

Local Flood Risk Management Strategy: 2014-2020

Habitats Regulation Assessment



June 2014

REVISION SCHEDULE					
Rev	Date	Details	Prepared by	Reviewed by	Approved by
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Project Number

47069163

Contact Details

URS Infrastructure and Environment UK Ltd
 6-8 Greencoat Place
 London
 SW1P 1PL
 United Kingdom

Telephone: +44(0)20 7798 5000

Fax: +44(0)20 7798 5001

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1 INTRODUCTION

1.1 Background

This document forms the Habitats Regulations Assessment (HRA) of the Local Flood Risk Management Strategy ('the Strategy') for the London Borough of Croydon.

It is a requirement of the EU 'Habitats Directive' 1992 (hereafter referred to as the Habitats Directive)¹ and the Conservation of Habitats and Species Regulations 2010 (Box 1) that 'land use plans' are subject to an 'Appropriate Assessment' (AA) if it is likely that they will lead to significant [adverse] effects on a Natura 2000 site (Special Areas of Conservation (SACs), and Special Protection Areas (SPAs)). As a matter of UK Government policy Ramsar sites², candidate Special Areas of Conservation (cSAC) and proposed Special Protection Areas (pSPA) are given equivalent status. These protected sites are collectively referred to as 'European sites' in this report.

Box 1: The legislative basis for Appropriate Assessment

EU 'Habitats Directive' 1992

"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."

Article 6 (3)

Conservation of Habitats and Species Regulations 2010 (as amended)

"A competent authority, before deciding to ... give any consent for a plan or project which 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) ... must make an appropriate assessment of the implications for the site in view of that sites conservation objectives ... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site ..."

The Habitats Directive applies the precautionary principle to protected areas; plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. This is in contrast to the Strategic Environmental Assessment (SEA) Directive which does not prescribe how plan or programme proponents should respond to the findings of an environmental assessment; it simply says that the assessment findings (as documented in the 'environmental report') should be 'taken into account' during preparation of the plan or programme. In the case of the Habitats Directive, potentially damaging plans and projects may be permitted only if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation will be necessary to ensure the overall integrity of the Natura 2000 network of protected sites.

As assessment of plans has developed, the term Habitats Regulations Assessment (HRA) has come into currency for describing the overall assessment process (including screening to determine whether significant adverse effects are likely or not) and this term is used below when necessary to distinguish the process from the 'Appropriate Assessment' stage itself.

¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

² Wetlands of International Importance designated under the Ramsar Convention 1979

1.2 Scope of HRA

The scope of the HRA includes all European sites within the London Borough of Croydon (the coverage of this 'land use plan') and additionally any European sites outside the Borough that are designated for features that could potentially be significantly affected by measures or policies within the land use plan.

Croydon Council, as the Lead Local Flood Authority, is given provisions through the Flood Risk Regulations 2009 and the Flood and Water Management Act 2010 to coordinate and manage the risk of flooding from 'local' sources, within the London Borough of Croydon; these include:

- Surface runoff – surface water prior to entry into watercourses;
- Groundwater – subterranean water in contact with substrates; and
- Watercourses – other than those on the Environment Agency's statutory map of main rivers (therefore including ditches, ponds, lakes and streams).

Flooding from main rivers and sewers are the responsibility of the Environment Agency and water companies respectively.

The Strategy sets out how the local sources of flooding will be managed over future years. Therefore any European sites that could be affected by strategies, policies or measures arising through the Strategy should be subject to HRA. This will include any sites that are affected by water levels or pollution and which could lie within the catchment of or downstream of local flooding events in South London.

The following European sites lie within London:

- Richmond Park SAC in the London Borough of Richmond;
- Wimbledon Common SAC in the London Boroughs of Merton and Wandsworth;
- Epping Forest SAC in the London Borough of Waltham Forest;
- Lee Valley SPA/Ramsar site in the London Borough of Waltham Forest; and
- South West London Waterbodies SPA/Ramsar site, a small part of which lies within the London Borough of Hounslow.

The location of these European sites are shown in Figure 1 and described in Appendix A.

In addition, Windsor Forest & Great Park SAC lies 6km to the west of London and Wormley Hoddesdonpark Woods SAC lies 4.5km north of London. These are the two closest European sites outside London. The Thames Estuary & Marshes SPA/Ramsar site lies 14km east (downstream) of London and is hydrologically connect to London via the River Thames.

For the purposes of this assessment, Windsor Forest & Great Park SAC, Epping Forest SAC, Lee Valley SPA and Wormley Hoddesdonpark Woods SAC are all scoped out of this analysis as they are geographically remote from the London Borough of Croydon (most being in North London on the far side of the River Thames) and hydrologically disconnected from the Borough. Those sites are therefore not discussed further.

Richmond Park SAC is also scoped out of assessment since it is internationally designated solely for its population of stag beetle. The persistence of the stag beetle population is primarily dependent on the Park retaining an adequate supply of standing and partially buried dead wood (in which stag beetles spend most of their life cycle as larvae) and this would not be affected by local flood risk management.

The Thames Estuary & Marshes SPA/Ramsar site is also scoped out of assessment because it is geographically remote from the London Borough of Croydon (lying over 30km to the east), because flood risk management associated with the River Thames lies outside the remit of the Strategy (being an Environment Agency responsibility) and because the London Borough of Croydon is 7km from the River Thames at its closest.

The South West London Waterbodies SPA/Ramsar site is also scoped out of the assessment because these waterbodies consist of a series of sealed reservoirs (such as Wraysbury Reservoir or Staines Reservoirs) or flooded former gravel pits (such as Wraysbury Pits). The reservoirs are separated hydrologically from any influence due to local flood risk management. While the flooded gravel pits could potentially be affected by anything that changed the water table or affected groundwater the nearest gravel pit component of the SPA/Ramsar site is Thorpe No.1 Gravel Pit in Spelthorne 26km to the west of the London Borough of Croydon. It is not feasible that any flood risk management activities in the London Borough of Croydon would affect the water table so remotely from the Borough.

Wimbledon Common SAC does have moderate hydrological sensitivity being internationally designated partly for its areas of wet heathland which are associated with a high local water table on the Common. However, it is located almost 7km from the London Borough of Croydon at its closest. It is not feasible that any flood risk management activities in the London Borough of Croydon would affect the water table so remotely from the borough.

It is therefore concluded that all European sites can be scoped out of this assessment due to a lack of pathways linking them to local flood risk management in the London Borough of Croydon and therefore no further HRA is required.

2 CONCLUSIONS

2.1 Conclusions and Recommendations

The Local Flood Risk Management Strategy for the London Borough of Croydon has been screened out as having no likely effects on any European sites due to a lack of pathways linking them to local flood risk management in the London Borough of Croydon and therefore no further HRA is required.

APPENDIX A – EUROPEAN SITES

Richmond Park SAC

Richmond Park has a large number of ancient trees with decaying timber. It is at the heart of the south London centre of distribution for stag beetle *Lucanus cervus*, and is a site of national importance for the conservation of the fauna of invertebrates associated with the decaying timber of ancient trees.

Features of European interest³

The site is designated as a SAC for its:

- Stag beetle

Wimbledon Common SAC

Wimbledon Common has a large number of old trees and much fallen decaying timber. It is at the heart of the south London centre of distribution for stag beetle *Lucanus cervus*, and a relatively large number of records were received from this site during a recent nationwide survey for the species. The site supports a number of other scarce invertebrate species associated with decaying timber.

Features of European Interest

The site is designated as a SAC for its:

- Wet heathland
- Dry heathland
- Stag beetle

South West London Waterbodies SPA/Ramsar site

The South-West London Water Bodies SPA comprises a series of embanked water supply reservoirs and former gravel pits that support a range of man-made and semi-natural open water habitats. The reservoirs and gravel pits function as important feeding and roosting sites for wintering wildfowl, in particular Gadwall *Anas strepera* and Shoveler *Anas clypeata*, both of which occur in numbers of European importance.

Features of European Interest

The site is designated as a SPA/Ramsar site for its wintering:

- Gadwall
- Shoveler

Windsor Forest & Great Park SAC

Windsor represents old acidophilous oak woods in the south-eastern part of its UK range. It has the largest number of veteran oaks *Quercus* spp. in Britain (and probably in Europe), a consequence of its management as wood-pasture. It is of importance for its range and diversity of saproxylic invertebrates, including many rare species (e.g. the beetle *Lacon querceus*), some known in the UK only from this site, and has recently been recognised as having rich fungal assemblages. Windsor Forest and Great Park has been identified as of potential international importance for its saproxylic invertebrate fauna by the Council of Europe.

³ Features of European Interest are the features for which a European site is selected. They include habitats listed on Annex 1 of the Habitats Directive, species listed on Annex II of the EC Habitats Directive and populations of bird species for which a site is designated under the EC Birds Directive.

Violet click beetle *Limoniscus violaceus* was first recorded at Windsor Forest in 1937. The site is thought to support the largest of the known populations of this species in the UK. There is a large population of ancient trees on the site, which, combined with the historical continuity of woodland cover, has resulted in Windsor Forest being listed as the most important site in the UK for fauna associated with decaying timber on ancient trees. The site was also identified as of potential international importance for its saproxylic invertebrate fauna by the Council of Europe

Features of European Interest

The site is designated as a SAC for its:

- Oak and beech forest
- Violet click beetle (*Limoniscus violaceus*)

Wormley Hoddesdonpark Woods SAC

Wormley Hoddesdonpark Woods in south-east England has large stands of almost pure hornbeam *Carpinus betulus* (former coppice), with sessile oak *Quercus petraea* standards. Areas dominated by bluebell *Hyacinthoides non-scripta* do occur, but elsewhere there are stands of great wood-rush *Luzula sylvatica* with carpets of the mosses *Dicranum majus* and *Leucobryum glaucum*. Locally, a bryophyte community more typical of continental Europe occurs, including the mosses *Dicranum montanum*, *D. flagellare* and *D. tauricum*.

Features of European Interest

The site is designated as a SAC for its:

- Oak and hornbeam forest

Lee Valley SPA/Ramsar site

The Lee Valley SPA is located to the north-east of London, where a series of wetlands and reservoirs occupy about 20 km of the valley. The site comprises embanked water supply reservoirs, sewage treatment lagoons and former gravel pits that support a range of man-made, semi-natural and valley bottom habitats. These wetland habitats support wintering wildfowl, in particular Gadwall *Anas strepera* and Shoveler *Anas clypeata*, which occur in numbers of European importance. Areas of reedbed within the site also support significant numbers of wintering Bittern *Botaurus stellaris*.

Features of European Interest

The site is designated as an SPA/Ramsar site for its:

- Wintering bittern, gadwall and shoveler

Thames Estuary & Marshes SPA/Ramsar site

The Thames Estuary and Marshes SPA is located on the south side of the Thames Estuary in southern England. The marshes extend for about 15 km along the south side of the estuary and also include intertidal areas on the north side of the estuary. To the south of the river, much of the area is brackish grazing marsh, although some of this has been converted to arable use. At Cliffe, there are flooded clay and chalk pits, some of which have been infilled with dredgings. Outside the sea wall, there is a small extent of saltmarsh and broad intertidal mud-flats. The estuary and adjacent grazing marsh areas support an important assemblage of wintering waterbirds including grebes, geese, ducks and waders. The site is also important in spring and autumn migration periods.

Features of European Interest

The site is designated as an SPA/Ramsar site for its:

- Over-wintering bird assemblage, particularly avocet, hen harrier and ringed plover; and
- Its population of nationally scarce marshland plants and invertebrates

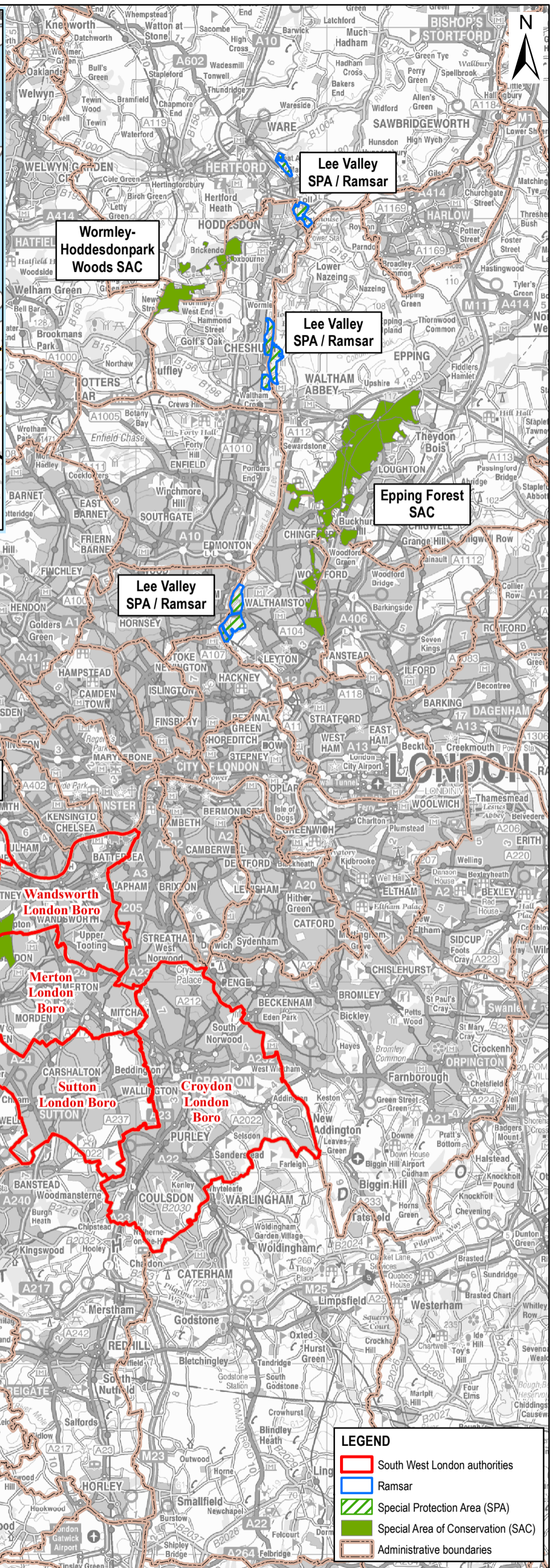
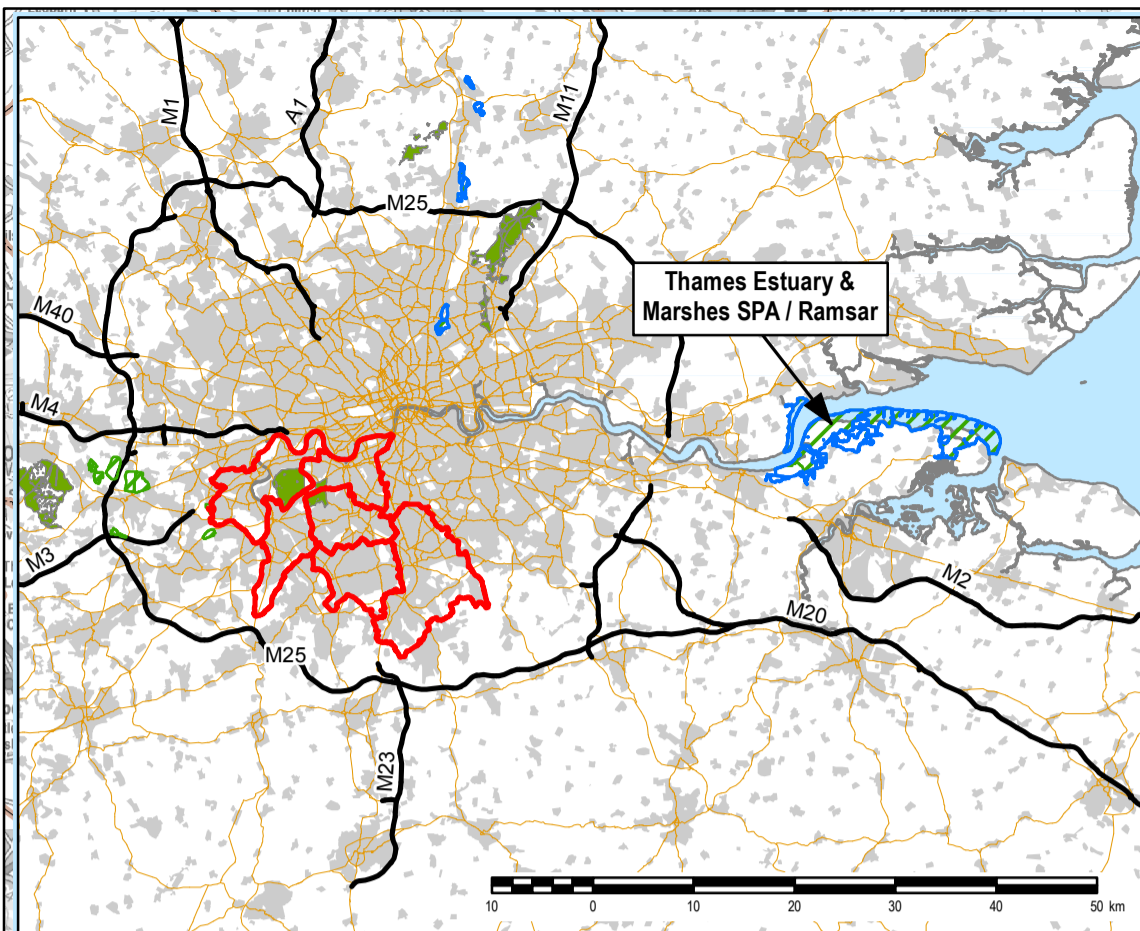
Epping Forest SAC

Epping Forest represents Atlantic acidophilous beech forests in the north-eastern part of the habitat's UK range. Although the epiphytes at this site have declined, largely as a result of air pollution, it remains important for a range of rare species, including the moss *Zygodon forsteri*. The long history of pollarding, and resultant large number of veteran trees, ensures that the site is also rich in fungi and dead-wood invertebrates. Epping Forest is a large woodland area in which records of stag beetle *Lucanus cervus* are widespread and frequent; the site straddles the Essex and east London population centres. Epping Forest is a very important site for fauna associated with decaying timber, and supports many Red Data Book and Nationally Scarce invertebrate species.

Features of European Interest

The site is designated as a SAC for its:

- Beech forest
- Wet and dry heathland
- Stag beetle



LEGEND


- South West London authorities
- Ramsar
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)
- Administrative boundaries

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URS Infrastructure & Environment UK Limited
 Scott House
 Alençon Link, Basingstoke
 Hampshire, RG21 7PP
 Telephone (01256) 310200
 Fax (01256) 310201
 www.ursglobal.com



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