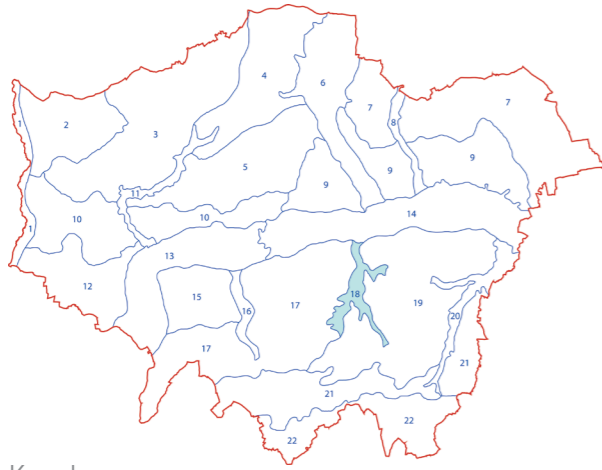


18. Ravensbourne River Valley



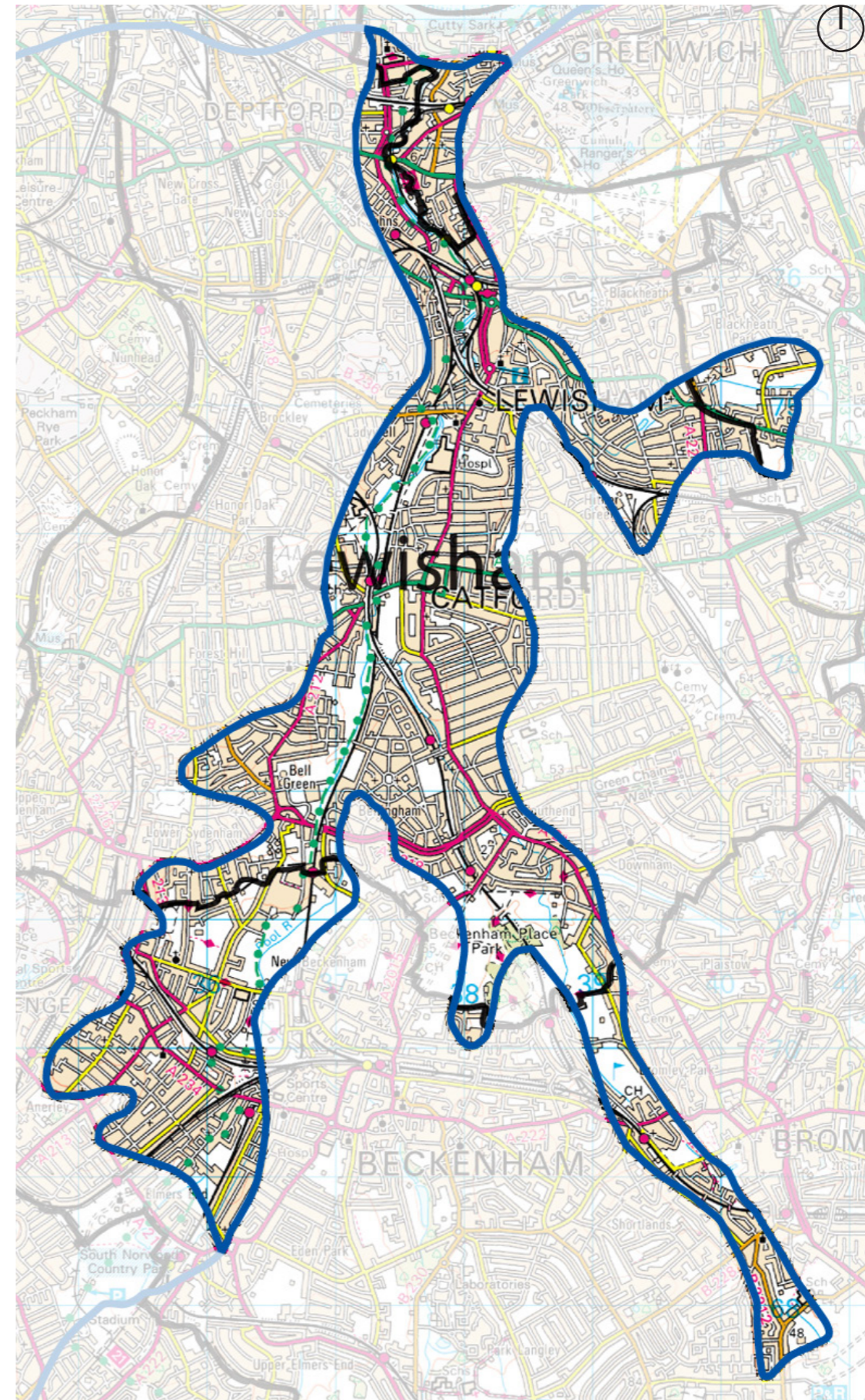
Key plan

Description

The Ravensbourne River Valley Natural Landscape Area comprises a valley system which drains parts of the South London Clays and Gravels (NLA 17) and the South London Pebbly Sands (NLA 19), before entering the Thames at Deptford Creek. Within the valleys are four small rivers, all of which flow broadly south to north and which are, from west to east, the Pool River, the Ravensbourne, the Quaggy and the Kyd Brook. The upper stretches of these rivers are fed by numerous small streams, ditches and springs (as at Hayes Common, for example). The valley of the Ravensbourne can be traced in the topography and geology continuing to the south, into the Chalk Slopes of the North Downs, but it is now dry.

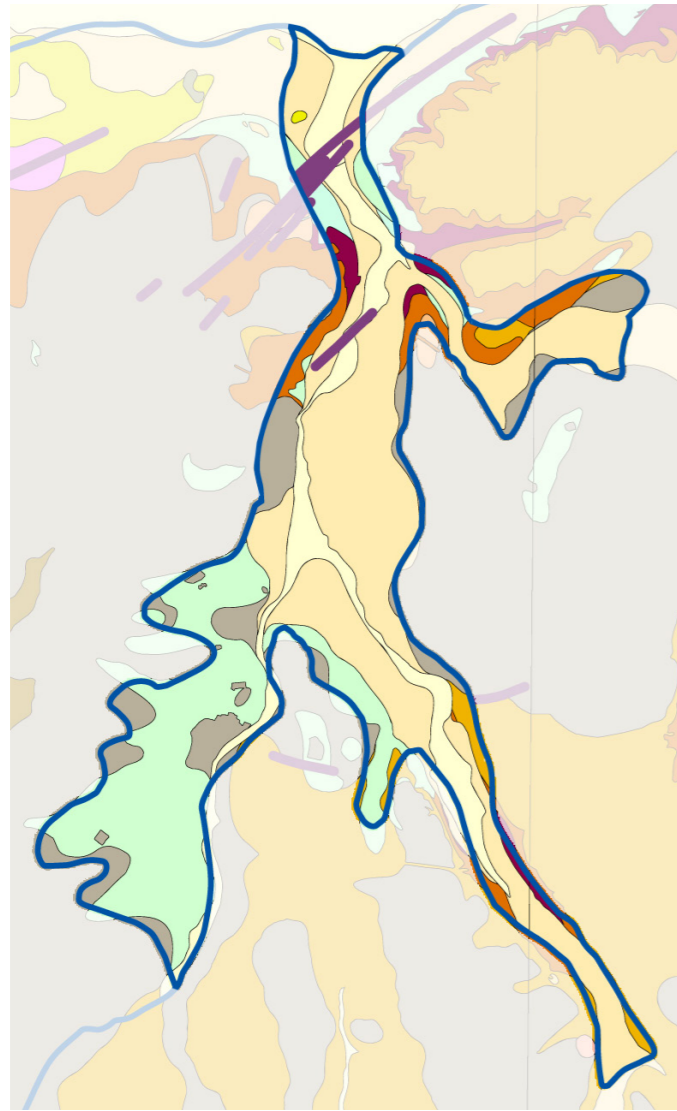
The valleys cut into the underlying London Clays, and the older rocks of the Harwich Formation, Lambeth Group, Thanet Sand and Lewes Nodular Chalk Formations which underlie the London Clay. The land climbs most sharply on the western side, where the Crystal Palace Ridge forms a distinct topographical feature. To the east, the slopes are gentler, although there is a steep climb from the Kyd Brook (c. 60m AOD) to Chislehurst (c. 100m AOD). In the wider parts of the valleys, particularly around the confluence of the Pool and Ravensbourne at Bellingham, they contain deposits of river terrace gravels. The actual course of each river is marked by a thin strip of alluvium. Head deposits flank the valley sides in places, particularly in the Pool valley.

The Ravensbourne joins the Thames at Deptford Creek, which is one of the few remaining navigable creeks off the Thames. Deptford gets its name from the 'deep ford' over the Ravensbourne and this 'working creek' has a range of fascinating wharves, mills, bridges and landing stages, with a mix of heavy industry, transport infrastructure and new riverside development.



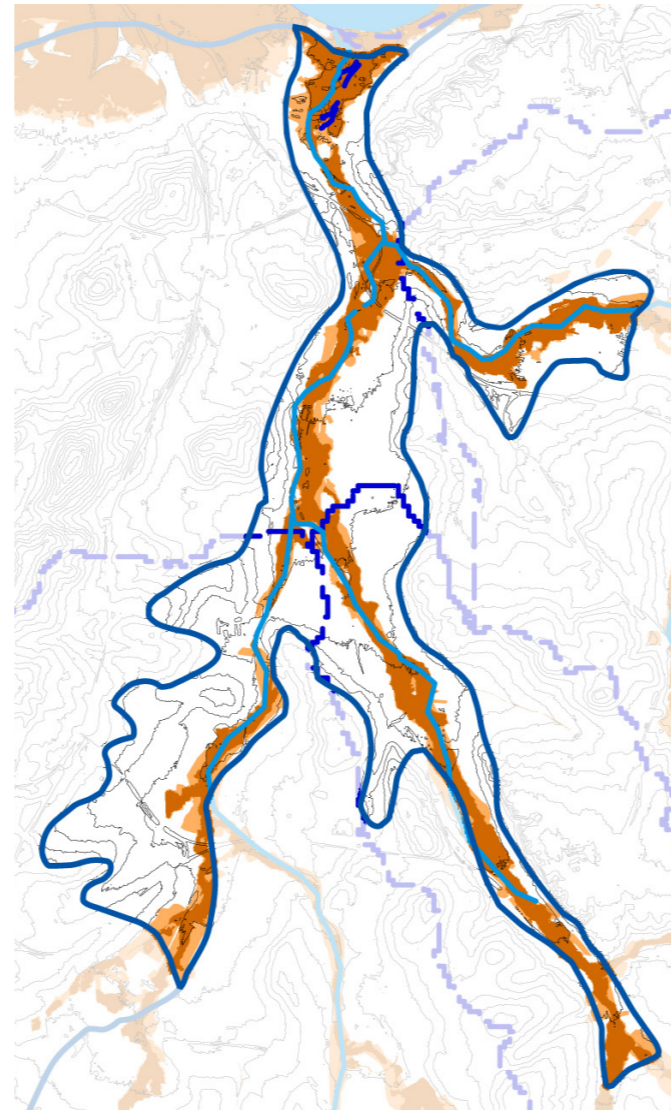
18. Ravensbourne River Valley

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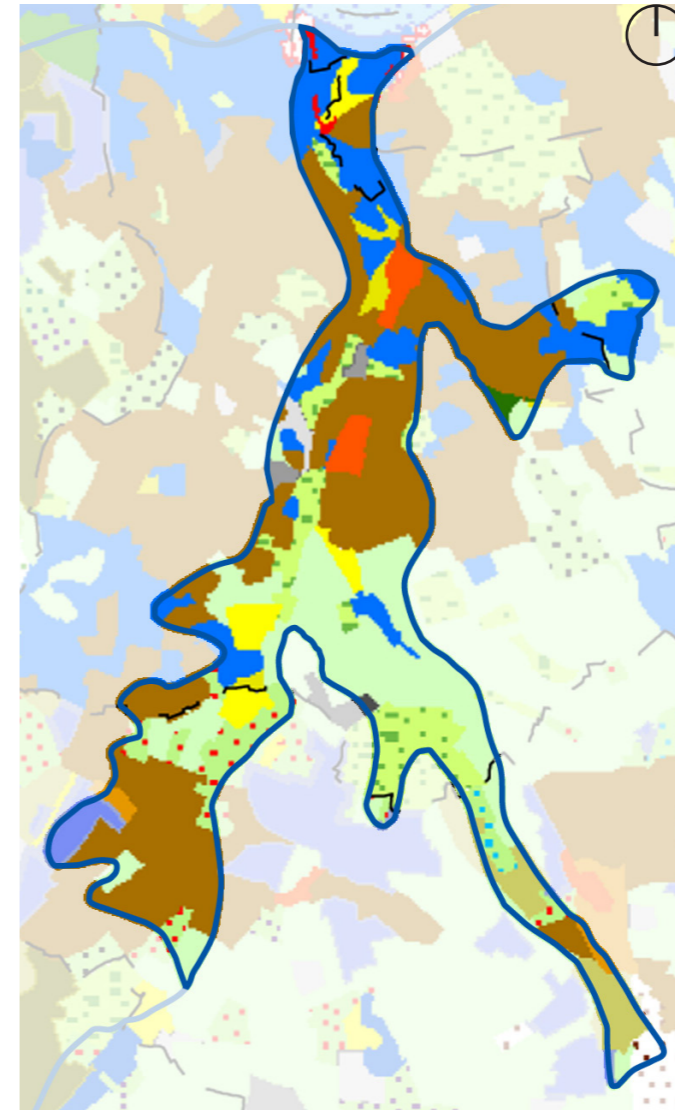
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Geology



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Rivers and Topography



ACKNOWLEDGEMENT: ENGLISH HERITAGE DATA

Historic Development

There are two historic settlements, Lewisham and Catford and a historic route, from Lewisham to Orpington, follows the line of the Ravensbourne. During the 19th century, railway lines were constructed along substantial stretches of the Pool and Ravensbourne valleys. The railway boom fuelled Victorian suburban expansion in Bromley, Beckenham, Lewisham and Catford. Urban development encroached on the valleys and this process continued throughout the interwar period. As a result, stretches of all the rivers are now completely obscured and canalised (if not actually culverted) by modern settlement. Substantial open areas still survive, however, along the actual valley bottom, occasionally broadening out to include a wider section of the valley.

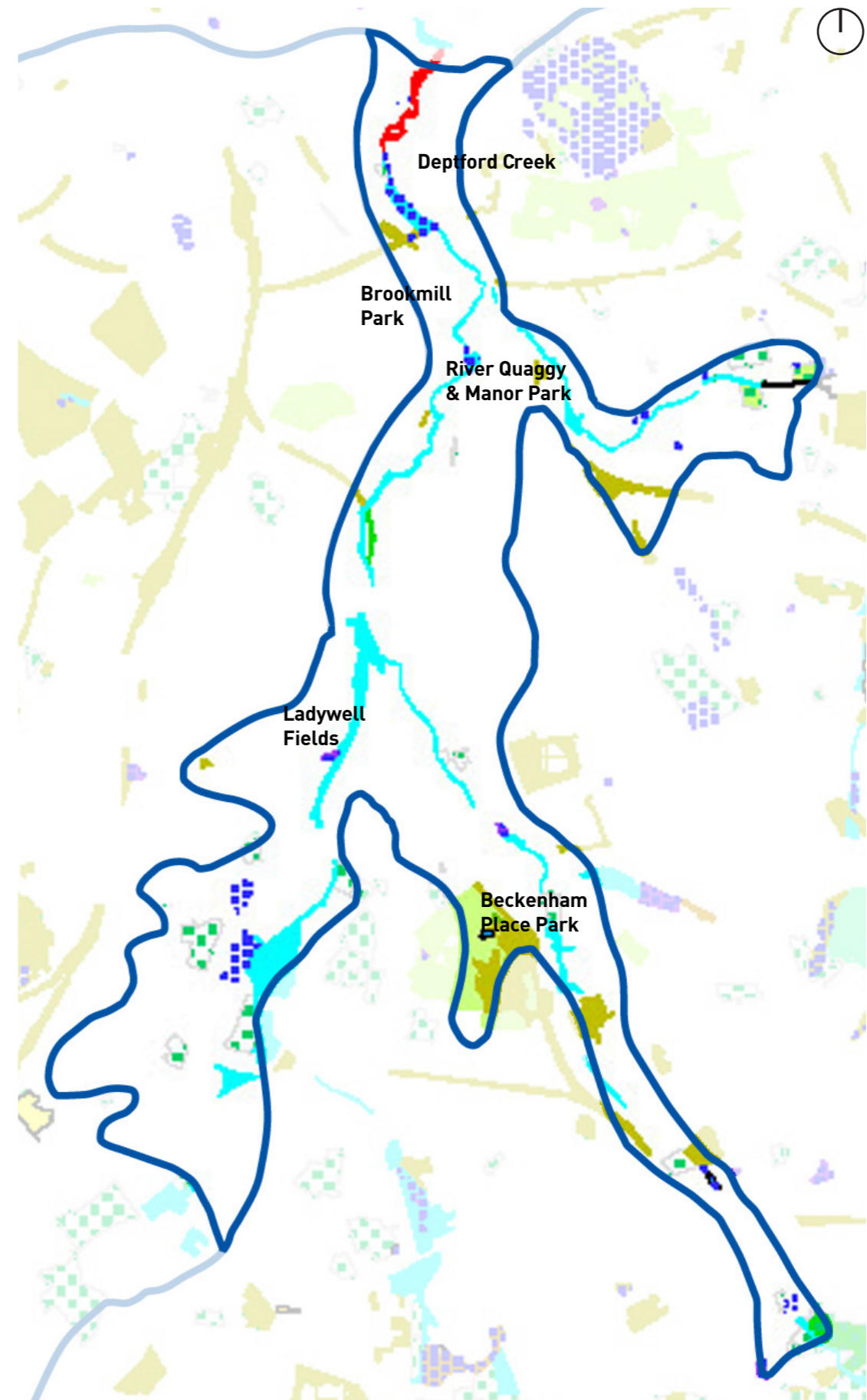
Natural Signature and natural landscape features

Natural Signature:
Ravensbourne River Valley – A network of small rivers, bounded by gravel terraces, which flow through water meadows and tidal flood meadows before reaching the Thames as a navigable channel, bordered by working wharves.

The Natural Signature of the Ravensbourne River Valley has been largely lost to 19th- and 20th-century suburban and railway development. In the upper reaches of the Pool and Ravensbourne Rivers, and in parts of the Quaggy and Kyd Brook, stretches of the river corridors retain their natural course and the valley bottom remains more open, sometimes with surviving fen carr (as well as allotments and playing fields), even where the river itself has been canalised. Only at one point, Beckenham Place Park, does a sense of the relationship between the stream and its wider valley survive. There are also views of the high ground of the Crystal Palace Ridge, particularly from elevated railway lines.

Examples of natural landscape features within the Ravensbourne River Valley Natural Landscape Area are:

- **Deptford Creek** – A half-mile, muddy, tidal stretch of the River Ravensbourne flowing into the Thames opposite the Isle of Dogs, which has historically been an important centre for shipbuilding (Henry VIII's Royal Dockyard and the East India Company's yard), tidal corn mills, the North Sea fishing industry, and a major power station. The Creek is a haven for hundreds of fresh and saltwater plants and animals and the new Creekside Centre provides a local focus for environmental education and green design. It is notable too for providing a habitat for species that require brownfield sites to flourish.
- **Beckenham Place Park** – particularly valuable because it provides an example of the transition from river floodplain to valley side slope, thus allowing a wider appreciation of the topography and natural vegetation of these river valleys. There are grasslands and areas of ancient woodland within the Park, which is part of a larger estate. A traffic free cycle route runs along much of the length of the Pool and lower Ravensbourne.
- **Brookmill Park** – A large section of the Ravensbourne was 'broken out' of its historical concrete channel during construction of the Docklands Light Railway, and given a 'natural' course offering much improved habitat for wildlife. The gently sloping edges of the inner channel of the Ravensbourne, and its gravelly bed with pools and riffles, provide many niches for aquatic plants and animals. The grassland of the outer channel floods on high tides; tidally-inundated grassland is a very rare habitat in London so this area will become increasingly important as habitats mature.
- **Ladywell Fields** – The River Ravensbourne is one of the most important features of Ladywell Fields. It flows between wooden revetments in a narrow strip of land, fenced off from the rest of the park. The Environment Agency has provided fish shelters, riffles and weirs to ensure suitable fish habitat at times when the water flow is low. Eel and stickleback are the most common fish and kingfisher are regularly seen; mallard and moorhen nest in the park. The fenced-off riversides contain stands of scrub, interspersed with tall herbaceous vegetation and rough grassland and a few mature trees. Ladywell Fields is currently undergoing a major capital programme of landscape enhancement, creating wetlands, river enhancement and flood alleviation.



Natural Habitats & Landscape Key Features

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Underlining the natural signature of the Ravensbourne River Valley

Key influences

- Meandering river channel with riffles and pools.
- Gravel river terraces and banks.
- Riverside walks and bridges.
- Wharves, flood walls and industrial archaeology, particularly at Deptford Creek.
- Tidal flood meadows.
- Broad flat floodplain, defined by native woodlands, which extend up the valley slopes.
- Water meadows with ponds and wet flushes.
- Ditches bordered by rush and sedge pastures.
- Small copses of wet woodland.

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.

- Sinuous forms – expressed in pathways, hedgerows, lines of trees and bands of woodland.
- Gravel terraces and banks on the fringes of flood attenuation basins.
- Steps, landing stages and jetties – hard edges which give access right to the water’s edge.
- Native woodlands or lines of street trees along roads or development edges towards the outer margins of the floodplain.
- Willow trees close to wetlands on the floodplain or low lying areas close to the rivers and their tributaries.
- Ponds with reedbeds and sculpted areas of wet grassland as a gateway or focus for new development.
- Bridges across broad swales and ditches.
- Deep sided and wooded river band sides.
- Curving gravel paths on shallow terraces, built into the sculpted margins of wet grassland or flood attenuation basins.
- Lines of trees planted alongside footpaths/cycleways and roads – planted on bends and to give visual emphasis to curves in the wider landscape.

Ravensbourne River Valley – Key environmental assets

Environmental asset	Relevant borough	Notes
River Ravensbourne and Brook Mill Park	Lewisham	Park associated with a recently ‘broken out’ stretch of the river, which is tidal. Newly created natural environment being managed with increased biodiversity.
River Quaggy and Manor Park	Lewisham	A formally managed, small park, but with the Quaggy flowing through it.
Ravensbourne River, Lewisham to Catford	Lewisham	The semi-natural course of the Ravensbourne is lined by trees and associated with a strip of mainly amenity grassland along much of this stretch. Railway follows the valley.
Ladywell Fields	Lewisham	Fenced off riverside with scrub and stands of herbaceous plants
Brookmill Park	Lewisham	Naturalised river course with wide range of aquatic life
Deptford Creek	Lewisham	Tidal mudflats at confluence with Thames, with fresh and saltwater vegetation
Pool River Park	Lewisham	Narrow strip of managed park along the course of the River Pool. Pool largely canalised, but has been broken out in places. Adjacent to and visible from the railway.
Beckenham Place Park	Lewisham	Ancient fen carr, woodland and acid heathland on the western side of the Ravensbourne valley. Ravensbourne follows its natural course. Railway runs through it. Views of Crystal Palace Ridge to the west. On Capital Ring.
Pool River and Riverview Park	Lewisham	River in culvert with planters for marginal vegetation. Ancient woodland, wetlands and some of best Neutral Grasslands in London.
Bell Green Gas Works	Lewisham	Redevelopment of site currently into mixed use plus landscaping. Opportunity site.