

# London Borough of Merton Local Flood Risk Management Strategy

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Habitats Regulations Assessment

August 2014



| REVISION SCHEDULE |             |         |                                     |                                  |                                  |
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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 Merton ('Merton').

It is a requirement of the EU Habitats Directive 1992 (hereafter referred to as the Habitats Directive)<sup>1</sup> 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 sites<sup>2</sup>, 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 Environment 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.

### 1.2 Scope of HRA

The scope of the HRA includes all European sites within Merton (the coverage of this 'land use plan') and additionally any European sites outside the Borough that are designated for features that could

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

<sup>2</sup> Wetlands of International Importance designated under the Ramsar Convention 1979

potentially be significantly affected by measures or policies within the land use plan. Within the context of this HRA, the majority of these lie within the South West London area.

Merton Council, as the Lead Local Flood Authority (LLFA), is given provisions under the Flood Risk Regulations 2009 ('the Regulations') and the Flood and Water Management Act 2010 ('the Act') to coordinate and manage the risk of flooding from 'local' sources of flooding, within Merton; these include:

- Surface runoff – surface water prior to entry into watercourses or sewers;
- Groundwater – subterranean water in contact with substrates which may appear above ground; and
- Ordinary 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 is the responsibility of the Environment Agency and water companies (Thames Water Utilities Limited) respectively.

The Strategy, a requirement of the Act and the Regulations, 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 this Strategy should be subject to HRA. This will include any sites that are affected by increased or decreased water levels or pollution and which could lie within the catchment or downstream of local flooding events in Merton.

Additionally, Merton forms part of the Greater London Flood Risk Area and as the LLFA the Council is required, under the Regulations, to contribute to the preparation of a Flood Risk Management Plan outlining significant flood risk, receptors and consequences across the Flood Risk Area. The Strategy has been prepared to meet the requirements of the Regulations as well as the Act, to avoid duplication.

The following European sites lie within London:

- Richmond Park SAC in the London Borough of Richmond;
- Wimbledon Common SAC<sup>3</sup> 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 in Appendix A and described in Appendix B.

In addition, Windsor Forest and 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 and Marshes SPA/Ramsar site lies 14km east (downstream) of London and is hydrologically connected to London via the River Thames.

For the purposes of this assessment, Windsor Forest and 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 too far remote from Merton (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

<sup>3</sup> Wimbledon Common is also designated as a Site of Special Scientific Interest (SSSI)

beetles spend most of their life cycle as larvae) and this would not be affected by local flood risk management.

The Thames Estuary and Marshes SPA / Ramsar site is also scoped out of the assessment because it is geographically remote from Merton (lying over 37km to the east), flood risk management associated with the River Thames lies outside the remit of the Strategy (being an Environment Agency responsibility) and though the River Wandle and Beverley Brook are hydraulically linked / discharge to the River Thames, Merton lies outside the tidal limit of these watercourses and is therefore unlikely to directly impact the Thames Estuary and Marshes SPA / Ramsar located 37km to the east.

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 19km to the west of Merton. It is not feasible that any flood risk management activities in Merton would affect the water table so remotely from the borough.

This document therefore focusses on the potential for impacts on Wimbledon Common SAC which the majority lies Merton (and a smaller area of Putney Heath, within the London Borough of Wandsworth) and 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.

### **1.3 This Report**

Section 2 of this report explains the process by which the HRA has been carried out. Section 3 presents an assessment of the Strategy Action Plan Objectives and Measures in respect of European sites. The key findings are summarised in Section 4: Conclusions. The details of the European sites considered within this report are provided in Appendix B.

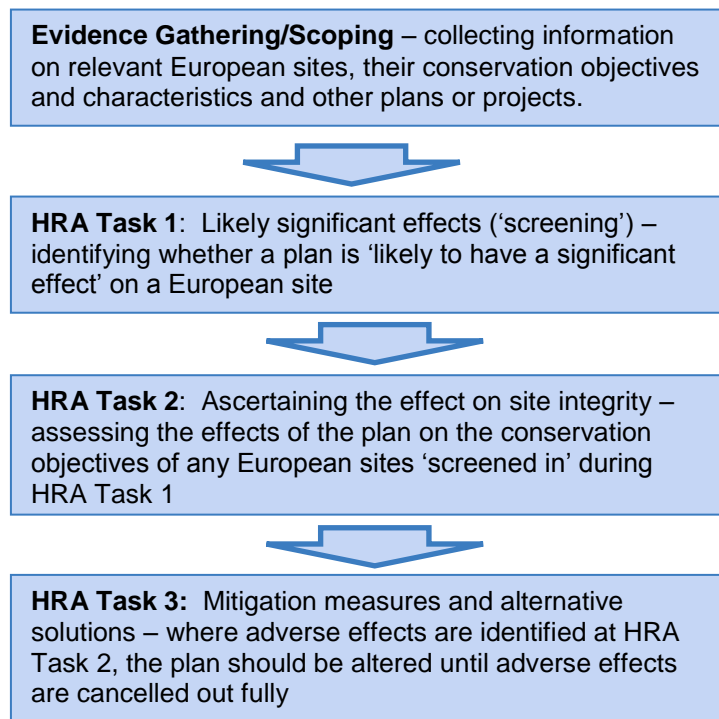


## 2 METHODOLOGY

### 2.1 The Process of HRA

The HRA has been carried out in the continuing absence of formal Government guidance. Communities and Local Government (CLG) released a consultation paper on AA of Plans in 2006<sup>4</sup>. As yet, no further formal guidance has emerged although informal guidance documents exist, produced by RSPB and for internal use by Natural England. Figure 2 below outlines the stages of HRA according to current draft CLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

**Figure 2: Four-Stage Approach to Habitat Regulations Assessment**



### 2.2 HRA Task One: Likely Significant Effects (Screening)

The first stage of any Habitat Regulations Assessment is a Likely Significant Effect (LSE) or screening test - essentially a high level risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required, and on which aspects any AA will need to be focussed. The essential question is: *"Is the [plan] (or any part of the [plan]), either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"*

This stage of the HRA process is the focus of this report.

### 2.3 Confirming Other Plans and Projects that may act 'In Combination'

It is a requirement of the Regulations that the impacts and effects of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.

It is clearly neither practical nor necessary to assess the 'in combination' effects of the Strategy within the context of all other plans and projects within London. In practice therefore, in combination assessment is of greatest relevance when the plan would otherwise be screened out because its

<sup>4</sup> CLG (2006) Planning for the Protection of European Sites, Consultation Paper

individual contribution is inconsequential. For the purposes of this assessment, it has been determined that, due to the nature of the identified impacts, the key other plans and projects relate to the additional housing, and commercial/industrial allocations proposed for local authorities within South West London over the lifetime of the Strategy (2014 – 2020).

**Table 2.1: London Borough Housing Targets from Local Plans**

| London Borough       | Housing to be delivered  |
|----------------------|--|
| Merton               | 4,800 from 2011-2026 <sup>5</sup>                                  |
| Croydon              | 13,300 from 2011 - 2021 <sup>6</sup>                               |
| Kingston upon Thames | 5,625 from 2012-2026 <sup>7</sup>                                  |
| Lambeth              | 16,700 from 2011 - 2025 <sup>8</sup>                               |
| Richmond upon Thames | 2,700 from 2007 – 2017 and 1,500-3,300 from 2017-2027 <sup>9</sup> |
| Sutton               | 5,175 from 2009-2023 <sup>10</sup>                                 |
| Wandsworth           | 7,500 from 2007 – 2017 and 3,750 from 2017-2021 <sup>11</sup>      |

<sup>5</sup> Merton’s Core Planning Strategy. Adopted July 2011

<sup>6</sup> Croydon Local Plan. Adopted April 2013

<sup>7</sup> Kingston upon Thames Core Strategy. Adopted April 2012

<sup>8</sup> Lambeth Core Strategy, Adopted January 2011

<sup>9</sup> Richmond Core Strategy. Adopted April 2009

<sup>10</sup> Sutton Core Planning Strategy. Adopted December 2009

<sup>11</sup> Wandsworth Core Strategy. Adopted October 2010



### 3 SCREENING OF THE STRATEGY OBJECTIVES AND MEASURES

#### 3.1 Introduction

All objectives and measures contained within the Strategy and the associated Action Plan were screened for potential conflicts with European sites. All of the objectives and measures could be ‘screened out’ as there was no potential for any of these to result in a likely significant effect on the hydrology of Wimbledon Common SAC. Table 3.1 highlights the objectives/measures and the HRA screening appraisal.

**Table 3.1: HRA Screening of Merton’s Strategy Objectives and Measures (as outlined in the Strategy and the accompanying Action Plan)**

| Strategic Objective  | Measures   | HRA Screening outcome   |
|--|--|---|
| 1. Identify areas at highest risk of flooding from local sources and develop a prioritised action plan in line with the principles of the Strategy   | <ul style="list-style-type: none"> <li>Facilitate reporting of flood incidents by communities, residents and businesses</li> <li>Maintain a centralised database of flooding incidents</li> <li>Improve understanding of groundwater flood risk and flooding mechanisms across the Borough</li> <li>Review and maintain the Merton Local Flood Risk evidence base</li> <li>Pursue opportunities for undertaking further detailed investigation into local sources of flooding within the Borough</li> <li>Develop and maintain a prioritised Action Plan for Local Flood Risk Management Activities, in line with available funding</li> <li>Develop and maintain a defined process for designating structures which have an impact of local flood risk</li> </ul> | No likely significant effects on European sites. Positive in that it encourages a clear understanding of flood risk issues and coordinated working. |
| 2. Work with Risk Management Authorities and stakeholders to identify ways of managing flood risk in those areas at greatest risk within the Borough | <ul style="list-style-type: none"> <li>Establish effective communication, data sharing and flood risk management arrangements with flood Risk Management Authorities and other stakeholders</li> <li>Define a clear set of criteria and protocol outlining when and how a flood incident will be investigated</li> <li>Continue to support the South West London Flood Group and seek opportunities for collaborative working and sharing of best practice across South West London Boroughs</li> <li>Continue to hold cross-departmental meetings to understand and manage local flood risk across the Borough</li> <li>Monitor and update the Multi-Agency and Severe Weather Flood Plans with information on local flood sources</li> </ul>                     | No likely significant effects on European sites. Positive in that it encourages a clear understanding of flood risk issues and coordinated working. |

| Strategic Objective  | Measures   | HRA Screening outcome   |
|--|--|---|
| <p>3. Work with planners and developers to ensure no increase in risk of flooding from new development</p>   | <ul style="list-style-type: none"> <li>• Set up the SuDS Approving Body (SAB), when enacted, in line with the Flood and Water Management Act 2010 to ensure the appropriate implementation of SuDS within new developments</li> <li>• Review policies in strategies and plans in line with emerging flood risk evidence</li> </ul>   | <p>No likely significant effects on European sites; measures to prevent increased flood risk would not affect water supply to water-dependent European sites. The implementation of SuDS would be a positive aspect for prevention of adverse effects on European sites sensitive to water pollution.</p> |
| <p>4. Maximise available resources and funding to target those areas at greatest risk</p>  | <ul style="list-style-type: none"> <li>• Identify and review funding streams available for flood risk management within the Borough</li> <li>• Identify beneficiaries for schemes and measures and seek opportunities for partnership funding from national, regional and local funding sources</li> <li>• Seek opportunities to work with council departments to deliver local flood risk management benefits, to maximise resources and funding available</li> </ul>   | <p>No likely significant effects on European sites. Positive in that it encourages a clear understanding of flood risk issues and coordinated working.</p>  |
| <p>5. Prioritise maintenance activities to reduce surface water flooding</p>   | <ul style="list-style-type: none"> <li>• Maintain and regularly update Merton's Flood Risk Asset Register</li> <li>• Review ongoing gully cleansing regime for higher risk areas, where funding is made available</li> <li>• Advise riparian owners on their rights and responsibilities and ensure inspections, maintenance and enforcement of flood risk assets is undertaken, where required</li> </ul>   | <p>No likely significant effects on European sites. Positive in that it encourages a clear understanding of flood risk issues and coordinated working.</p>  |
| <p>6. Advise communities, residents and businesses on the level of flood risk affecting them and how they can better protect themselves and their property</p> | <ul style="list-style-type: none"> <li>• Raise awareness of the flood risk in Merton and provide information on what actions residents and businesses can undertake themselves</li> <li>• Liaise directly with communities and businesses to encourage use of flood resilience measures</li> <li>• Work with the Environment Agency to encourage residents and businesses to sign up to Flood Alerts and Warnings</li> <li>• Consider innovative ways to raise awareness, through close liaison with the Council Communications Team</li> <li>• Raise profile of wider benefits of flood risk management activities to residents and businesses</li> </ul> | <p>No likely significant effects on European sites. Positive in that it encourages a clear understanding of flood risk issues and coordinated working.</p>  |

### 3.2 Other plans and projects

This section discusses other plans and projects that may operate in combination with the Strategy.

Water Company Water Resources Management Plans could theoretically lead to an in combination effect on European sites sensitive to changes in hydrology, if such plans included strategies that would reduce water availability to such European sites, and if there were any mechanism by which the Strategy could contribute to this 'in combination'. However, the Strategy does not include any strategic objectives that would be likely to lead to such effects, and the groundwater resources beneath Wimbledon Common are not abstracted for Public Water Supply.

Development of new housing by way of local authorities Local Plans have the potential to increase water demand and increase pressure on water treatment facilities. However, such development plan documents are subject (through any need for mitigation identified through their own HRA assessments) to timely provision of infrastructure capacity, such as water resource availability and sewerage treatment works. Furthermore, hydrological changes and water quality reductions would be avoided through regulatory frameworks implemented by the Environment Agency, working with water companies as necessary to ensure approaches to achieve favourable status of European sites. Therefore, the Strategy does not contain any measures that would be likely to lead to any effects on hydrological processes or water quality that would affect European sites. There is no likelihood of in combination effects of the Strategy alongside local authority Local Plans.

## **4 CONCLUSIONS**

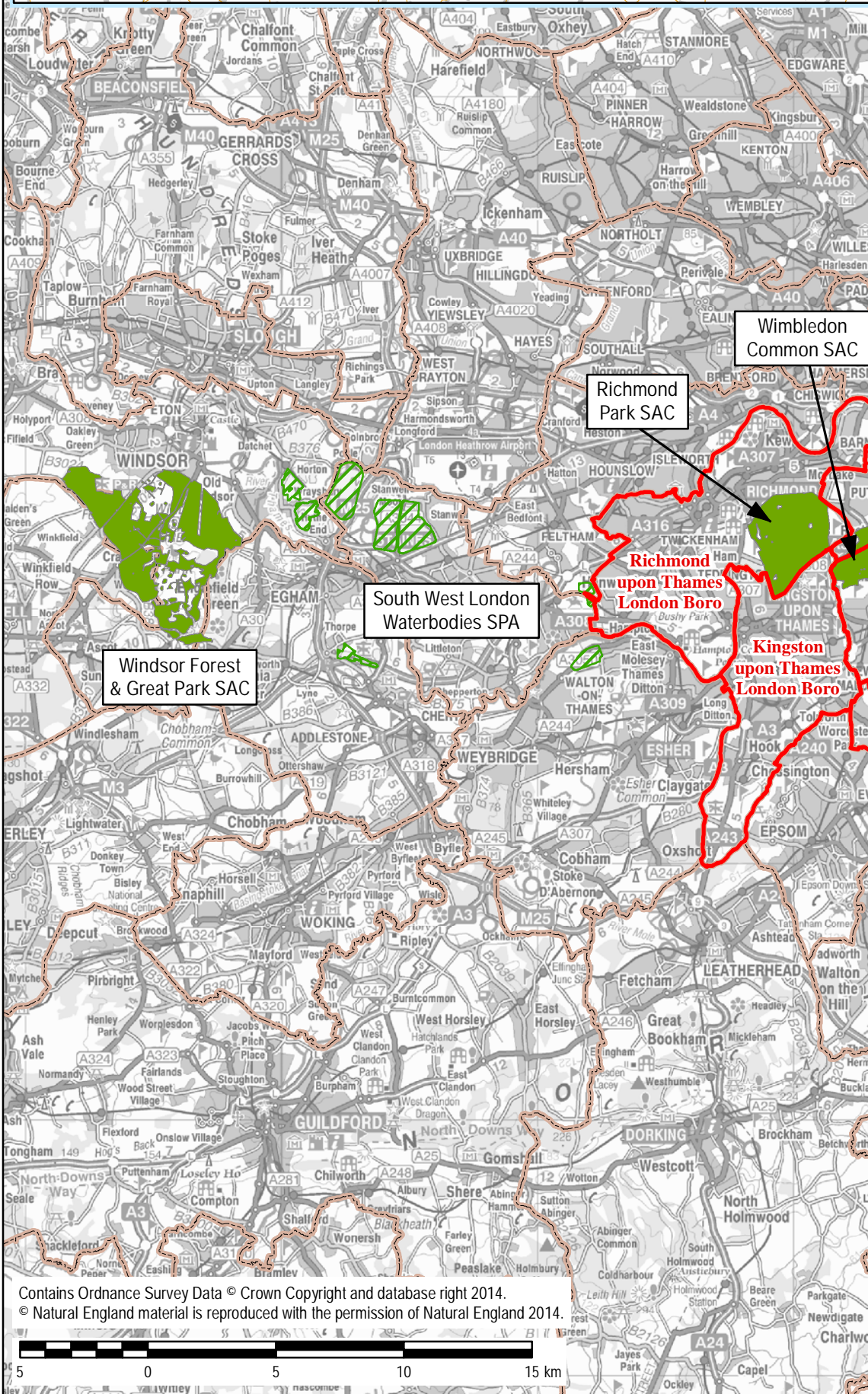
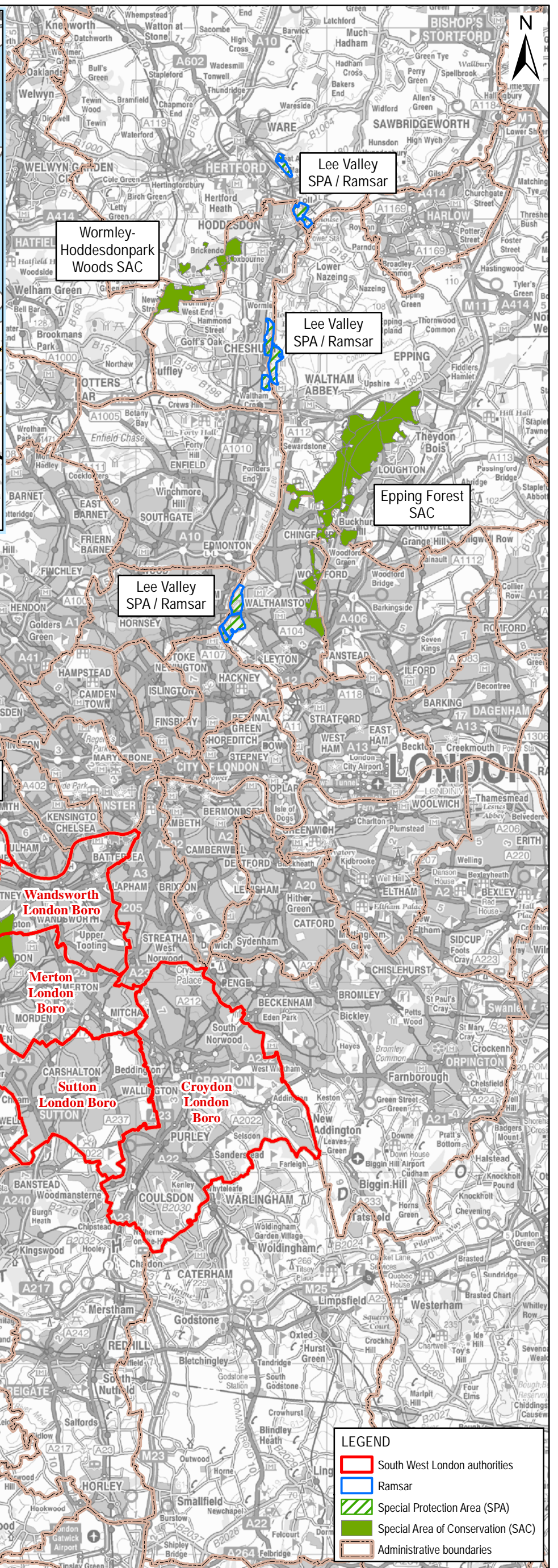
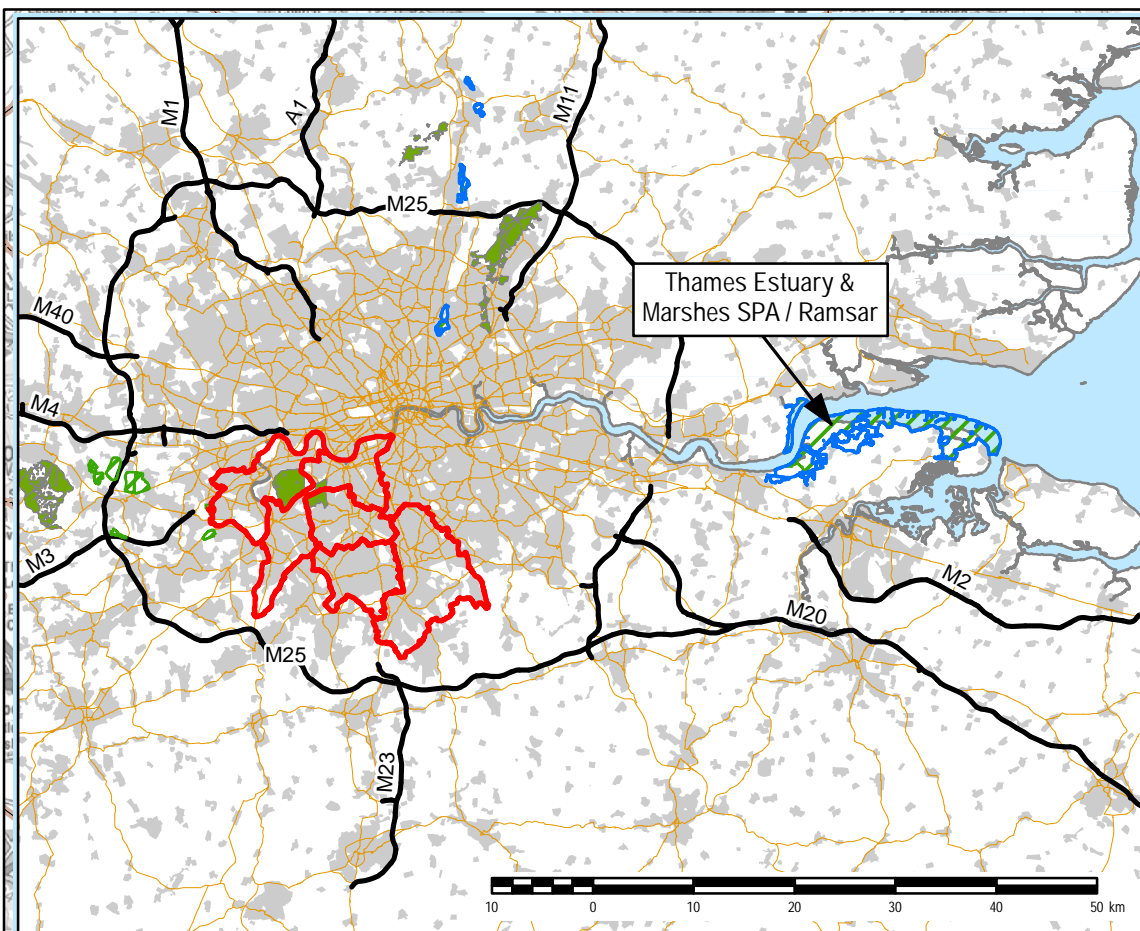
### **4.1 Conclusions**

Merton's Strategy has been found to have no likely effects on any European sites. The objectives within the Strategy all promote measures to avoid or reduce flooding events that arise on land not normally subject to natural flooding. The only European site within Merton that has some hydrological sensitivity is Wimbledon Common, and the Strategy does not promote actions or measures which may result in a change affecting the water table, or surface water features, within the Common.

Merton's Strategy promotes collaboration between relevant organisations for management of flood risk, and the coordinated approach outlined means that the potential for any unforeseen effects of flood management on European sites is negligible, either alone or in combination with other plans and projects.

## APPENDIX A – EUROPEAN SITES MAP





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**LEGEND**

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

Project Title/Drawing Title  
**SOUTH WEST LONDON LFRMS**  
**EUROPEAN SITES**

|  |                         |                           |
|--|-------------------------|---------------------------|
| Client<br><b>SOUTH WEST LONDON AUTHORITIES</b> |                         |                           |
| Drawn<br>TG                                    | Checked<br>JR           | Approved<br>JR            |
| Date<br>16/05/2014                             | Scale @ A3<br>1:225,000 | Purpose of Issue<br>DRAFT |
| Drawing Number<br><b>FIGURE 1</b>              |                         | Rev                       |

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## APPENDIX B – EUROPEAN SITES DESCRIPTION

### 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*<sup>12</sup>

The site is designated as a SAC for its:

- Wet heathland
- Dry heathland
- Stag beetle

Wimbledon Common is also a SSSI (Site of Special Scientific Interest).

### 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 interest*

The site is designated as a SAC for its:

- 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 and 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.

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<sup>12</sup> 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 and Marshes SPA/Ramsar site**

The Thames Estuary and Marshes SPA / Ramsar site 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