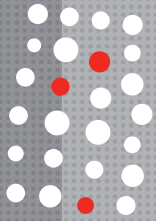


IMPROVING  
**ENFIELD**



North East Enfield  
Habitats Regulations  
Assessment

Proposed Submission Stage

February 2014



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## 1.1 Background

1.1.1 Peter Brett Associates LLP (PBA) has been appointed by Enfield Council to carry out a Habitats Regulations Assessment (HRA) of the Proposed Submission North East Enfield Area Action Plan on behalf of the Council.

## 1.2 Requirements for Plan Assessment

1.2.1 Article 6 of the European Habitats Directive (92/43/EEC) provides the means by which the European Union meets its obligations in relation to natural habitats, flora and fauna under the Bern Convention. The main provision of the Directive relevant to this report is concerned with the assessment and review of plans and projects which have the potential to affect Natura 2000 sites. Natura 2000 sites include: Special Protection Areas established in accordance with the requirements of the Birds Directive (2009/147/EC as amended) and Special Areas of Conservation established in accordance with the requirements of the Habitats Directive.

1.2.2 Articles 6(3) and 6(4) of the Habitats Directive state:

- 6 (3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.
- 6 (4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

1.2.3 Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

1.2.4 The Conservation of Habitats and Species Regulations 2010 (as amended) (Habitats Regulations) transpose into domestic legislation obligations associated with both the European Birds Directive and the Habitats Directive.

Regulation 102 of the Habitats Regulations is the most pertinent in relation to this report. Regulation 102(1) states:

1.2.5 Where a land use plan—

- (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and
- (b) is not directly connected with or necessary to the management of the site,

1.2.6 the plan-making authority for that plan must, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site's conservation objectives.

1.2.7 The term 'European Site' is defined in Regulation 8 of the Habitats Regulations; in practice this term includes Natura 2000 sites and any site over which the provisions of the Habitats Regulations have influence, whether that be through the strict letter of the law or through government policy.

## 1.3 Purpose of this report

1.3.1 This report presents the HRA for the Proposed Submission North East Enfield Area Action Plan (NEEAAP). It sets out the methodology for the HRA, determines the European sites that require consideration with regards to potential effects arising from the NEEAAP, and then goes through the assessment process, assessing likely significant effects on relevant European sites and presents its conclusion. Throughout this report the term 'Habitats Regulations Assessment' covers the whole process required under the Habitats Regulations.

1.3.2 Consultation on this report with appropriate stakeholders will be undertaken as part of the consultation for the Proposed Submission NEEAAP.

1.3.3 It should be noted that within the NEEAAP area and its immediate surrounds there are other sites of nature conservation importance which are not European sites. These other sites are not considered in this report as this report deals with the Habitats Regulations Assessment process only and therefore necessarily focuses on the European sites to which the Habitats Regulations refer. The policies map within the NEEAAP identifies all sites of conservation interest in the area. All forthcoming development within the NEEAAP area should ensure that the presence of sites or species of nature conservation interest are fully taken into account, in accordance with the National Planning Policy Framework and other relevant planning guidance and legislation.

## 2.1 Approach to Plan Assessment

2.1.1 There are a number of pieces of guidance relating to the application of the Habitats Directive and the Habitats Regulations that have been produced by various organisations over recent years. However, until recently no single piece of guidance has provided a clear approach to the methodology for HRA. The approach to the HRA used in this report is that set out recently in The Habitats Regulations Assessment Handbook (DTA Publications Ltd, 2014). The Handbook provides a regularly updated source of guidance on the understanding and interpretation of the Habitats Regulations and consistency in applying their requirements in respect of plans and projects. It is considered that this is the best practice methodology currently available for HRA.

2.1.2 The approach to the HRA process set out the Handbook is related directly to Articles 6(3) and 6(4) of the Habitats Directive and is divided into four distinct stages:

- Stage 1: Screening – Screening plans and projects to see if they would be likely to have a significant effect on a European site
- Stage 2: Appropriate Assessment and the Integrity test – Undertaking an ‘appropriate assessment’ and ascertaining whether the plan or project would have a significant adverse effect on the integrity of the European site
- Stage 3: Alternative solutions – Deciding whether there are alternative solutions which would avoid or have a lesser effect on the European site
- Stage 4: Imperative reasons of overriding public interest and compensatory measures – considering imperative reasons of overriding public interest and securing compensation

2.1.3 These four stages are separate to each other and follow on from each other only if the conclusion of the proceeding stage is such that further assessment is required to meet the requirements of the legislation. Whilst HRA is a step-wise process it is also iterative in that through the production of the Proposed Submission NEEAAP and this HRA there have been amendments made to ensure that the legislation and policy framework requirements are met and minimise the potential for significant effects on European sites alongside delivery of the plan.

2.1.4 To inform stage 1 of the HRA process, and for each of the subsequent stages where these are required, it is imperative to:

- Identify the European sites in and around the plan area;
- Identify and list the qualifying features for these sites;
- Determine the conservation objectives in respect of each qualifying feature; and
- Determine the conservation status of the qualifying features, their condition and the factors influencing them.

2.1.5 This information is gathered from citations, condition assessments and other reports produced for the European sites by Natural England and JNCC. The information regarding the European sites is used to determine the vulnerability of the European sites to potential effects arising from the NEEAAP.

2.1.6 The approach to the first stage of the Habitats Regulations Assessment (screening) takes into account the considerations discussed above with reference to all policies within the Proposed Submission NEEAAP and their potential and/or likely significant effects on the interest of the European sites identified as being within the zone of influence of the NEEAAP. Each of the policies within the Proposed Submission NEEAAP is allocated to one of twelve screening categories which determine whether or not the policies should be screened out from further consideration or taken forward in the HRA process. The twelve categories are described in the Habitats Regulations Assessment Handbook (DTA Publications Ltd, 2014) and set out in Table 1 overleaf.

### In combination effects

2.1.7 In considering the HRA of the Proposed Submission NEEAAP careful consideration was given to the potential in-combination effects of the individual policies within the NEEAAP as well of the NEEAAP in combination with other plans and projects. In-combination effects are considered for those policies of the NEEAAP which could potentially have some effect on a European site but where these are determined to be not significant on their own, in accordance with guidance given in the Habitats Regulations Assessment Handbook (DTA Publications Ltd, 2014) which takes into account case law on this issue.

2.1.8 The plans, reports and projects considered in the production of the Proposed Submission NEEAAP and this HRA are listed in full in the Proposed Submission NEEAAP. Additional references used to provide an evidence base for this HRA are listed in full in section 5 of this report.

Table 1: Screening Categories

Category	Description
A	General Statement of Policy/General – the European Commission recognises that policies which are no more than general statements of policy or general political aspirations should be screened out from further consideration
B	Policies listing general criteria for testing the acceptability/sustainability of proposals should be screened out from further consideration
C	Proposals referred to but not proposed by the plan under consideration should be screened out from further consideration.
D	Environmental protection or site-safeguarding policies can be screened out from further consideration because the implementation of the policies is likely to protect rather than adversely affect European sites and not undermine their conservation objectives.
E	Policies or proposals that steer change in such a way as to protect European sites from adverse effects whose qualifying features may otherwise be affected by change can be screened out from further consideration.
F	Policies or proposals that cannot lead to development or any other change (e.g. design principles, layout or materials) can be screened out from further consideration.
G	Policies or proposals that could not have any conceivable adverse effect on a site because there is no causal link between them and the qualifying features of a European site. Alternatively there may be policies or proposals that would only have positive effects or would not otherwise undermine the conservation objectives for the site can be screened out from further consideration.
H	Policies or proposals the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in combination) of the European site(s) can be screened out from further consideration.
I	Policies or proposals with a likely significant effect on a European site alone need to be taken further in the HRA process (screened in).
J	Policies or proposals not likely to have a significant effect alone – These aspects of a plan would have some effect on a European site's conservation objectives but the effect is not likely to be significant, so they must be checked for in-combination effects (see K and L below) (screened in)
K	Policies or proposal not likely to have a significant effect alone or in combination should be screened out from further consideration
L	Policies or proposals likely to have a significant effect in combination need to be taken further in the HRA process (screened in)

### 3.1 Screening the Plan

3.1.1 A plan can only be exempt from consideration under HRA if the whole of the plan is directly connected with or necessary to the management of the site for its conservation purposes. This is obviously not the purpose of the NEEAAP and so it cannot be exempted from consideration under HRA for this reason. The next stage of the screening process is to determine whether the plan would be likely to have a significant effect on a European site, either alone or in combination with other projects. In order to consider this, information about the European sites that could be potentially affected by the NEEAAP needs to be collated and reviewed.

### 3.2 Screening for European Sites

3.2.1 There is no clear guidance on which European sites should be taken into consideration in the HRA for a plan or project. However, it is intuitive that certainly any sites within a plan area should be taken into consideration and also that sites within a likely zone of influence should be taken into consideration. Whilst the NEEAAP area lies within the urban envelope of greater London and does not in itself support any European sites, the high-density urban nature of the area creates the potential for indirect effects as a result of plan policies, particularly where the plan area is in proximity to those sites which could be affected by issues which cover

a potentially wide zone of influence; such as air pollution effects, aquatic environments, or sites supporting species susceptible to recreational disturbance, for example. For this reason, all European sites within 15km of the NEEAAP have been considered as part of this HRA. The information relating to the qualifying features, conservation status and condition assessment of the relevant European sites have all been taken from the latest version of relevant documentation held on the JNCC and Natural England websites.

3.2.2 Table 2 below lists the European sites within 15km of the NEEAAP area. Figure 1 (Appendix B, page 17) shows the locations of these sites in relation to the NEEAAP plan area.

3.2.3 In considering potential effects of the NEEAAP on these European sites it is important to consider the conservation objectives of the sites and their condition such that the vulnerabilities of the sites can be taken into consideration as part of the HRA. It is this information that is used to determine the potential for the NEEAAP to have a significant effect on the European sites.

3.2.4 Ramsar sites do not have agreed conservation objectives but as Lee Valley Ramsar overlaps with the Lee Valley SPA boundary, it is the conservation objectives of the SPA that are presented in this case. The conservation objectives for SPAs and SACs are set by Natural England and published on their website. The condition assessment and

**Table 2: European sites within 15km of the NEEAAP area**

European site	Qualifying features*
Epping Forest SAC	<p>The habitats and species which are the primary reason for the designation of this site are: Atlantic acidophilous beech <i>Fagus sylvatica</i> forests with holly <i>Ilex aquifolium</i> and sometimes also yew <i>Taxus baccata</i> in the shrub layer and the presence of stag beetle <i>Lucanus cervus</i>.</p> <p>Habitats present as a qualifying feature, but not a primary reason for the designation of this site are: northern atlantic wet heaths with cross-leaved heath <i>Erica tetralix</i> and european dry heaths.</p>
Lee Valley SPA and Ramsar	<p>This site qualifies as an SPA by supporting overwintering populations of European importance of the following species:</p> <p>Bittern <i>Botaurus stellaris</i>, gadwall <i>Anas strepera</i> and shoveler <i>Anas clypeata</i>,</p> <p>This site also qualifies as a Ramsar site due to the presence of vulnerable, endangered, or critically endangered species (bittern) and as it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird (gadwall and shoveler).</p>
Wormley Hoddestonpark Woods SAC	<p>The habitat which is the primary reason for the designation of this site is: sub-atlantic and medio-european oak <i>Quercus petraea</i> or oak-hornbeam <i>Carpinus betula</i> forests.</p>

\*When undertaking an assessment of effects at a site, all features of European importance (both primary and non-primary) need to be considered.



factors affecting conservation status are taken jointly from a review of the condition assessments made of the Sites of Special Scientific Interest Units that make up the European sites and the reports made by JNCC to the European Union regarding the vulnerabilities of the European sites.

**Table 3: Conservation Objectives and Condition of European Sites**

European Site	Conservation Objectives	Condition Assessment and factors influencing conservation status
Epping Forest SAC	<p>Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.</p> <p>Subject to natural change, to maintain or restore:</p> <ul style="list-style-type: none"> <li>- The extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> <li>- The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>- The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>- The populations of qualifying species;</li> <li>- The distribution of qualifying species within the site.</li> </ul>	<p>The Epping Forest SSSI has almost the same boundary as the SAC; two small parts of the Forest to the north and south of the main parts of the SSSI are not included within the SAC. The SSSI condition assessment report by Natural England (December 2013) has recorded that the majority of the units within the SSSI in the SAC boundary are in an unfavourable condition, although many of these are ‘unfavourable recovering’.</p> <p>The potential threats to the site which could influence the conservation status of the habitats and species for which the SAC are designated include:</p> <p>Air pollution and, in particular, the effects of excessive levels of oxides of nitrogen and other pollutants, and the related deposition of acidity and of nitrogen. Many veteran trees display clear symptoms of stress (e.g. thin canopy and die-back of leading shoots), there is excessive growth of bramble, and there are dense stands of nettles along roadsides and ride edges, heathland areas show excessive growth of grasses;</p> <p>Habitat management and grazing management is required to optimise the ecological interest of the site in some units;</p> <p>Recreation pressure is having an adverse effect on some parts of the site (SSSI units 130 and 136 towards the southern end of Epping Forest).</p>
Lee Valley SPA and Ramsar	<p>Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the</p>	<p>The Walthamstow Reservoirs SSSI has the same boundary as the Lee Valley SPA and Ramsar. The SSSI condition assessment report</p>



European Site	Conservation Objectives	Condition Assessment and factors influencing conservation status
	<p>qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.</p> <p>Subject to natural change, to maintain or restore:</p> <ul style="list-style-type: none"> <li>- The extent and distribution of the habitats of the qualifying features;</li> <li>- The structure and function of the habitats of the qualifying features;</li> <li>- The supporting processes on which the habitats of the qualifying features rely;</li> <li>- The populations of the qualifying features;</li> <li>- The distribution of the qualifying features within the site.</li> </ul>	<p>by Natural England (December 2013) has recorded the SSSI as being in an "unfavourable recovering" condition. This reports a slight fall in the number of breeding grey heron and tufted duck. Wintering cormorant, shoveler and tufted duck and breeding pochard remain favourable. However, the condition assessment report states that the site is in good condition and the fall in numbers is no reflection of site management. This indicates that the species which are qualifying features for the SPA and Ramsar remain favourable. No mention is made of bittern.</p> <p>The potential threats to the site which could influence the conservation status of the species for which the SPA is designated include:</p> <p>Maintenance of water levels and water quality;</p> <p>Impacts associated with recreational activities;</p> <p>Maintenance of mosaic of habitat types to provide refuge, foraging, breeding etc. opportunities for the species that use the site.</p>
Wormley Hoddestonpark Woods SAC	<p>Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.</p> <p>Subject to natural change, to maintain or restore:</p> <ul style="list-style-type: none"> <li>- The extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> <li>- The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>- The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>- The populations of qualifying species;</li> <li>- The distribution of qualifying species within the site.</li> </ul>	<p>All the SSSI units for these woods also fall within the boundary of the SAC. In the southern part of the woods, closest to the NEEAAP boundary, all units were considered to be in a Favourable condition (December 2013) apart from one unit in an unfavourable condition. In the northern part of the woods, all units were considered to be in a Favourable condition (December 2013) apart from three units which are in an Unfavourable condition.</p> <p>The potential threats to the site identified in the SSSI information include:</p> <p>Encroachment of sycamore;</p> <p>Small-scale refuse tipping;</p> <p>Appropriate management to maintain and diversity woodland structure;</p> <p>Deer browsing (management needed);</p> <p>Inappropriate use by off-road vehicles in small areas.</p>

### 3.3 Vulnerabilities

3.3.1 All of the European sites discussed above lie outside of the boundary of the NEEAAP. Therefore, potential effects associated with the plan are those where links can be made between activities resulting from the NEEAAP and the vulnerabilities of the interest features of the European sites.

3.3.2 Taking into account the qualifying features of the European sites, their condition and conservation objectives (set out in the preceding section) and the most likely issues arising from a land use plan, the key issues that could result in a potential effect on the European sites within the zone of influence of the NEEAAP are most likely to be those associated with the following vulnerabilities for each European site.

### 3.4 Potential Effects of the NEEAAP

3.4.1 The vulnerabilities of the European sites in the zone of influence of the Proposed Submission NEEAAP were used to focus consideration of each of the policies of the Proposed Submission NEEAAP to determine whether the policies are likely to result in a significant effect on the qualifying features of any of the European sites; either alone or in combination with other policies in the plan, other plans or projects. A table setting out the results of this assessment in full, with reference to the categories given in Table 1, is set out at Appendix 1. The justification in relation to the conclusion given with regards to potential effects on the vulnerabilities of the European sites is considered in the section below and should be read in conjunction with the information provided at Appendix 1.

#### Disturbance from Recreation

3.4.2 The NEEAAP sets out the sites within the Plan area which present opportunities for housing development, to help meet the targets set out in the adopted Core Strategy policy (Core Policy 2: Housing supply and location for new homes) The Council has carefully considered all sites that

may be available for residential development within NEE and has concluded that it is possible to bring forward 552 units net; a shortfall of 448 units from the 1,000 units identified in the Core Strategy. The provision of new housing is likely to result in increased populations in the plan area once implemented. There are also some policies which propose to encourage access and improve connectivity between the Lee Valley Regional Park (LVRP) and the NEE area (e.g. policies 8.1-8.3). Both these factors could potentially lead to increased disturbance as a result of increased recreation pressure on the Lee Valley SPA/Ramsar (which forms part of the LVRP); in particular the wintering bird populations for which the SPA is designated.

3.4.3 As previously described, the interest of the Lee Valley SPA is associated with its use in winter by three bird species: bittern, gadwall and shoveler.

3.4.4 Of these three species, the bittern is perhaps the species most susceptible to disturbance as it is a known secretive species (RSPB, undated). The waterbody within the NEEAAP (King George's Reservoir) is not known to support this species, nor does it support the extensive areas of reedbed favoured by this species as wintering habitat in the Lee Valley (Harris, 2006). Therefore the King George's reservoir is not likely to support this species, and therefore unlikely to provide a significant supporting role to those areas of the Lee Valley Park that do.

3.4.5 A recent study (Briggs et al. 2012) of a reservoir complex in south west London showed that disturbance levels and food resources both strongly influenced habitat use by gadwall and shoveler, and that birds responded sensitively to changes in these and other environmental variables (Briggs et al. 2012). Gadwall tended to use one or neighbouring waterbodies almost exclusively, favouring those with low disturbance levels and/or with refuge areas within them. Meanwhile, shoveler used a complex of waterbodies and it was postulated that movements between waterbodies by shoveler were prompted by both food availability and disturbance

**Table 4: European Site Vulnerabilities**

European site	Potential effects associated with the NEEAAP
Epping Forest SAC	Habitat loss/damage from recreation pressures; air pollution issues (deposition of nitrogen and acidifying rain).
Lee Valley SPA and Ramsar	Disturbance of birds from recreation and/or development pressures; water level and water quality issues.
Wormley Hoddestonpark Woods SAC	Habitat loss/damage from recreation pressure.

(Briggs et al., 2012). The Lee Valley SPA occurs 4.8km south of the NEEAAP but it lies within a complex of waterbodies along the Lee Valley which include the King George's Reservoir. The King George's reservoir is itself included as part of the Chingford Reservoirs SSSI which is designated as one of the major wintering grounds for wildfowl and wetland birds in the London area and holds nationally important numbers of some species. This includes wintering populations of shoveler (but no Gadwall) so there is a possibility, given that shoveler is known to use a complex of waterbodies (Briggs et al., 2012) that the SSSI waterbody of King George's reservoir within the NEEAAP area could provide a supporting role to the interest of the SPA.

3.4.6 However, recent numbers of shoveler recorded using the King George's reservoir (average number 20.25 (Natural England, Dec 2013)) do not support this view. The low number of shoveler in recent years is not attributed to management of the reservoirs and may be affected by background population trends or site preference (Natural England, 2013). Natural England and Thames Water are investigating wintering bird data in detail to establish possible causes, and it has been agreed that site conditions will be maintained at current levels in order to provide continued opportunity for use by wintering birds. Increased monitoring effort has also been agreed (Natural England, 2013). However, immediate recreational effects on the King George's reservoir are not of concern in relation to the interest of the SPA. The SSSI interest should of course be protected in the bringing forward of any development in the NEEAAP area but this is not a matter for this HRA.

3.4.7 Whilst effects on the reservoir within the NEEAAP itself appear to not be of concern in relation to the supporting role the King George reservoir plays to the interest of the Lee Valley SPA, the potential effects of the NEEAAP on the interest of the European sites themselves in relation to increased disturbance from recreational use remain given the proximity of the sites to the NEEAAP area. This is particularly the case for the Lee Valley SPA/Ramsar which has been identified as being vulnerable to recreational disturbance. To mitigate against any potential effects, the NEEAAP states that Enfield Council will work with appropriate partners with regards to the proposed Green Network and other developments which could have an effect, or an influence on, the recreational use of the LVRP.

3.4.8 The Lee Valley Park Development Framework sets out what the Lee Valley Regional Park Authority (LVRPA) wants to achieve within the Lee Valley and how the LVRPA plan to balance competing demands. Whilst some elements of the Framework are yet to be finalised, the LVRPA is committed to management of the Park to improve visitor access whilst protecting the biodiversity interest of the Park; particularly those areas which lie within the Lee Valley Special Protection

Area and Sites of Special Scientific Interest (LVRPA, 2010; UE Associates, 2009). Given these measures and commitments given within the NEEAAP, no significant effects relating to disturbance of the interest of the Lee Valley SPA /Ramsar are anticipated as a result of the NEEAAP policies, either alone or in combination, and therefore these policies have been scoped out from further consideration in the HRA process.

### Disturbance and other effects from development

3.4.9 The NEEAAP includes a policy which sets out the opportunities for employment-led mixed-use development at Ponders End Waterfront (Policy 12.1). This includes the proposal to develop building frontages overlooking waterways, streets and spaces within the development, to create views through the development to the water and to the reservoir embankments, to provide new paddle-sport facilities and to provide new pedestrian/cycle access linking into the Lee Valley Regional Park. Whilst disturbance from construction or recreation associated with this proposed development is unlikely to have a significant effect on the Lee Valley SPA interest, as discussed in the section above, other indirect effects associated with development in proximity to the Lee Valley SPA/Ramsar needs careful consideration to ensure no significant effects on the interest of the SPA. This is acknowledged in the wording of the policy which states that 'any proposals must not have any indirect adverse effect on the ecological interest of the LVRP (e.g. through light pollution, water quality/level issues, increased recreational disturbance to sensitive areas, disturbance during construction) so as to avoid effects on the European site within the LVRP. Given these measures and commitments included within the NEEAAP, no significant effects are anticipated as a result of this policy, either alone or in combination, on the interest of the Lee Valley SPA/Ramsar and therefore this policy has been scoped out from further consideration in the HRA process.

### Damage from recreation

3.4.10 The Natural England condition assessment report for Epping Forest identifies that recreation pressure is having an adverse effect on some parts of the site but this is limited to a small area (parts of units 130 and 136 towards the southern end of Epping Forest). Similarly, the Wormley Hoddestonpark Woods condition assessment report identifies small-scale refuse tipping and inappropriate use by off-road vehicles in small areas. There is the potential that proposed development within the NEEAAP area in combination with other policies or proposals for development in the areas around these European sites could result in increased recreational use of the two sites identified above by the general public. It is difficult to provide any more specific information about potential recreational affects as whilst the location of sites allocated for development have been identified within the

NEEAAP, there remains a lack of detail relating to the design of the developments that will be brought forward in this area, and uncertainty remains in relation to other possible developments which could be brought forward in the wider area that could act in combination with the NEEAAP development allocations.

3.4.11 The Epping Forest SAC and Wormley Hoddestonpark Woods SAC are both subject to management plans which aim to maintain and enhance the ecological interest of each site. The Corporation of London own and manage Epping Forest. An updated Management Plan for Epping Forest is being finalised but current management work is following the previous management plan (2004-2010) until this comes into effect ([www.cityoflondon.gov.uk](http://www.cityoflondon.gov.uk)). Wormley Hoddestonpark Woods form part of the Broxbourne Woods National Nature Reserve (NNR). The NNR is jointly managed by the current owners: Hertfordshire County Council owns Broxbourne Wood and Bencroft Wood, while the Woodland Trust owns Hoddestonpark Wood and Wormley Wood. Both are approved to manage these woodlands by Natural England under Section 35 of the Wildlife and Countryside Act, 1981 (as amended). Hoddestonpark Woods and Wormley Woods have their own management plans put together by the Woodland Trust. These management plans provide excellent information about the woodlands and identify the opportunities to encourage and facilitate use of the woodlands by the public without damaging their interest through the provision of informative displays, well-signed paths and literature.

3.4.12 The chapter of the NEEAAP relating to housing acknowledges the potential for indirect effects on European sites as a result of housing development within the areas allocated in the NEEAAP, in particular as a result of increased populations. The NEEAAP mitigates for these potential effects by including a statement which requires that implementation of the policies and proposals of the Plan must be done in a way which avoids adverse effects on the integrity of any of the identified European sites. Given this, no significant effects relating to damage from recreational use are anticipated as a result of this policy, either alone or in combination, and this policy has therefore been scoped out from further consideration in the HRA process.

### Air pollution

3.4.13 Air pollution effects are identified as a particular vulnerability associated with Epping Forest SAC (Natural England, 2013). The main source of air pollution in the borough in which Epping Forest is located is road traffic, with levels of nitrogen dioxide being of particular concern (Essex Air, 2013). Epping Forest's epiphytic bryophyte population has been in decline due to the death of pollards, shading and pollution from acid rain. The reintroduction of pollarding and

wood pasture management in the 1990s is helping to reverse the decline. The slow recovery can also be attributed to the reduction of atmospheric pollutants since the passing of the 1956 Clean Air Act. (JNCC, 2011). However, the concern remains that increased populations in NEE as a result of policies in the NEEAAP could result in increased traffic and that changes to energy production proposed in the NEEAAP have the potential to also increase nitrogen dioxide outputs.

3.4.14 A number of policies in section 4 of the NEEAAP are associated with improving the road network design and to encourage modal shift from private car transport to use of public transport. Both these measures will act to reduce outputs of nitrogen dioxide and other air pollutants from traffic sources. The other policy within the NEEAAP which could result in changes to air pollution is the policy relating to sustainable energy (policy 9.1). This policy sets out aspirations for sustainable energy and how the Council aims to achieve this through the Lee Valley Heat Network and the provision of a Combined Heat and Power Plants (CHPs). However, the policy also includes a statement that any changes in energy production will ensure no net addition to air pollutant emissions and, where possible, a reduction in such emissions. This is in line with the Mayor of London's Air Quality Strategy (Great London Authority, 2010) and other relevant guidance and legislation relating to air quality requirements. This will ensure no significant effects on the European sites as a result of this policy. Given these measures and commitments given within the NEEAAP, no significant effects on the Epping Forest SAC are anticipated as a result of implementation of these policies, either alone or in combination, and they have therefore been scoped out from further consideration in the HRA process.

### Water levels and quality

3.4.15 Lee Valley SPA is part of a network of waterbodies and waterways that form the Lee Valley Regional Park. Adverse changes to water levels and water quality are identified as potential factors that could affect the conservation status of the SSSI (Natural England 2013); this could also affect the integrity of the SPA. The key issues that could affect water levels and quality relate to abstraction of surface water for public supply and waste water affecting the water quality through eutrophication.

3.4.16 The need for development in south east England is not only identified in the NEEAAP but also in plans for the whole south east. This is acknowledged in the River Basin Management Plan (RBMP) for the Thames Basin (within which the Lee Valley sits) that has been prepared under the Water Framework Directive by the Environment Agency (Environment Agency, 2009). The RBMP focuses on the measures required to achieve the protection, improvement and sustainable use



of the water environment. The NEEAAP identifies the need to work with the Environment Agency, Thames Water and other parties who are responsible for the management of water levels and quality within the Lee Valley and, in accordance with appropriate plans and strategies (e.g. Environment Agency, 2013), to ensure that any plans or proposals for development which could potentially affect the Lee Valley are developed in a sustainable way and in accordance with the requirements of the Water Framework Directive. This will ensure that development within the NEEAAP is brought forward in such a way so as to avoid any adverse effects on the integrity of the European sites in the area, in particular the Lee Valley SPA. Given these measures and the commitments given within the NEEAAP, no significant effects are anticipated as likely to arise as a result of the NEEAAP, either alone or in combination, and therefore this plan does not require further consideration in the HRA process.

4.7.1 Given the adjustments that have been made to the policies in the Proposed Submission NEEAAP as a consequence of the iterative approach to plan development, all likely significant effects alone or in combination, on European sites within the zone of influence of the NEEAAP area, have been avoided. The NEEAAP provides an appropriate framework for future development and regeneration in North East Enfield whilst avoiding the potential for likely significant effects on European sites. There is therefore no requirement for the Habitats Regulations Assessment process to further consider potential effects of the NEEAAP on European sites.

- 5.7.1 Briggs, B D J; Hill, D A; Gosler, A G. Habitat selection and waterbody-complex use by wintering Gadwall and Shoveler in South West London: Implications for the designation and management of multi-site protected areas. *Journal for Nature Conservation* 20: 200– 210
- 5.7.2 DTA Publications Ltd (2014) *The Habitats Regulations Assessment Handbook*. DTA Publications Ltd. <http://www.dtapublications.co.uk/>
- 5.7.3 Environment Agency (2009) *River Basin Management Plan. Thames River Basin District*. Environment Agency.
- 5.7.4 Environment Agency (2013) *London Abstraction Licensing Strategy. A licensing strategy to manage water resources sustainably*. February 2013. Environment Agency.
- 5.7.5 Essex Air (2013) *Epping Forest District Council*. <http://www.essexair.org.uk/AQInEssex/LA/EppingForest.aspx>
- 5.7.6 Greater London Authority (2010) *Clearing the air. The Mayor's Air Quality Strategy*. Greater London Authority.
- 5.7.7 Harris, A (2006) *Roosting behaviour of wintering Eurasian Bitterns in the Lee Valley*
- 5.7.8 Hockin, D; Ounsted, M; Gormant, M, Hill, D; Kellert, V and Barker, M A (1992) *Examination of the Effects of Disturbance on Birds with Reference to its Importance in Ecological Assessments*. *Journal of Environmental Management* 36:253-286
- 5.7.9 JNCC (2011) *Epping Forest Natura 2000 Data Form*. JNCC
- 5.7.10 Lee Valley Regional Park Authority (2010) *Park Development Framework. Park Development Scheme*. <http://www.leevalleypark.org.uk/parkframework/development/pdfs/ParkDevelopmentSchemeJuly2010.pdf>
- 5.7.11 Natural England (2013) *Chingford Reservoirs. Condition of SSSI units*. Natural England
- 5.7.12 Natural England (2013) *Epping Forest. Condition of SSSI units*. Natural England
- 5.7.13 Natural England (2013) *Wormley Hoddestonpark Woods. Condition of SSSI units*. Natural England
- 5.7.14 RSPB (undated) *The Bittern*. <http://www.rspb.org.uk/wildlife/birdguide/name/b/bittern/index.aspx>
- 5.7.15 Thames Water (2013) *Revised Draft Water Resources Management Plan 2015-2040*. Thames Water
- 5.7.16 UE Associates (2009) *Habitats Regulations Assessment for the Lee Valley Park Development Framework. Screening Statement*. Lee Valley Regional Park Authority.

## Appendix A – Policy Screening

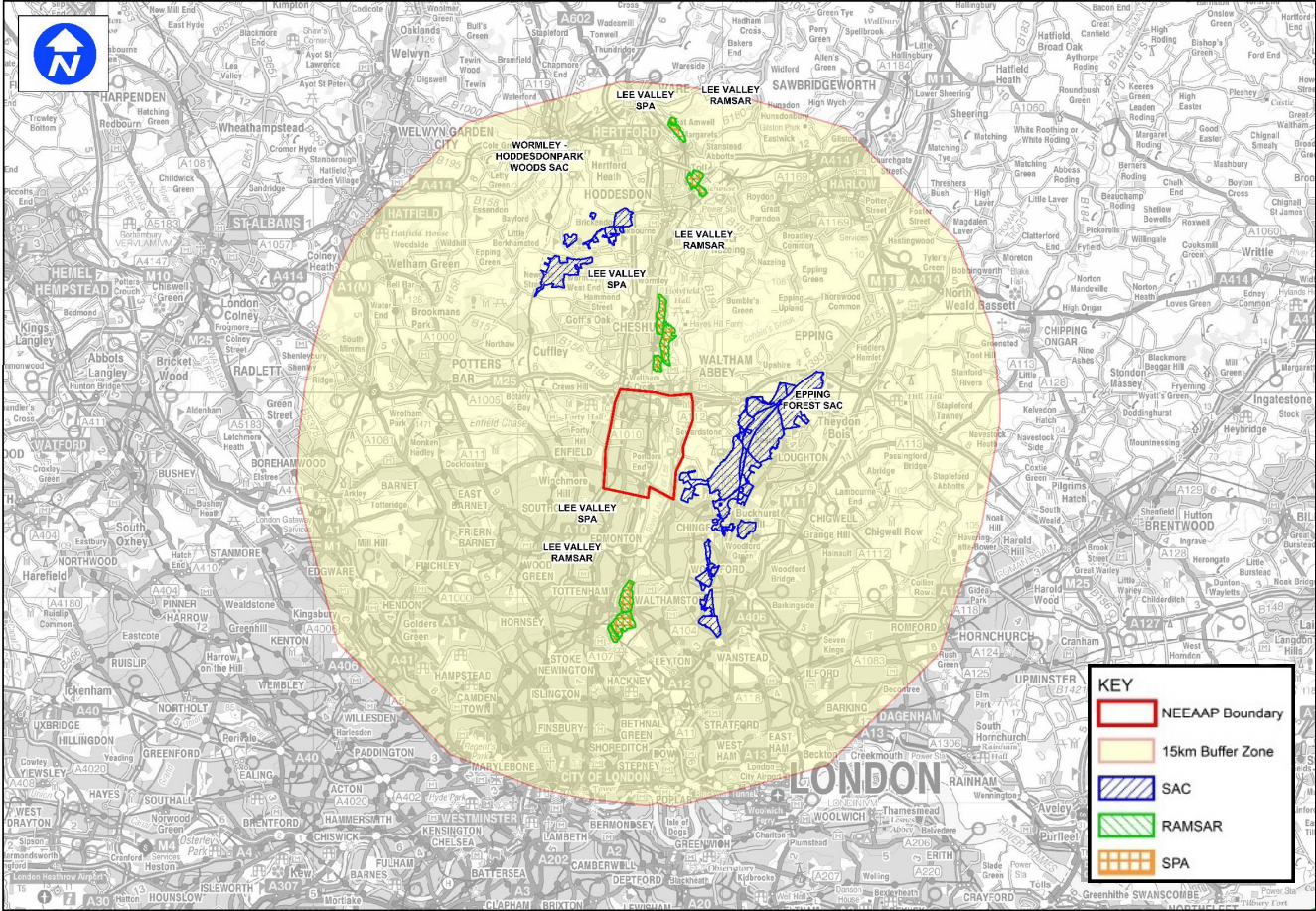
NEEAAP Reference	Subject	Nature	Screening Category	Scope in/out
Sections 1-3	Introductory text, Area Context and Opportunities, Vision and Objectives.	Administrative text, background and context and general aspirations or objectives of the NEEAAP	A	Out
Policies 4.1-4.10	Encouraging Modal Shift, movement of all forms of transport and the quality of the pedestrian and cycling environment	Improvement of routes for pedestrians and cyclists to encourage move away from car use and improvement of other modes of transport to ease congestion on roads.	G	Out
Policies 4.11-4.13	Improving bus routes and services	Improving quality and availability of public transport to discourage use of car	G	Out
Policy 4.14	Design of Road Network	Council will work towards developing a comprehensive network design specific to road users and the functions served in accordance with the Road Task Force July 2013. All to do with reducing congestion, improving journey times and encouraging modal shift.	C and G	Out
Policy 5.1 and 5.2	Affordable Housing Targets and Mix of Housing types	Sets out acceptable percentage of affordable housing and mix of housing types for new residential developments.	F	Out
Policy 5.3	Improving public realm	Sets out principles to developing a strategy for public realm improvements to support the policies in chapter 4 and 8	C and G	Out
Policy 6.1-6.3	Improving existing industrial areas and retail parks	Sets out aspirations for improvements to be made to existing industrial areas and retail parks, including improving all modes of transport and encouraging modal shift.	A and G	Out
Policies 7.1	Community facilities and services	Describes how Council will monitor need for community facilities and areas where these are required.	A and G	Out
Policies 8.1-8.3	Green network	Sets out where the Council would like new green spaces to be created, how existing green spaces can be improved and how these should be linked together. Guides local people to engage with and use these areas. (instead of European sites) and encourages use of Lee Valley only in areas of least sensitivity	E	Out
Policy 8.4	Food growing	Encouraging local food growing	G	Out



NEEAAP Reference	Subject	Nature	Screening Category	Scope in/out
Policy 9.1	Sustainable energy	Sets out aspirations for sustainable energy and how the Council aims to encourage this through the Lee Valley Heat Network and provision of CHPs. Acknowledges potential for changes in air pollutants and states any change must result in no net change, or reduction, in air pollution as a result of energy generation in the plan area.	G	Out
Policy 10.1-10.2	Ponders End Central, Ponders End High Street regeneration	Sets out principles for redevelopment of these areas	F	Out
Policy 11.1 and 11.2	Ponders end and South Street regeneration	Sets out principles and aspirations for redevelopment of these areas.	F	Out
Policy 11.3	Ponders End Station	Proposes improvements to the station to encourage modal shift from private to public transport	G	Out
Policy 12.1	Ponders End Waterfront	Proposes improvements to the Ponders End Waterfront which include measures to enhance biodiversity interest; redevelopment of buildings will replace existing run-down buildings with new ones with improved frontage. Makes specific reference to avoiding impacts on the LVRP	G	Out
Policy 13.1	Enfield Highway Local Centre	Sets out principles for the development of a street design scheme. Does not propose any significant new development, simply improvements to existing. Changes may indeed improve traffic flow.	A and G	Out
Policy 14.1-14.2	Enfield Wash Local Centre	Sets out principles for the development of a street design scheme and principles for redevelopment of the Co-op store. Does not propose any significant new development simply improvements to existing. Changes may indeed improve traffic flow.	A and G	Out
Policy 15.1	Turkey Street Station and Conservation Area	Sets out principles for the development of a street design scheme. Does not propose any significant new development simply improvements to existing. Changes may indeed improve traffic flow.	A and G	Out
Policy 16.1	Southbury Station Area	Sets out principles for the development of a street design scheme. Does not propose any significant new development simply improvements to existing. Changes may encourage transport mode shift.	A and G	Out

NEEAAP Reference	Subject	Nature	Screening Category	Scope in/out
Policy 17.1 - 17.2	Enfield Lock Station Area	Sets out principles for the development of a street design scheme and improvements to the station in the short and long-term. Does not propose any significant new development simply improvements to existing. Changes may encourage transport mode shift.	A and G	Out
Policy 18.1	Enfield Lock Conservation Area	Sets out principles for the development of a public realm improvement scheme around the lock. Does not propose any significant new development simply improvements to existing. Changes may encourage transport mode shift.	A and G	Out
Policy 19.1- 19.2	Brimsdown Station Area	Sets out principles for the development of a street design scheme and improvements to the station area in the short and long-term. Does not propose any significant new development simply improvements to existing. Changes may encourage transport mode shift.	A and G	Out
Sections 20- 23	Delivery and Implementation, Appendices	Administrative text, definitions and references	A	Out

Appendix B - Figure 1





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