

No.	Title
Appendix A	New Southwark Plan Submission Version
Appendix B	New Southwark Plan Submission Version: Consultation Plan
Appendix C	New Southwark Plan Submission Version: Consultation Report
Appendix D	New Southwark Plan Submission Version Integrated Impact Assessment
Appendix E	New Southwark Plan Submission Version Habitats Regulations Assessment

New Southwark Plan Submission Version

Habitats Regulations Assessment: Screening Assessment

April 2020

CONTENTS

Section	Page number
1. Introduction	3
2. Methodology	4-5
3. Site descriptions	6-11
4. Summary of the NSPSV	12
5. Screening Analysis	13-19
6. Identifying Impact Pathways	23-29
7. Conclusion	30-31

1. Introduction

This document forms the Council's Habitats Regulations Screening Assessment (HRA) of the New Southwark Plan: Submission Version (NSPSV).

The NSPSV will form part of Southwark's development plan along with the new London Plan and area action plans. It is a regeneration strategy for Southwark and will be used to make decisions on planning applications, and to guide development in the borough. While the NSPSV must be in general conformity with the London Plan and the National Planning Policy Framework, it can adapt some policies to reflect specific issues in Southwark. It will replace the Core Strategy (2011) and saved Southwark Plan (2010) policies.

In addition to this assessment, the Council has undertaken a separate Integrated Impact Assessment incorporating a Strategic Environmental Assessment for the NSPSV, which makes a judgement on the borough-wide social, economic and environmental sustainability and health impacts of the plan.

The new London Plan is being prepared by the Mayor of London. In December 2019, the Mayor published his response to the Inspectors' report (who examined the Plan). The Secretary of State, who has the power to direct changes to the London Plan, is considering the Mayor's response (as of Feb 2020). AECOM were appointed by the Mayor to undertake an HRA of the Draft London Plan.

The legislative basis for the HRA

The Conservation Natural Habitats and Species Regulations 2010 implements the European Council Directive 92/42/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – known as the 'Habitats Directive'. The Habitats Directive and associated regulations, including the Conservation of Habitats and Species Regulations 2017, provide legal protection for habitats and species of European importance.

The Conservation of Habitats and Species Regulations 2010 states that "*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....shall make an appropriate assessment of the implications for the site in view of that site's 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*".

This requirement is supported under the National Planning Policy Guidance (2019) paragraph 37 which states that "*A local plan may ... require a Habitats Regulations Assessment if it is considered likely to have significant effects on habitats, sites or species located in the local planning authority's area or in its vicinity.*"

Under this legislation, the Council is required to identify any aspects of the NSPSV that would cause a likely significant effect on any Natura 2000 sites, otherwise known as European sites, either in isolation or in combination with other plans and projects. These European sites consist of Special Areas of Conservation (SACs) which protect habitats, Special Protection Areas (SPAs) which protect birds, and Ramsar sites which protect wetlands.

The legislation sets out a multi-stage process to be taken in the completion of the HRA. The initial assessment must determine whether there are any likely significant effects resulting from a plan or project on the integrity of nearby Nature 2000 sites. If likely effects are identified, or if it is not possible to conclude that there will not be likely significant effects, then a further 'appropriate assessment' is required to determine with certainty whether the relevant plan or project will threaten the integrity of nearby Nature 2000 sites, and if necessary what mitigation measures must be put in place.

The Habitats Directive applies the 'precautionary principle' to European sites. 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. Plans and projects with predicted adverse effect on European sites may still be permitted if there are no alternatives to them and there are imperative reasons of overriding public interest as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the Natura 2000 network.

2. Methodology

There is no formal central Government guidance on HRA, although general EU guidance on HRA has been provided in the 'Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive' (2001).

The stages proposed by the EU guidance document are:

- **Evidence gathering** – collecting information on relevant European sites, their conservation objectives and characteristics and other plans or projects.
- **HRA Stage 1** – likely significant effects ('screening') – identifying whether a plan is 'likely to have a significant effect' on a European site
- **HRA Stage 2** – ascertaining the effect on site integrity – assessing the effects of the plan on the conservation objectives of any European sites 'screened in' during HRA Task 1
- **HRA Stage 3** – mitigation measures and alternative solutions – where adverse effects are identified at HRA Task 2, the plan should be altered until adverse effects are cancelled out fully.
- **HRA Stage 4** - where no alternative solutions exist and where adverse impacts remain, an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

In addition to this EU guidance, the UK Department of Communities and Local Government guidance recommends that *"The comprehensiveness of the assessment work undertaken should be proportionate to the geographical scope of the option and*

the nature and extent of any effects identified. The assessment should be confined to the effects on the internationally important habitats and species for which the site is classified. An AA need not be done in any more detail, or using more resources, than is useful for its purpose.”

HRA Stage 1 – likely significant effects (‘screening’)

As per the requirements of HRA Stage 1, the assessment presented in this document identifies whether the NSPSV, either alone or in combination with other relevant projects and plans, is likely to result in a significant effect upon any European sites.

In evaluating significance, the Council has relied on its professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.

An effect is considered ‘significant’ if it could undermine the site’s conservation objectives. The ‘test of significance’ can generally be interpreted as any negative effects that are not negligible or inconsequential; ‘likely’ is interpreted as a simple question of whether the plan or project concerned is capable of having an effect.

Identification of relevant sites

As Natural England has not previously provided a recommended distance to Southwark Council, this assessment uses a distance of 10km. There is no set distance enshrined in the legislation, but other assessments carried out by London boroughs have also used the 10km boundary. It is considered that the NSPSV is unlikely to have any measurable effects on sites beyond 10km due to the absence of reasonable impact pathways.

The Council has identified that there are no Natura 2000 sites in Southwark. Four sites are located partially within 10km of Southwark and are set out in Table 1 below (see also Map 1):

Identified conservation sites of EC importance	
Wimbledon Common	Special Area of Conservation SAC (UK0030301) Outer London
Lee Valley	Special Protection Area SPA (UK9012111) Ramsar (UK11034) Essex, Outer London, Hertfordshire
Richmond Park	Special Area of Conservation SAC (UK0030246) Outer London
Epping Forest	Special Area of Conservation SAC (UK0012720) Essex, Outer London

Table 1: Natura 2000 sites identified within 10km of Southwark

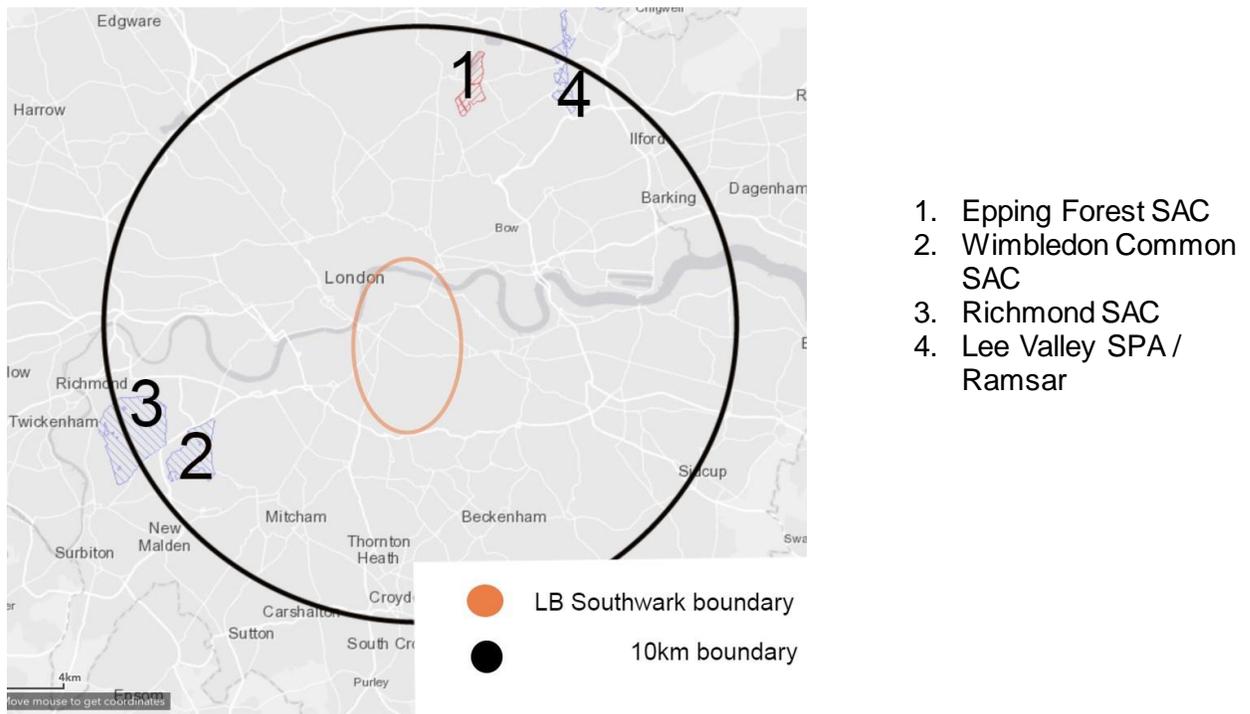
3. Site Descriptions

The description for these sites and the rationale for their conservation at European level have been taken from the Draft London Plan Habitats Regulations Assessment (2017) which also includes supplementary information to assess the vulnerability of the sites to potential adverse effects. The contents of the AECOM report are compiled from the Natura 2000 forms, Natural England's 'conservation objectives' for Sites of Special Scientific Importance (SSSIs) with European interest and the JNCC and Natural England websites.

The description of each site is listed in the Tables 2, 3, 4 and 5 below.

It should be noted that any effects on Natura 2000 sites can also be minimised through the implementation of other pan-London strategies (such as the Mayor's Transport Strategy – which is particularly relevant to reducing air pollution) and 'management/improvement plans' for the individual sites which have been prepared collaboratively by stakeholders to manage/monitor potential environmental impacts, e.g. from additional visitor pressure and pollution.

Map 1: Natura 2000 sites within 10km of Southwark (source: Natura 2000 Network Viewer)



Site name and designation	Qualifying Interest and Species	Current Condition	Recognised threats
<p>Wimbledon Common SAC (348.31 ha)</p>	<p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> • Lucanus cervus (stag beetle) <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> • Northern Atlantic wet heaths with Erica tetralix • European dry heaths 	<p>The current condition of Wimbledon Common SAC is reported here.</p> <p>As of April 2020, all but one of the monitoring units are 'Favourable', with the other being 'Unfavourable, no change'.</p>	<p>The draft London Plan HRA lists the following pressures to the Wimbledon Common SAC:</p> <ul style="list-style-type: none"> • Inappropriate behaviour by some visitors (e.g. collection and removal of dead wood) • Habitat fragmentation • Invasive species (specifically oak processionary moth Thaumetopoea processionea) • Atmospheric pollution (nitrogen deposition) <p>The draft London Plan HRA provides further details relating to the following pressures:</p> <p><u>Recreational pressure</u> The site does not have a high level of accessibility and has an urban setting, and is therefore likely to have a more local core recreational catchment extending to around 5km. Any significant recreational impacts are therefore likely to be generated by residents living in proximity to the heathland in LB Merton and Wandsworth and the Royal Borough of Kingston upon Thames.</p> <p>The heathlands of the SAC are theoretically vulnerable to recreational pressure and Wimbledon Common generally (not just the SAC component) is a popular site for visitors. However, most of the heath fails to meet key targets for quality. The main hotspots of recreational usage at the SAC are not the heathland areas but grassland, which does not represent SAC features, and the draft London Plan HRA considers that in general it is the lack of physical disturbance from both people and grazing animals that is more of a concern for the heathland areas than excessive footfall, as this allows the furthering encroachment of scrub.</p> <p><u>Air quality</u> An area of heathland within the SAC lies within 200m of the A3 and A219 roads. Average background nitrogen deposition rates within the SAC exceed the minimum part of the critical load range for heathland. The draft London Plan HRA notes policies in the London Plan aimed at improving air quality in London and measures in the Mayor's Transport Strategy and by Transport for London to reduce traffic levels.</p>

Table 2: Wimbledon Common SAC site description.

Site name and designation	Qualifying Interest (Habitats and Species)	Current Condition	Recognised threats
<p>Lee Valley SPA / Ramsar (447.87 ha)</p>	<p>Lee Valley qualifies as an SPA for its Annex I species:</p> <p>Wintering:</p> <ul style="list-style-type: none"> • Bittern <i>Botaurus stellaris</i> <p>Migratory:</p> <ul style="list-style-type: none"> • Gadwall <i>Anas strepera</i> • Shoveler <i>Anas clypeata</i> <p>Lee Valley qualifies as a Ramsar site under the following criterion:</p> <ul style="list-style-type: none"> • Criterion 2: The site supports the nationally scarce plant species whorled water-milfoil <i>Myriophyllum verticillatum</i> and the rare or vulnerable invertebrate <i>Micronecta minutissima</i> (a water-boatman); and, • Criterion 6: species/populations occurring at levels of international importance. 	<p>The population of bird species and condition of the habitat is monitored by Natural England here.</p>	<p>The draft London Plan HRA lists the following pressures to the Lee Valley SPA / Ramsar:</p> <ul style="list-style-type: none"> • Water pollution • Hydrological changes • Recreational disturbance including angling • Atmospheric pollution <p>The draft London Plan HRA provides further details relating to the following pressures:</p> <p><u>Recreational pressure</u> Within the past five to ten years landowners/managers within the SPA (RSPB, the local Wildlife Trust, the Regional Park Authority and Thames Water) have undertaken initiatives both to facilitate and to promote greater public access to the SPA for recreation. Changing public access is fundamentally linked with increasing visitor numbers given that one of the primary reasons for changing the access is to attract more visitors. The various owners and managers of the SPA components would not have embarked on these initiatives (or have been permitted to do it by competent authorities) if it was expected that by providing and promoting greater public access at this location they would risk an adverse effect on the SPA. Recreational disturbance is therefore not considered an issue.</p> <p><u>Air quality</u> The only parts of the Lee Valley SPA/Ramsar site in London are Walthamstow Reservoirs. These are sealed reservoirs that are internationally designated for their populations of wintering gadwall and shoveler ducks. No likely significant effects are anticipated since the South West London Waterbodies SPA, like most freshwater environments, is essentially phosphate limited, rather than nitrogen limited, meaning that it is phosphate availability that controls the growth of macrophytes and algae. The London Plan will not affect</p>

			<p>phosphate availability within Walthamstow Wetlands.</p> <p><u>Water resources</u> Water levels for the reservoirs are controlled by Thames Water and have been largely responsible for creating the circumstances that led to the site being of international importance for species. There are no wastewater treatment works with catchments within the GLA boundary that discharge into the River Lee or its tributaries. Natural England has developed a Site Improvement Plan for the Lee Valley, published in 2014.</p>
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Table 3: Lee Valley SPA / Ramsar site description.

Site name and designation	Qualifying Interest (Habitats and Species)	Current Condition	Recognised threats
Richmond Park SAC (846.68 ha)	<p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> Lucanus cervus (stag beetle) 	<p>The current condition of Richmond Park SAC is reported here.</p> <p>As of April 2020, all units are 'Favourable' or 'Unfavourable recovering'</p>	<p>The draft London Plan HRA lists the following pressures to the Richmond Park SAC:</p> <ul style="list-style-type: none"> None specifically identified in the Natural England Site Improvement Plan, although loss of habitat (dead wood) would affect the stag beetle population. <p>The draft London Plan HRA provides further details relating to the following pressures:</p> <p><u>Recreational pressure</u> The SAC located in an urban setting and as such is potentially vulnerable to recreational pressure and urbanisation. The site is designated as an SAC only for its stag beetle population, which is dependent upon mature trees and deadwood. The continuing presence of the stag beetle is largely dependent on good habitat management.</p> <p><u>Air quality</u> While stag beetles themselves are not vulnerable to nitrogen deposition, this can negatively impact on woodland features such as ground flora diversity/structure. These impacts may be offset by planning policies to reduce traffic flows and wider improvements in vehicle technologies. Development anticipated by the draft London Plan is unlikely to have a significant impact on the habitat, and population, of the stag beetle in Richmond Park.</p>

Table 4: Richmond Park SAC site description.

Site name and designation	Qualifying Interest and Species (Habitats and Species)	Current Condition	Recognised threats
Epping Forest SAC (1600 ha)	<p>The site contains Annex I habitats of:</p> <ul style="list-style-type: none"> • Beech forests on acid soils with Ilex and sometime Taxus in the shrublayer. • Wet heathland with cross-leaved heath; and • Dry heath <p>The site contains Annex II species:</p> <ul style="list-style-type: none"> • Lucanus cervus (stag beetle) 	<p>The current condition of Epping Forest SAC is reported here.</p> <p>The SAC is made up of multiple monitoring units. Most record: 'Favourable' or 'Unfavourable recovering'</p>	<p>The draft London Plan HRA lists the following pressures to the Epping Forest SAC:</p> <ul style="list-style-type: none"> • Air pollution • Public disturbance • Inappropriate water levels • Water pollution <p>The draft London Plan HRA provides further details relating to the following pressures:</p> <p><u>Recreational pressure</u></p> <p>The SAC receives a high number of visits (over 4 million a year) and there are long-standing concerns about increased recreational use resulting in damage to its interest features. A 2011 visitor survey report identified that those living within 2km of the edge of the Forest comprise at least 95% of all visitors, although another 2014 survey found 89% of people lived within 5km of the SAC. Overall the main points of visitor origin in London appear to be residents of LB Redbridge and LB Waltham Forest.</p> <p>Natural England has published detailed advice on conserving and restoring site features of the Epping Forest SAC (23 January 2019).</p> <p><u>Air quality</u></p> <p>The SAC is affected by relatively poor air quality alongside the roads that traverse the SAC, negatively affecting the epiphytic lichen communities of the Forest as well as other features. The nature of the road network around Epping Forest means that journeys between a number of key settlements involves traversing the SAC. The South Essex/East Hertfordshire HMA authorities have agreed to work collaboratively with Essex County Council, Hertfordshire County Council, Highways England and the Corporation of London to devise a strategy to address the traffic flows through the SAC and facilitate improved roadside air quality in the SAC.</p>

Table 5: Epping Forest SAC site description.

Conservation objectives

With regard to the SAC, and the natural habitats and/or species for which the site has been designated, the following conservation objectives are listed for Wimbledon Common SAC, Richmond Park SAC and Epping Forest SAC:

'Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.'

With regard to the SPA and Ramsar, and the natural habitats and/or species for which the site has been designated, the following conservation objectives are listed for Lee Valley SPA and Ramsar:

'Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.'

4. Summary of the NSPSV

The NSPSV aims to deliver an average of 2,355 new homes each year and to create 47,000 new office jobs over the lifetime of the plan. The majority of growth will take place on the 82 sites which have been identified as suitable to support large scale development in the borough.

There are 6 overarching strategic objectives which guide all policies within the NSPSV.

Area Visions provide the strategic vision for the future of Southwark's distinct places and neighbourhoods. There are 16 Area Visions in the plan. They set out infrastructure improvements, opportunities for improved public spaces, transport improvements and growth opportunities for new homes and jobs. The Area Visions promote the provision of as many homes as possible while respecting the local character of each area; the increase or improvement of the number and quality of local open spaces, squares and public realm; and the provision of excellent transport links.

Implementation policies set out how the council will implement the NSPSV as the Council's primary planning and regeneration strategy, alongside the policies in our wider Development Plan, including our Area Action Plans, the London Plan and any neighbourhood plans. There are 8 Implementation Policies in the plan.

5. Screening Analysis

Coding the potential impacts

The policies within the NSPSV have been analysed to assess whether they would be likely to result in significant adverse impacts on the integrity of Natura 2000 sites within a 10km boundary. The Natural England guidance¹ defines 'likely' as meaning 'probably', not merely a fanciful possibility'. A precautionary approach was adopted so that the assessment also considered cumulative impacts therefore all potentially significant adverse impacts were assessed.

Any potential positive impacts are also explored.

Coding used for recording effects / impacts on European Sites (from guidance produced by Tydesley and Associates (2006), Annex 2).

Coding used for recording effects/impacts on European Sites
Reason why policy will have no effect on a European Site
1. The policy will not itself lead to development (e.g. it relates to design or other qualitative criteria for development, or it is not a land use planning policy)
4. Concentration of development in urban areas will not affect European Site and will help to steer development and land use change away from a European Site and associated sensitive areas.
5. The policy will help to steer development away from a European Site and associated sensitive areas, e.g. not developing in areas of flood risk or areas otherwise likely to be affected by climate change.
6. The policy is intended to protect the natural environment, including biodiversity.
7. The policy is intended to conserve or enhance the natural, built or historic environment, and enhancement measures will not be likely to have any effect on a European Site.
Reason why policy could have a potential effect
8. The DPD steers a quantum or type of development towards, or encourages development in, an area that includes a European Site or an area where development may indirectly affect a European Site.
Reason why policy would be likely to have a significant effect
9. The policy makes provision for a quantum, or kind of development that in the location(s) proposed would be likely to have a significant effect on a European Site. The proposal must be subject to appropriate assessment to establish, in light of the site's conservation objectives, whether it can be ascertained that the proposal would not adversely affect the integrity of the site.

Table 6: Coding used for recording effects on European Sites.

¹ The Assessment of Regional Spatial Strategies and Sub Regional Strategies under the Provisions of the Habitats Regulations' (2006).

New Southwark Plan Policy	Related policy reference	Why policy will have no impact on Natura 2000 sites	Any other potential impacts?	Essential recommendations to avoid potential negative effects on European sites
Strategic policies	SP1 Quality affordable homes	4, 7	None	None
	SP2 Regeneration that works for all	4, 7	None	None
	SP3 Best start in life	4, 7	None	None
	SP4 Strong local economy	4, 7	None	None
	SP5 Healthy, active lives	4,7	None	None
	SP6 Cleaner, greener, safer	1,4,6,7	None. This policy provides the overarching strategy for increasing, protecting and enhancing the borough environment. This policy will promote the use of spaces within the borough for recreation, improve air quality, and facilitate the careful management of water resources.	None
Quality affordable homes	P1 Social rented and intermediate housing	4, 7	None	None
	P2 New family homes	4, 7	None	None
	P3 Protection of existing homes	4, 7	None	None
	P4 Private rented homes	4, 7	None	None
	P5 Student homes	4, 7	None	None
	P6 Housing for older people	4, 7	None	None
	P7 Wheelchair accessible and adaptable housing	4, 7	None	None

	P8 Houses in multiple occupation	4, 7	None	None
	P9 Supported housing and hostels	4, 7	None	None
	P10 - Self and custom build	4, 7	None	None
	P11 Homes for Travellers and Gypsies	4, 7	None	None
Social regeneration to revitalise neighbourhoods	P12 Design of places	4, 7	None. This policy states that development must support the use of green infrastructure through the principles of water sensitive urban design, and by providing adequate outdoor seating for residents and visitors. This policy will provide greater recreational opportunities for residents locally.	None
	P13 Design quality	4, 7	None	None
	P14 Residential design	4, 7	None	None
	P15 Designing out crime	4, 7	None	None
	P16 Tall buildings	1,4	None	None
	P17 Efficient use of land	4, 7	None	None
	P18 Listed buildings and structures	1, 4	None	None
	P19 Conservation areas	4, 7	None	None
	P20 Conservation of the historic environment and natural heritage	1, 4	None	None
	P21 Borough views	4, 7	None	None
	P22 Archaeology	1, 4	None	None
	P23 World heritage sites	4, 7	None	None

	P24 River Thames	4, 6, 7	None	None
	P25 Local list	4, 7	None	None
Best start in life	P26 Education places	4, 7	None	None
	P27 Access to employment and training	4, 7	None	None
Strong, local economy	P28 Strategic protected industrial land	4, 7	None	None
	P29 Office and business development	4, 7	None	None
	P30 Affordable workspace	4, 7	None	None
	P31 Small shops	4, 7	None	None
	P32 Business relocation	4, 7	None	None
	P33 Railway arches	4, 7	None	None
	P34 Town and local centres	4, 7	None	None
	P35 Development outside town centres	4, 7	None	None
	P36 Protected shopping frontages	4, 7	None	None
	P37 Shops outside protected shopping frontages, town and local centres	4, 7	None	None
	P38 Shop fronts	1, 4, 7	None	None
	P39 Betting shops, pawnbrokers and pay day loan shops	1, 4, 7	None	None
	P40 Hotels and other visitor accommodation	4, 7	None	None

	P41 Pubs	4, 7	None	None
	P42 Outdoor advertisements and signage	1, 4, 7	None	None
	P43 Broadband and digital infrastructure	4, 7	None	None
Healthy, active lifestyles	P44 Healthy developments	4, 7	None	None
	P45 Leisure, arts and culture	4, 7	None	None
	P46 Community uses	4, 7	None	None
	P47 Hot food takeaways	4, 7	None	None
	P48 Public transport	4, 7	None	None
	P49 Highways impacts	4, 7	None	None
	P50 Walking	4, 7	None	None
	P51 Low Line routes	4, 7	None	None
	P52 Cycling	4,7	None. This policy should significantly increase the number of people who cycle and the number of trips made by bicycle, which will impact on air quality.	None
	P53 Car Parking	4,7	None. Southwark will grow sustainably without adverse environmental impacts through car free development in highly accessible areas and reduced reliance on the private car.	None
	P54 Parking standards for disabled people and the mobility impaired	4,7	None	None
Cleaner, Greener, Safer	P55 Protection of amenity	4,7	None	None
	P56 Open space	1,4,6,7	None. Prohibiting development on Metropolitan Open Land (MOL) or Borough Open Land (BOL) will protect these spaces for recreational use by	None

			local residents.	
P57 Open water space	1,4,6,7		None	None
P58 Green infrastructure	4,6,7		None. Ensuring that green infrastructure with arrangements in place for long term stewardship and maintenance funding is provided on new major developments will provide spaces for recreational use for local residents and may improve air quality.	None
P59 Biodiversity	1,4,6,7		None. This policy requires development to contribute to net gains in biodiversity, protecting and avoiding damage to SINCS, LNRs, populations of protected species and priority habitats/species.	None
P60 Trees	4,6,7		None	None
P61 Reducing waste	1,4,7		None	None
P62 Land for waste management	4,7		None	None
P63 Contaminated land and hazardous substances	1,4,6,7		None	None
P64 Improving air quality	1,4,7		None. Developments that are Air Quality Neutral will help to minimise air pollution.	None
P65 Reducing noise pollution and enhancing soundscapes	1,4,7		None	None
P66 Reducing water use	4,7		None. Limiting the type of fittings that water-dispensing and consuming elements of a development can incorporate will contribute to ensuring the most efficient use of London's limited water resources.	None
P67 Reducing flood risk	4,5,6,7		None	None
P68 Sustainability standards	4,6,7		None	None

	P69 Energy	4,6,7	None. An increased provision and demand for sustainable forms of energy will reduce carbon dioxide emissions, improving air quality.	None
Implementation policies	IP1 Infrastructure	4, 7	None. This policy ensures that adequate infrastructure is in place to support future and existing residents in Southwark, to prevent any demand being placed on other London boroughs.	None
	IP2 Transport infrastructure	4, 7	None. The promotion of public and active forms of transport is intended to improve air quality.	None
	IP3 Community infrastructure levy (CIL) and Section 106 planning obligations	4, 7	None	None
	IP4 Enforcement against unlawful development	4, 7	None	None
	IP5 Compulsory Purchase Order (CPO)	4, 7	None	None
	IP6 Monitoring development	4, 7	None	None
	IP7 Statement of Community Involvement	1, 4	None	None
	IP8 Local Development Scheme	4, 7	None	None
New Southwark Plan Area				
AV.01 Aylesbury	n/a	4,7	None	None
AV.02 Bankside and The Borough	NSP01 NSP02 NSP03 NSP04 NSP05 NSP06	4, 7	None	None

	NSP07 NSP08 NSP09			
AV.03 Bermondsey	NSP10 NSP11 NSP12	4, 7	None	None
AV.04 Blackfriars Road	NSP13 NSP14 NSP15 NSP16 NSP17 NSP19 NSP20	4,7	None	None
AV.05 Camberwell	NSP21 NSP22 NSP23 NSP24 NSP25 NSP26 NSP27 NSP28 NSP29 NSP30 NSP31 NSP32 NSP33	4, 7	None	None
AV.06 Crystal Palace and Gipsy Hill	NSP34	4, 7	None	None
AV.07 Dulwich	NSP35	4, 7	None	None
AV.08 East Dulwich	NSP36 NSP37 NSP38 NSP39 NSP40	4, 7	None	None

AV.09 Elephant and Castle	NSP41 NSP42 NSP43 NSP44 NSP45 NSP46 NSP47	4, 7	None	None
AV.10 Herne Hill and North Dulwich	NSP48	4, 7	None	None
AV.11 London Bridge	NSP49 NSP50 NSP51 NSP52	4, 7	None	None
Av.12 Nunhead	n/a	4,7	None	None
AV.13 Old Kent Road	NSP53 NSP54 NSP55 NSP56 NSP57 NSP58 NSP59 NSP60 NSP61 NSP62 NSP63 NSP64 NSP65 NSP66 NSP67 NSP68 NSP69 NSP70	4, 7	None	None
AV.14 Peckham	NSP71 NSP72 NSP73 NSP74	4, 7	None	None

AV.15 Rotherhithe	NSP75 NSP76 NSP77 NSP78 NSP79	4, 7	None	None
AV.16 Walworth	NSP80 NSP81 NSP82	4, 7	None	None

Table 7: Full coded analysis of every policy and site allocation in the NSPSV.

6. Assessment of likely impacts

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

There are a number of existing and emerging plans and projects which will be used as guidance alongside the NSPSV. These plans and projects have been taken into account during this assessment. The policies within these documents seek to complement the strategic policies detailed in Southwark’s Core Strategy (2011) and the London Plan.

Plan / Project	Summary
Area Action Plans: These plans guide development where the majority of new housing and employment development is expected to come forward during the plan period.	
Aylesbury Area Action Plan (2010)	
Peckham and Nunhead Action Plan (2014)	
Canada Water Action Plan (2015)	
Old Kent Road Area Action Plan (emerging 2020)	
Neighbourhood Plans	
Southbank and Waterloo Neighbourhood Plan (2020)	The Neighbourhood Plan guides development in Southbank and Waterloo, an area which is mainly located in the LB Lambeth.
Protecting the environment	
Movement Plan (2020)	The Movement Plan intends to introduce more sustainable forms of transport in the borough, by reducing car use and promoting public transport and safe and accessible walking and cycling routes.
Cycling Strategy (2015)	The Cycling Strategy outlines plans to increase the number of journeys made by bike in the borough by over double by 2025, by investing in cycling infrastructure and making cycling more accessible to all.
Biodiversity Action Plan (2020)	The Biodiversity Action Plan outlines how biodiversity in the borough will be protected. The plan ensures that Biodiversity Net Gains are made on all major developments, and that nature is accessible to all.
Air Quality Strategy & Action Plan (2017)	This revised Air Quality Action Plan lists 113 actions that Southwark will undertake under the new London Local Air Quality Management Framework.
Old Kent Road Integrated Water Management Strategy (2018)	The Strategy identifies that the regeneration of the Old Kent Road Opportunity Area may result in an increase in potable demand and wastewater discharge, unless mitigation measures are introduced. The strategy identifies how demand for water can be minimised, how and water discharge to the sewer can be reduced in order to reduce the overall volume of water used locally to sustainable levels.
Thames Tideway Tunnel project	Thames Water is in the process of constructing the 25km long Thames Tideway Tunnel, which will massively increase London’s wastewater treatment capacity. This project is due to finish in 2023. The Shad

	Thames Pumping Station and Chambers Wharf are undergoing works as part of the project.
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It is not considered likely than any of the identified plans or projects will have a significant impact on any European sites. Any impacts will be beneficial, including the increased provision of local spaces for recreational use, the careful management of population density and requirement of adequate amenity space, the improvement of air quality, and the reduced local demand for water and improved treating of wastewater.

Identifying Impact Pathways

In order to assess whether the policies introduced under the NSPSV are likely to have any impact on European sites, it is necessary to explore whether any links exist between these sites and the development taking place within Southwark through a known 'pathway'. Briefly defined, pathways are routes by which a change in activity associated with a development can lead to an effect upon an internationally designated site.

MHCLG guidance states that the Appropriate Assessment should be proportionate to the geographical scope of the [plan policy] and that an AA need not be done in any more detail, or using more resources, than is useful for its purpose (2019).

Taking the 'precautionary approach', the increased population anticipated for Southwark could have indirect impacts on the identified European sites. These potential indirect impacts are: recreational pressure, urbanisation, transport and atmospheric pollution, and increased recreational demand, and management of water.

The pathways which are likely to require consideration of effects in relation to the NSPSV are discussed in detail below:

Recreational pressure

Terrestrial European sites can be adversely affected by recreational causes such as walkers (in turn causing soil compaction and erosion), dog walking (potentially leading to soil enrichment from dog fouling and potential harassment of wildlife and damaged sensitive habitats as dogs are less likely to keep to marked footpaths), mountain biking, motorbike scrambling, and off-road vehicle use are all capable of causing serious erosion as well as disturbance to sensitive species. Water-bourne recreation can also adversely affect sensitive water bodies.

The likelihood of effects caused by the NSPSV

It is considered unlikely that residents of Southwark will travel in large numbers or frequently to the identified European sites for recreational purposes for the following reasons:

- Southwark residents have a number of large open spaces available much more locally, either within the borough or on its immediate edges (e.g. Southwark Park, Burgess Park, Dulwich Park, Peckham Rye Park and Common, Sydenham Hill Woods etc) which attract large numbers of visitors. The number of open spaces

is expected to expand over the lifetime of the plan, and guidance is in place to ensure that residents have access to adequate amenity space. The south London sub-region as a whole is relatively well served by open space.

- The Area Visions set out that development in many areas should provide new open space and improve walking and cycling routes to enable local residents to more easily access this space.
- Based on 2014 data it appears that the vast majority of visitors to Epping Forest originate from within 5km of the SAC (Draft London Plan HRA 2017).

Richmond Park and the Lee Valley are not thought to be sensitive to recreational pressure due to their management. Whilst residents of Southwark may visit Wimbledon Common, these would be in comparatively small numbers and the increases in borough population planned through the NSPSV are not thought to be significant in terms of increased recreational pressure on Wimbledon Common. Southwark residents are unlikely to travel in large numbers to Epping Forest due to its distance from the borough.

In order to ensure that borough residents are well served by open space, the NSPSV includes the following policies to ensure that there is no loss of recreational open to space within the borough, to encourage sufficient access to existing open spaces, and to make provision for new space within or nearby to proposed areas accommodating new residential dwellings:

- P12 Design of places
- P56 Open space
- P58 Green infrastructure
- P60 Trees

Whilst the population of Southwark will increase over the lifetime of the plan, it is evident that there are policies in place to ensure that the recreational needs of this population are met within the borough boundaries. It is therefore considered that the NSPSV is not likely to have any significant impact on the identified European sites with regards to recreational pressure.

Urbanisation

Urbanisation is discussed separately to the impact of recreational activity in this assessment as an increased population in an area can create adverse social effects such as fly tipping and inadvertently fabricate an environment with damaging consequences to species such as owning a domestic cat (predation), or causing light or noise pollution to ornithological or bat species. In some response to this, Natural England has on a number of different planning applications identified 400m from an SPA as the distance within which they felt no new development could be allowed because of the general 'urbanisation' effects that would be experienced by the SPA.

The likelihood of effects caused by the NSPSV

Given the Natural England guidance and the distance between the boundary of Southwark and the identified sites (which is a minimum of 5km), any urbanisation impacts as a result of the NSPSV policies are very unlikely to have an adverse effect on the conservation features for which the sites are designated. Additionally, policy P59

Biodiversity states that development must contribute to net gains in biodiversity by protecting local SINC, LNR, populations of protected species and priority habitats/species.

It is therefore considered that the NSPSV is not likely to have any significant impact on the identified European sites with regards to urbanisation.

Transport and Atmospheric pollution

While there is limited information available on the effects of air quality on seminatural habitats; the main pollutants of concern are well understood. Oxides of Nitrogen (NO_x) can have a directly toxic effect upon vegetation. NO_x emissions are mainly related to vehicle exhaust. In a typical housing development, the largest contribution of NO_x will be made by the associated road traffic. Therefore it is reasonable to expect that emissions of NO_x will increase if policies within the New Southwark Plan: Submission Version would result in greater vehicle use.

Sulphur dioxide (SO₂) and Ammonia emissions (NH₃) are the other main atmospheric pollutants. SO₂ is mainly concerned with the output of coal stations and industrial processes that require the combustion of coal and oil. NH₃ emissions are influenced by agriculture. As such, it is unlikely that there will be any fundamental increase in SO₂ and NH₃ emissions associated with the DRLLP.

Epping Forest SAC is the key site of concern for London with regard to air quality, as it currently exceeds its critical load for nitrogen deposition by a large margin and also has a NO_x concentration above the critical level. Wimbledon Common also has NO_x concentration that exceeds the critical level. The Lee Valley SPA also has NO_x concentration that exceeds the critical level but in this case the interest features of the site (Gadwall, Shoveler and Bittern) rely more on the open water and marginal vegetation and the botanical composition of the grassland is likely to have little effect on their use of the site.

The likelihood of effects caused by the NSPSV

The most acute impacts of NO_x take place close to where they are emitted, but individual sources of pollution will also contribute to an increase in the general background levels of pollutants at a wider scale, as small amounts of NO_x and other pollutants from the pollution source are dispersed more widely by the prevailing winds. In terms of diffuse air pollution, Natural England has previously advised that effects of vehicular atmospheric emissions should be considered if the roads on which the vehicles travel are closer than 200m from a Nature 2000 site.

The implication of this is that any long-range contribution made to 'background' concentrations of NO_x or other atmospheric pollutants by the development set out in the NSPSV is outside the remit of this assessment. Therefore, the issue of 'long-range' pollution need not be considered within this HRA. Additionally, the following policies within the NSPSV aim to significantly reduce car use in the borough by improving walking and cycling facilities, heavily restricting parking spaces on all new developments, and by working with Transport for London, the Greater London Authority and the borough of Lewisham to promote an extension of the Bakerloo Line into south London:

- P48 Public transport
- P49 Highways impacts
- P50 Walking
- P52 Low Line routes
- P52 Cycling
- P53 Car Parking
- P69 Energy
- IP2 Transport infrastructure

The use of the above policies will ensure that over the lifetime of the plan, the transport needs of an increasing borough population are met, with associated benefits including improved air quality. As the plan accounts for an average of 2,355 new homes a year there may be some increase in car use, but overall the major development sites are located in areas with excellent public transportation where car use will not be necessary.

It is therefore considered that the NSPSV is not likely to have any significant impact on the identified European sites with regards to transport and atmospheric pollution. Policies are in place to manage the transport needs of a growing population, with an emphasis on the promoting of public and active transport which will result in improved local air quality and a decrease in the number of Southwark residents who may use any roads within a 400m distance of the identified European sites.

Water resources

Walthamstow Reservoirs SSSI is a series of sealed reservoirs that are part of the water supply infrastructure for London. As such, water levels are directly controllable by the site manager (Thames Water) and they have been largely responsible for creating the circumstances that have led to the site being of international importance for gadwall and shoveler. Thames Water has invested significantly in water supply infrastructure to ensure that London's water supply is as resilient as possible. This includes the construction of an operational desalination plant at Beckton in north-east London. There are no wastewater treatment works that have catchments within Southwark, the GLA or its tributaries which may impact on the Lee Valley Park. Therefore, it is considered that both the draft London Plan and the NSPSV will not result in levels of water usage in the Walthamstow Reservoirs or general water quality within the River Lee.

The HRA undertaken as part of the Lee Valley Park Development Framework (UE Associates, 2009) was able to conclude that there would be no likely significant effect of the numerous measures and policies intended to increase public accessibility to the Regional Park (including those areas of international importance) due to the Regional Park Authority's overriding commitment to managing the Regional Park, their past experience of delivering increased access while avoiding disturbance and their ongoing commitment to visitor access management in the more sensitive parts of the Park.

The likelihood of effects caused by the NSPSV

The HRA undertaken as part of the Lee Valley Park Development Framework concludes that an increased number of visitors to the park would not be likely to create any significant harmful impacts on the integrity of the SPA and Ramsar. In fact, there is a

management plan in place to encourage more visitors to the least vulnerable areas of the park.

Additionally, the NSPSV is in compliance with the London Plan with regards to the use of water, as policy P66 Reducing water use states that residential development should ensure a ‘safe to drink’ water use of no more than 105 litres per person per day, and that measures to reduce demand for mains water should be put in place. It is therefore considered that the NSPSV is not likely to have any significant impact on the identified European sites with regards to water resources.

Any increases in wastewater resulting from policies promoting population, housing and employment growth in Southwark are not likely to affect the identified European sites as wastewater is treated at the Crossness Wastewater Treatment Works and then discharged into the Thames. The treatment works is located so as to avoid any potential path with the European sites. The Thames Tideway Tunnel that is under-construction is expected to be completed in 2023, which will vastly improve London’s capacity to treat wastewater.

Consideration of the wider regional context

The draft London Plan is due to be adopted in late 2020. The HRA (2017) for the draft London Plan identifies that Policy H1 Increasing housing supply may result in increased urbanisation and demand for recreational greenspace, due to an increased population density. This policy has only been found to have a likely significant impact on the Wimbledon Common SAC.

The draft London Plan includes policies intended to improve air quality in London. Whilst it is noted that the aim is in general to improve air quality from a public health perspective, any improvement in air quality will have a positive knock-on-effect to European designated sites that are sensitive to atmospheric pollution. Overall, the Mayor’s air quality policies in the draft London Plan, The Mayor’s Transport Strategy and the London Environment Strategy is expected to result in a considerable net improvement in air quality in London (including the Epping Forest area) over the plan period and beyond even allowing for growth in population and jobs.

The HRA for the draft London Plan concludes that the following impact pathways that could interact with European sites identified in this assessment.

European site	Likely effects
Richmond Park SAC	There are no impact pathways that could interact with the Richmond Park SAC in a manner that would prevent it achieving its conservation objectives for stag beetle.
Wimbledon Common SAC	<ul style="list-style-type: none"> • It is considered that the scale of growth proposed for Merton, Kingston and Wandsworth in the draft London Plan is not likely to result in a significant recreational pressure effect on Wimbledon Common SAC alone or in combination with other plans and projects. • Increasing housing supply could result in increased atmospheric pollution linking to impacts upon Wimbledon

		Common SAC.
Epping Forest SAC		The effect of an increased population is not like to impact on the Epping Forest SAC due to the management of the Forest already in place.
Lee Valley SOA/Ramsar		Recreational disturbance is not considered an issue since Walthamstow Reservoirs are currently considered an underused recreational resource and are carefully managed by the Walthamstow Wetlands project.

7. Conclusion

Summary of likely significant effects on European sites

It is considered that any policies introduced under the NSPSV are likely to have a significant impact on the identified European sites for the reasons summarised below.

Potential pathway	Any likelihood of significant effects?	Reasons
Recreational	No	<ul style="list-style-type: none"> • Southwark and other boroughs in South London have a number of open spaces available much more locally than the European Sites. • Sites have management strategies, for example Epping Forest which includes licensing for some recreational activities • The area of Wimbledon Common most frequented by visitors does not fall under the SPA • Richmond Park and the Lee Valley are not thought to be sensitive to recreational pressure
Urbanisation	No	<ul style="list-style-type: none"> • Natural England suggests 400m from an SPA as the distance within which they feel no new development could be allowed because of the general 'urbanisation' effects that would be experienced by the SPA. • Given the distance between Southwark and the four identified sites (at least 5 km), development resulting from the NSPSV is unlikely to result in adverse impacts on the integrity of the site.
Transport / Atmospheric Pollution	No	<ul style="list-style-type: none"> • Natural England have previously advised that vehicular emissions decline exponentially from the road edge, and the concentration of pollutant from roads can be said to have localised impacts up to 200m from the road side. • There are no European Sites within 200m of any roads within the boundary of Southwark.
Water resources	No	<ul style="list-style-type: none"> • HRA of the Lee Valley Park Development Framework concludes that an increased number of visitors to the park would not be likely to create any significant harmful impacts on the integrity of the SPA and Ramsar.

Table 8: Summary of likely significant effects on European sites.

The policies introduced under the New Southwark Plan: Submission Version have been shown to pose 'no significant effects, alone or in combination' when assessed against the provisions of Regulation 105 of the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'). This conclusion has been accepted by Natural England following formal consultation

It is not therefore not considered necessary to carry out Stage 2 (Appropriate Assessment) and Stage 3 (mitigation and alternative solutions) of the Habitats Regulations Appropriate Assessment.

References

Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment, Ministry of Housing and Local Government, 2019.

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Planning for the Protection of European Sites: Appropriate Assessment Guidance for Regional Spatial Strategies and Local Development Documents, DCLG, 2006.

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The Conservation of Habitats and Species Regulations (England and Wales) Regulations, DEFRA, 2010.

The Conservation of Habitats and Species Regulations (England and Wales) Regulations, DEFRA, 2017.