger Quarry for gravel/sand extraction. Restoration back to agricultural land and possible contribution to Watling Chase Community Forest. Approximately 	<ul style="list-style-type: none"> • No changes likely to the Natura 2000 site given the distance from the preferred area and lack of significant pathways. Very low chance of increased traffic within the vicinity of the SAC dependent on proposed routes but unlikely to be significant. Addressed by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	As above

	29km from the site. <ul style="list-style-type: none">• Cumulative impacts as above.				
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Matrix 7 – Policy 3 Preferred areas: Eversden and Wimpole Woods SAC

Preferred area	Likely effect of the MLP (direct, indirect or secondary effects – either alone or in combination with other plans or projects)	Likely changes to the Natura 2000 sites	Impacts on the Natura 2000 sites as a whole	Significance of the effect	Comments and suggestions
Land at former British Aerospace, Hatfield	<ul style="list-style-type: none"> • Development of a new sand/gravel extraction site adjacent to existing sites. After use as potential recreation/amenity land with woodland planting and extension of Watling Chase Community Forest. Approximately 45km from the Natura 2000 site. • Cumulative impacts associated with increased residential and employment development, with associated infrastructure, 	<ul style="list-style-type: none"> • No changes likely to the Natura 2000 site given the distance from the preferred area and lack of significant pathways. Addressed by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested

	resource abstraction, waste and recreation requirements/issues.				
Land adjoining Rickneys Quarry, near Hertford	<ul style="list-style-type: none"> • Extension to the existing Rickneys Quarry for gravel/sand extraction. Approximately 35km from the site. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • No changes likely to the Natura 2000 site given the distance from the preferred area and lack of significant pathways. Addressed by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested
Land at Coursers Road, near London Colney	<ul style="list-style-type: none"> • Extension to the existing Tyttenhanger Quarry for gravel/sand extraction. Restoration back to agricultural land and possible contribution to Watling Chase Community Forest. Approximately 49km from the site. • Cumulative impacts as above. 	<ul style="list-style-type: none"> • No changes likely to the Natura 2000 site given the distance from the preferred area and lack of significant pathways. Addressed by Policy 16, 17 and 18. 	<ul style="list-style-type: none"> • No impact likely. 	<ul style="list-style-type: none"> • No impact likely. 	None suggested

