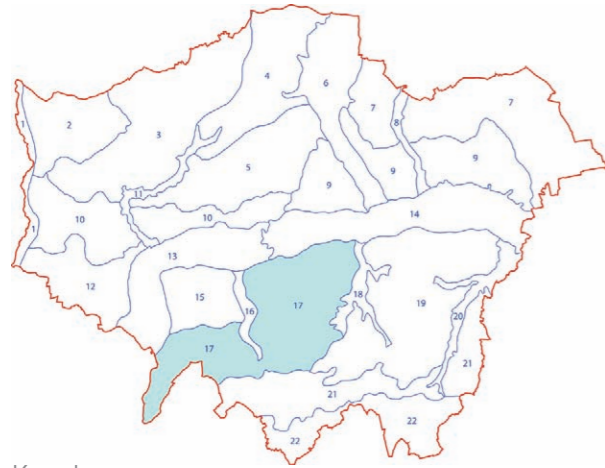


# 17. South London Clays & Gravels

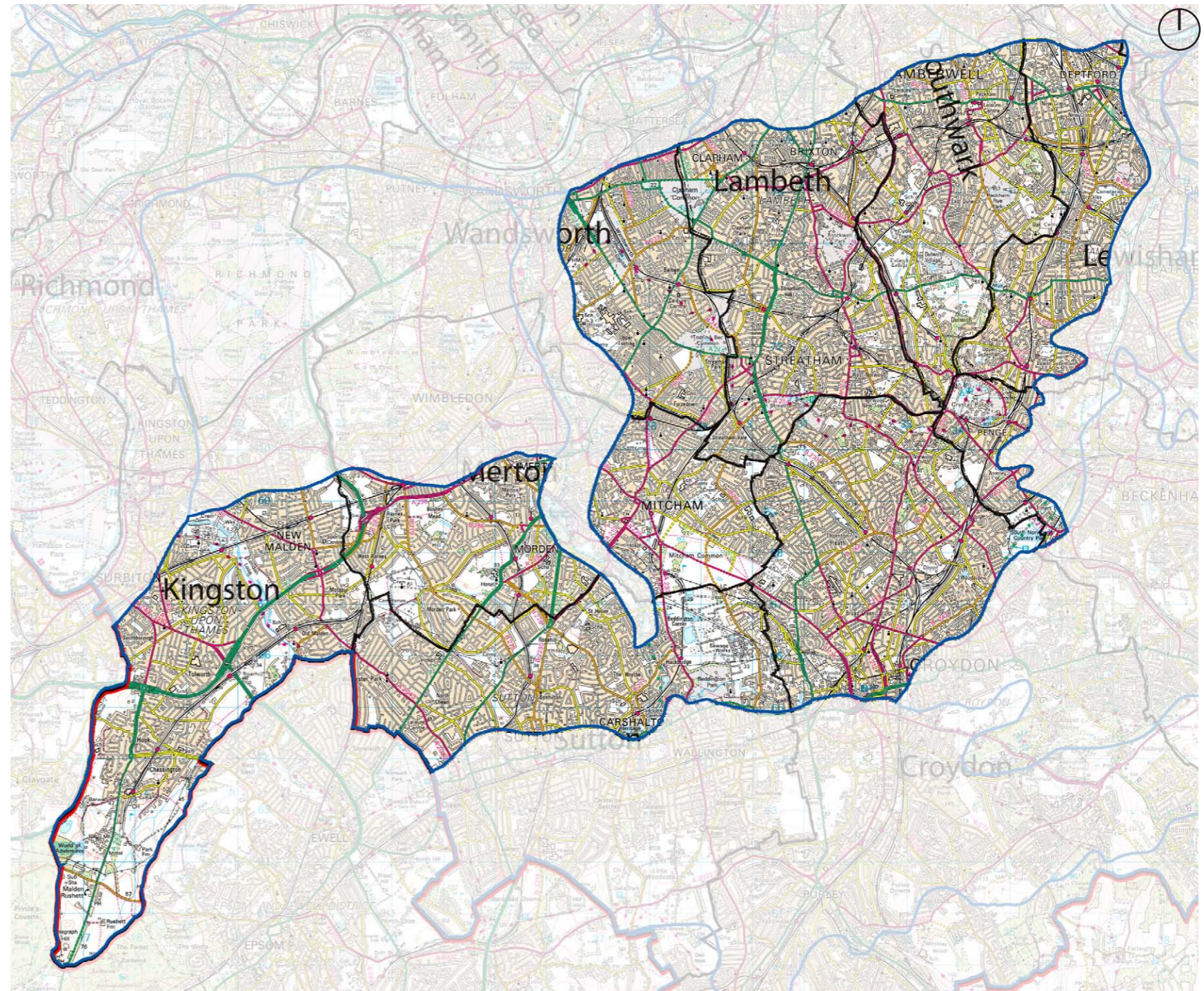


Key plan

## Description

The South London Clays and Gravels is an extensive Natural Landscape Area that incorporates parts of 9 boroughs - Kingston, Sutton, Merton, Wandsworth, Croydon, Lambeth, Bromley, Southwark & Lewisham. It extends south and west from Deptford towards Streatham and New Malden. It is bordered by two river systems, the Wandle (NLA 16) and the Ravensbourne (NLA 8) to the east and west, and by the North Downs Lower Dip Slope (NLA 21) to the south.

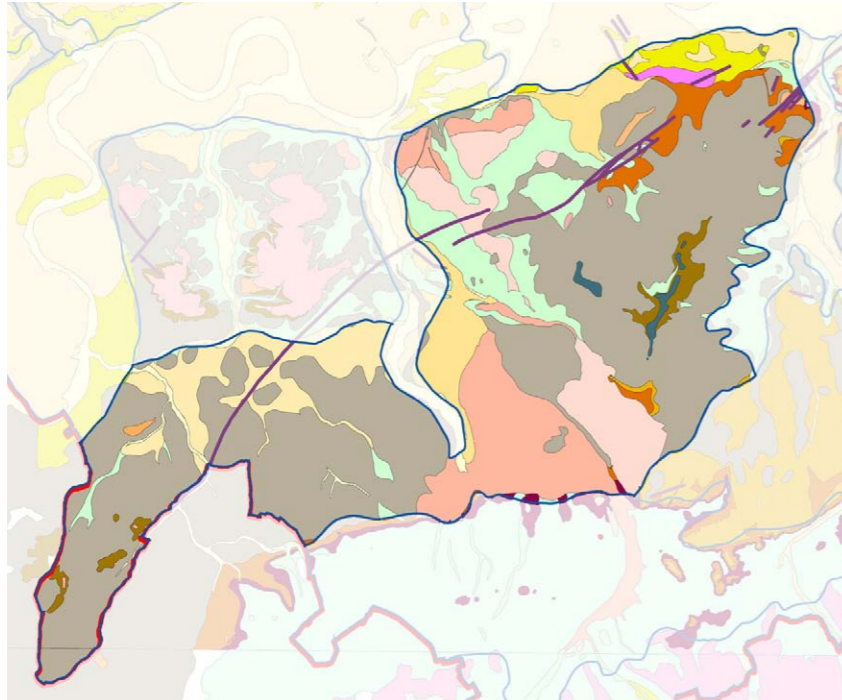
The whole area is underlain by London Clay, but in places (Crystal Palace and Chessington) the Clay is capped by the younger, more resistant strata of the Claygate Member to form ridges. At Crystal Palace the ridge is particularly prominent and extends north-south from Forest Hill to Upper Norwood, with superb views across to the Isle of Dogs and the City and, to the south, to Croydon and the North Downs. To the south of this ridge, the older rocks of the Harwich Formation (pebbly beds) and the gravelly sands and clays of the Lambeth Group crop out in the Thornton Heath and Carshalton areas. This out crop does not correspond to an obvious variation in landform, but the sandy soils associated with the Lambeth Group tend to support heathland and this is also suggested by some local place names. The oldest rocks are in the Deptford area to the north, where an exposure of the Thanet Sand Formation and small inliers of Lewes Nodular Chalk Formation are surrounded by sands/gravels from the Lambeth Group. Again there is no significant change in landform, but the extensive gravel deposits here, and also in the Clapham/Tooting areas to the west, moved downslope by hill wash and solifluction processes, depositing Head alongside the flooded river corridors of the Thames and the Wandle, generally as a result of melting permafrost.



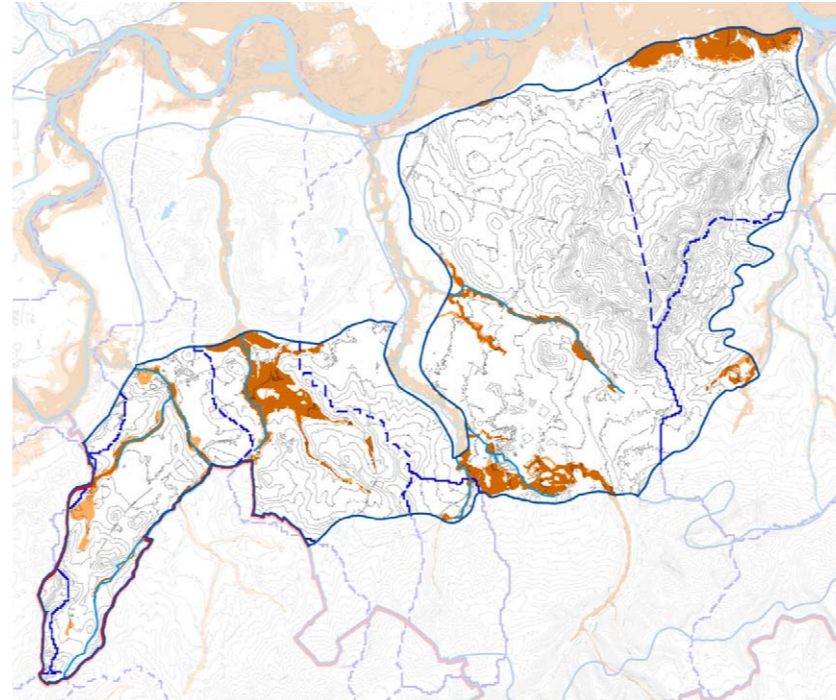
17. South London Clays &amp; Gravels

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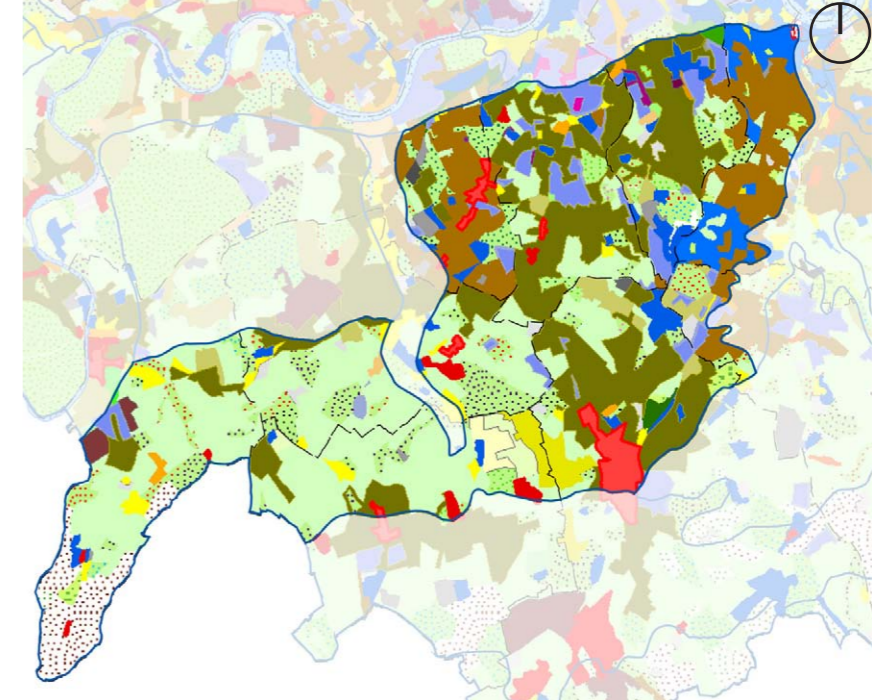


Geology



Rivers and Topography

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ACKNOWLEDGEMENT: ENVIRONMENT AGENCY DATA



Historic Development

ACKNOWLEDGEMENT: ENGLISH HERITAGE DATA

The settlement pattern is varied, ranging from open countryside and farmland in the south west to dense residential, industrial and commercial developments to the north and east. The two oldest key settlement cores are at Croydon and South Clapham. Elsewhere most built development dates from the Victorian period and the boom in residential development which followed the growth of the railways, although south of Peckham Rye, extending to Streatham Vale, the housing stock is predominantly interwar suburbia. There are high rise tower buildings in areas that suffered particularly heavy bomb damage in the Second World War and a particularly dense complex of sewage works and heavy industry at Beddington.

Whilst the Malden Ruston area to the south west is surrounded by open countryside and farmland, the majority of the landscape type is densely developed, and the open space matrix consists of a fragmented network of historic commons, public parks, playing fields and golf courses maintained as amenity grassland. There are also fragmented small patches of native woodland and hedgerows, typically along railway sidings and in some parks.

## Natural Signature and natural landscape features

### Natural Stignature:

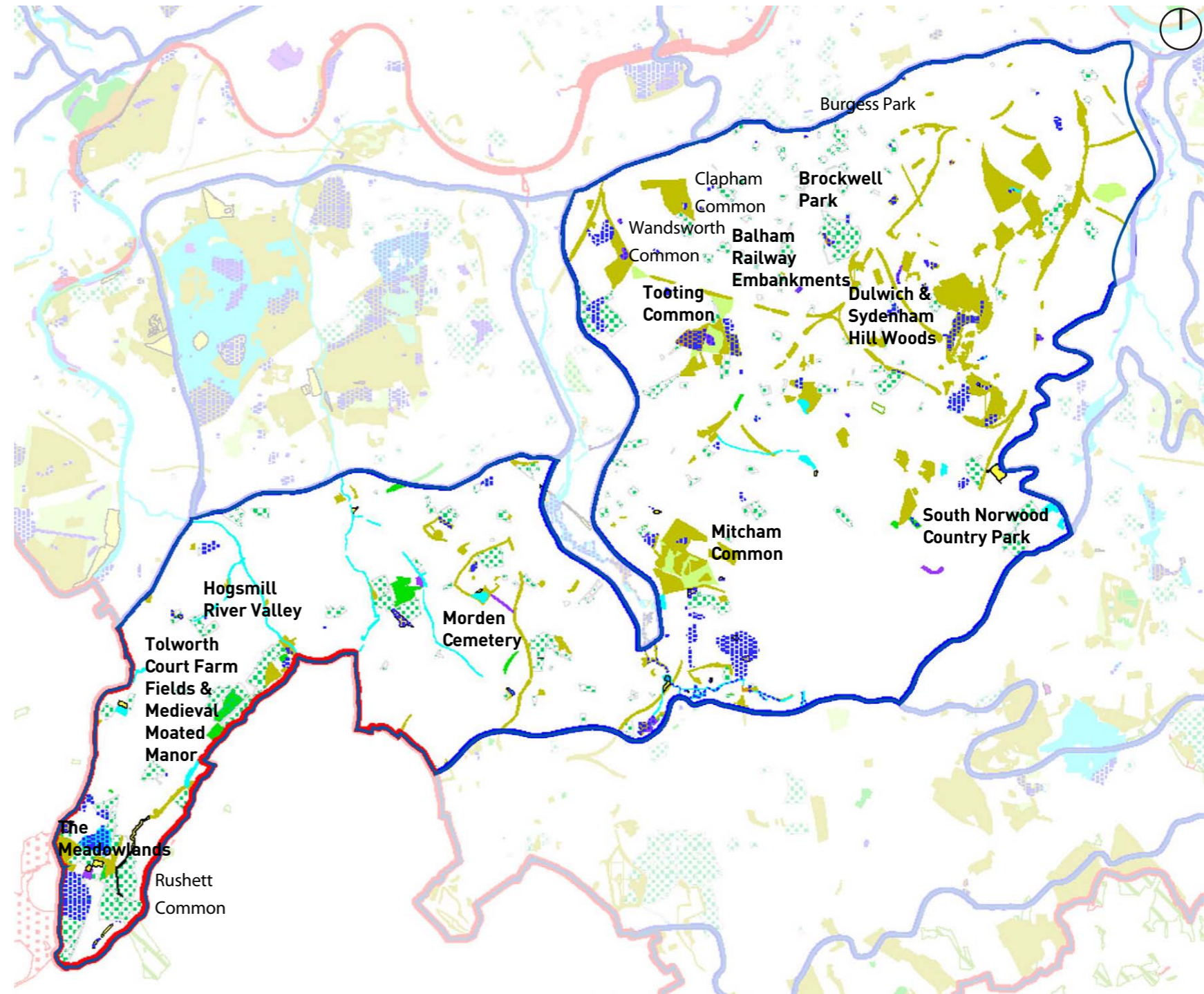
**South London Clays and Gravels – Small hedged meadows and large heathy commons set against a backdrop of extensive woodlands on higher land.**

The Great North Wood was an exceptionally dense forest, recorded in the Domesday Book, which once extended from Selhurst/Elmers End northwards towards what is now Upper Norwood, Forest Hill and Hatcham/Deptford. By the 17th century significant parts of it were Common Land, and little now remains, but fragments of ancient woodland on higher land provide core areas of valuable habitat which could be a priority for future woodland planting. The network of woodlands, hedgerows, small meadows and field ponds at Tolworth Court Farm Fields indicates the likely scale and character of farmland surrounding the woodlands and the floodplain meadows and woodlands in the Hogsmill Valley Nature Reserve suggests how the landscape pattern would have varied along river valleys.

This is obviously a snapshot in time, but it suggests the character of the rural landscape during the period before urbanisation and it provides a set of references to inform the Natural Signature of this extensive area.

Examples of natural landscape features within the South London Clays and Gravels Natural Landscape Area are:

- **Dulwich and Sydenham Hill Woods** – The largest remnant of the historic Great North Wood and one of the closest ancient woodland to central London. Mostly sessile oak-hornbeam woodland, with a wide variety of other tree and shrub species, including numerous exotics planted when the wood included parts of large gardens. The flora includes numerous indicators of long-established woodland; wood anemone, lily-of-the-valley and hairy wood-rush. Two ponds contain aquatic vegetation and support amphibians and dragonflies.



Natural Habitats & Landscape Key Features

- **Hogsmill Valley** – This Local Nature Reserve encompasses the entire Hogsmill river corridor from Berrylands rail station south to Malden Lane, comprising a varied mosaic of relict floodplain habitats. The majority of the valley is open species-rich grassland, but there are also small pockets of willow woodland over sedge beds, which support one of London’s few populations of slender tufted-sedge. The Hogsmill, a chalk stream, has a diverse aquatic flora here including horned pondweed and a well established fish community. The specially protected water vole is also present.
- **Tolworth Court Farm Fields and Medieval Moated Manor** – A large area of farmland, with a field system of pastures, hedgerows and woodland. The site also includes the remains of a medieval moated manor house, where there are important wetland habitats. This large area of relict farmland comprises a field system of both grazed and ungrazed pastures, hedgerows and small blocks of secondary woodland. There are varied examples of grassland management, with some fields retaining species indicative of old hay meadows and damper fields supporting dense rush beds. The hedge network is very old, with several veteran oak pollards present. Several small areas of woodland have developed from these hedgerows, and consist predominantly of oak and elm. The ancient trackway of Cox Lane traverses the site, adding further historical interest. The remains of the moat form a large overgrown pond, overhung by willows and other wetland plants.
- **The Meadowlands** – A small area of species-rich chalk grassland preserved within a housing estate. The turf supports an extraordinary diversity of plants, including bee and pyramidal orchid.
- **Morden Cemetery** – This cemetery contains areas of flower-rich neutral grassland, very rare in London and once supporting the only colony of green-winged orchid in London.
- **Rushett Common** – This site includes two tracts of woodland alongside the A243 from Malden Rushett south to London’s boundary with Surrey. The woodland consists mostly of pedunculate and sessile oaks, with yellow archangel and woodruff in the ground flora. West of the road, the site also includes areas of scrub and grassland, with common gorse and heath bedstraw.
- **Mitcham Common** – A large common consisting mainly of acid grassland and secondary woodland, with some interesting wetlands and several small but important areas of heathland. The heath communities are degraded but notable for the abundance of the London rarity dwarf gorse, marking them as intermediate in composition between the heathlands of East Anglia and central southern England.
- **Balham Railway Embankments** – The Wandsworth area has a particularly complex criss-crossing network of railways, partly due to the location of Clapham Junction. This adds up to a substantial area of natural habitat and provides important wildlife corridors linking the various commons and major wildlife sites together. Much of the habitat is a mix of native and non-native broadleaved woodland and roughland, with frequent patches of regenerating elm scrub and bracken. The embankments either side of Balham station are covered in dense scrub, mostly of bramble with stands of tall herbs and coppiced sycamore.

- **Tooting Common** – A large open space with three extensive areas of woodland (Bedford Hill, Streatham Hill and Tooting Graveney Woods) and relict acid grassland. The woodland is dominated by oak, with a range of other trees including hornbeam and several fine veteran oaks. The acid grasslands are dominated by common bent and red fescue, with pockets of gorse and bramble scrub. There are also several wetland habitats including a lake, a reedbed and a seasonal pond.

- **Brockwell Park** – A large and valuable open space serving Brixton, Herne Hill, Tulse Hill and beyond. It combines a variety of formal recreational facilities with large areas of open parkland, woodland and ponds.

The wetland features include a series of small ponds linked by a tributary of the River Effra on the western boundary of the park. On the banks of the stream are yellow iris, fool's water-cress, pendulous sedge, great willowherb and hemlock water-dropwort. In the grassland around the stream grow cuckooflower and patches of sweet vernal-grass. The main habitat in the park is close-mown grassland, but the area of rough or meadow grassland has been gradually extended over time. There are fine examples of native trees in the park including two mature oaks in the south-east, which seem to belong to an old field boundary.

- **Dulwich Upper Wood** – A small fragment of ancient oak woodland, surrounded by secondary woodland of oak, sycamore, lime and ash, with a good variety of other trees and shrubs. Ground flora in the ancient part includes wood anemone, bluebell and yellow pimpernel. Fungi are particularly well recorded, with over 200 species noted.
- **South Norwood Country Park** – This site, a former sewage farm, has been developed as a country park by the London Borough of Croydon. It contains a large area of wet grassland, bramble scrub and hedges. A large lake has been created, and two tributaries of the River Ravensbourne also cross the site.

## Underlining the natural signature of the South London Clays and Gravels

### Key influences

- Fragments of ancient woodland, particularly on elevated land characterised by sessile oak in remnants of the Great North Wood. .
- More extensive secondary native woodlands.
- Networks of dense hedgerows with hedgerow trees enclosing small meadows and pastures.
- Wildflower meadows with orchids.
- Managed hay meadows.
- Ponds with marginal vegetation and wet grasslands with rush beds on floodplains.
- Heathy commons with scrub, gorse and acid grassland.
- Green lanes.

### Design clues

Ideas for place making and shaping future design decisions - how the Natural Signatures for each natural landscape area might be expressed within the wider public realm, through new development and landscape management projects.

- Belts of native woodland on higher land as a backdrop to local views.
- Street trees planted close together, particularly on upper slopes.
- Copses and areas of woodland at gateways and as focal points within new developments.
- Hedgerows with groups of hedgerow trees, as boundaries within built areas and extending out into adjacent greenspaces.
- Small meadows and varied grasslands – managed under different mowing regimes.
- Hedged green lanes and pathways bordered on one side by a hedge with hedgerow trees.
- Strings of small ponds (rather than large, simple flood attenuation basins) which form a focus for intimate, small-scale damp meadows and grasslands.

## South London Clays & Gravels – Key environmental assets

Environmental Asset	Relevant borough	Notes
<b>Dulwich and Sydenham Hill Woods</b>	Southwark	Last surviving part of the Great North Wood.
<b>Hogsmill Valley</b>	Kingston upon Thames	Local Nature Reserve encompasses entire river corridor; majority is species-rich grassland.
Hogsmill Valley Sewage Works and Hogsmill River	Kingston upon Thames	Includes active sewage works; several areas of tall herb and scrub.
<b>Tolworth Court Farm Fields and Medieval Moated Manor</b>	Kingston upon Thames	Large area of farmland with mosaic of farmland, hedgerows and woodlands.
<b>The Meadowlands</b>	Kingston upon Thames	Species-rich grassland maintained within a housing estate.
Rushett Common	Kingston upon Thames	Two roadside tracts of land supporting oak woodland.
<b>Mitcham Common</b>	Croydon, Merton	Large common consisting predominantly of acid grassland and secondary woodland; exceptionally diverse invertebrate fauna.
<b>Morden Cemetery</b>	Merton	Flower-rich grassland; supports only colony of green-winged orchid in London.
<b>Balham Railway Embankments</b>	Wandsworth	Links together many patches of habitat, acting as a valuable system of corridors.
Clapham Common (Wandsworth section)	Wandsworth	Some ponds of conservation interest; area of exotic woodland supports diverse bird populations.
Wandsworth Common	Wandsworth	Mosaic of secondary woodlands and acid grassland; also areas of neutral grassland.
<b>Tooting Common</b>	Wandsworth	Three extensive areas of woodland dominated by oak species.

Environmental Asset	Relevant borough	Notes
Wandsworth Cemetery	Wandsworth	Dominated by neutral grassland with scattered trees.
<b>Brockwell Park</b>	Lambeth	Predominantly open parkland, but includes areas of wetland linked by a tributary of River Effra.
Streatham Common	Lambeth	Grassland and formal gardens at the Rookery.
Sydenham Hill and West Dulwich Railsides	Southwark	Woodland dominated by sycamore, but also includes some ash and oak species; structure is less good further north.
Grove Park Cuttings and Peckham Rye to East Dulwich Railsides	Southwark	Cuttings support good woodland with shrub layer and areas of roughland.
<b>Dulwich Upper Wood</b>	Southwark	Small fragment of ancient oak woodland surrounded by secondary woodland of mixed native species.
<b>South Norwood Country Park</b>	Croydon	Former sewage farm developed as country park; contains large areas of wet grassland, scrub and hedges; large lake connected to tributaries of River Ravensbourne.
Crystal Palace Park	Bromley	Victorian pleasure ground; former site of the Crystal Palace and its grounds. Good views towards London; many species of plant; rats and parakeets also present.
Biggin Woods	Croydon	Small area of deciduous woodland, a remnant of the Great North Wood
Grangewood Park	Croydon	Park containing fragment of ancient woodland, once part of the Great North Wood
Beaulieu Heights	Croydon	Ancient woodland, formerly a part of the Great North Wood
The Lawns	Croydon	Woodland developed from parkland including some old oak pollards